

ANNUAL REPORT **2016**

DISTRICT TEAM

Board Members

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



District Staff

Deb Wilson, Manager Melissa Buck, Admin. Assistant Shaun Wessell, District Technician Megan Whitlatch, ACT/Nut. Mgmt. Carl Johnson, DGLVR Technician Grace Pesselato, Watershed Specialist

Associate Board Members

George Miller, Laura Lynn Yohe, Todd Beers, Jerry Chamberlin, Becky Gaston, Tom Kundrich

MISSION

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.



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RECOGNIZED



Board Members

Chairman, Herb Landes, Vice-Chairman, Porter Duvall, and Sec/Treasurer, Allen Campbell, were recognized by the District for their years of dedicated service. The District awarded each of them a pocket watch engraved "Thanks for being there time after time". Each of these men have been with the District over 30 years.



WHAT IS A CONSERVATION DISTRICT?

Created under the Conservation District Law, conservation districts are the local unit of state government that provides the link between you, the citizens, and the multitude of local, state and federal natural resource management programs. A Board of Directors, appointed by the County Commissioners from nominations received from County-wide organizations, serves as your voice. A staff of professionals provides information, technical assistance, financial assistance and educational programs and support at the direction of that Board.

The Jefferson County Conservation District is composed of a six member, volunteer Board of Directors representing both urban and farm backgrounds and one County Commissioner. The Board members represent a variety of local communities, lead District programs and set District policies. The District Team also includes six volunteer associate directors and six full-time staff.

Monthly board meetings are held the first Thursday of every month at the Conservation Center, Route 28 in Brookville. The meeting date and time is published in the Courier-Express and is open to the public.

19TH ANNUAL NW GRAZING CONFERENCE

The Conservation District, along with Headwaters RC&D Council, Clearfield Conservation District, NRCS, Penn State Extension, Foundations for PA Watersheds, Dean's Dairy, and PA Grazing Lands Conservation Initiative, held this year's NW Grazing Conference. "Options Equals Opportunities" was the main topic of this event. Kathy Voth, owner of <u>Livestock for</u> <u>Landscapes</u> was the keynote speaker. Her presentation included training your livestock to eat weeds while debunking common myths about the safety and nutritional value of raising livestock on a diet of weeds. Additionally, this method proves to be beneficial when it comes to saving time and money on grazing.

PARTNERSHIPS



STORMWATER MANAGEMENT

The Jefferson County Conservation District has signed working agreements with 25 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 2016, 219 stormwater plans were reviewed by either Conservation District staff or Geo-Tech Engineering for compliance with the municipal ordinance.

MULTI-MUNICIPAL COOPERATION

For the past 17 years, the Conservation District has worked with the Jefferson County Sewage Association and the Greater Jefferson Area Council of Governments (COG) by providing supervision and office support. The working relationship between the three organizations is a unique situation. In 2014, Bureau Veritas (a third-party building code officer) moved their office into the Conservation Center complex and thus providing a *one-stop shop* for anyone in the process of purchasing property to build. There is someone available to assist with getting sewage permits, stormwater plans, building permits, and DEP permits Monday through Friday. This arrangement also provides checks and balances throughout the permitting process. The staff members responsible for each permit are familiar with the entire process and work together to help the applicants save time and money. These three agencies together with Bureau Veritas have worked together to save their member municipalities money; help their employees; and provide professional, qualified service to ensure that state and local laws are being followed.

KYLE LAKE IMPROVEMENT PROJECT

Kyle Lake is a 165-acre impoundment located in Washington Township, Jefferson County, that is owned by the Commonwealth and managed by the PA Fish and Boat Commission (PFBC) for public fishing and boating. The Conservation District is assisting the PFBC with construction of an ADA compliant fishing pier, shoreline stabilization, and fish habitat improvements at Kyle Lake, collectively referred to as the "Kyle Lake Improvement Project". In 2016 an estimated \$4 million dam reconstruction project was funded by PFBC. The lake has been drained, a design completed, and all permits have been issued. Construction of the fishing pier, shoreline stabilization, and fish habitat structure placement is being funded through a grant from the Redbank Watershed Trust.

E & S/NPDES/CHAPTER 105 PROGRAMS

Through delegation agreements with the Department of Environmental Protection, the Jefferson County Conservation District participates in the administration of the E&S Program (Erosion and Sediment Pollution Control), NPDES (National Pollutant Discharge and Elimination System), and Chapter 105 (Dam Safety and Encroachment Act – Water Obstruction and Encroachment) programs. Shaun Wessell, District Technician, along with clerical support from Melissa Buck, is responsible for these programs. Highlights of 2016 are as follows:

- > Reviewed 36 E&S Control Plans for Chapter 102 Compliance.
- > Conducted 70 site inspections to obtain voluntary compliance.
- ▶ Issued 9 General NPDES Permits.
- > Recommended 1 Individual NPDES Permits for issuance by DEP.
- Acknowledged 37 General Permits for water obstructions & encroachments.
- Conducted 25 site inspections in response to Chapter 102 & 105 complaints.





DIRT, GRAVEL & LOW VOLUME ROAD PROGRAM

The Dirt, Gravel and Low Volume Road Program focuses on projects that provide long-term environmental benefits to PA's streams while making improvements to the public road system. Program projects should have benefits to road owners and users AND improve drainage and reduce impact of public roads on stream and other water bodies. The District entered into 14 contracts with 11 municipalities in 2016.

Carl Johnson, Resource Technician, assists with assessing roadways for eligibility, preparation of funding requests, and implementation of construction projects. \$377,411.77 in program funds were used to complete these projects. In-kind contributions from local participants totaled \$93,000.92.





Before

After

AGRICULTURE

PLANNING...

Megan Whitlatch, ACT/Nutrient Management Specialist, works with farmers and NRCS to develop Agricultural Erosion & Sedimentation Control Plans, Conservation Plans, Manure Management Plans, and Nutrient Management Plans. She also responds to complaints regarding soil and manure management. She assists farmers with preparation of applications to be submitted to the PA Resource Enhancement and Protection Program in which farmers can earn tax credits for implementing best management practices on their farm.

The JCCD Board of Directors approved 3 nutrient management plans in 2016 for crop years 2017-2019. Three agricultural complaints were investigated. The District helped farmers apply for \$150,618.00 in tax credits for practices that improve soil and manure management and protect water quality in their watershed.

CREP...

Megan visited 12 landowners enrolled in the Conservation Reserve Enhancement Program (CREP) to provide information to identify and control noxious and invasive weeds found on their property.

NEWSLETTERS...

Quarterly newsletters are distributed to farmers in Jefferson County to provide educational information on a variety of ag topics and upcoming events in the area.

BARNYARD AND PASTURE MANAGEMENT WORKSHOP...

This workshop held in May, 2016 was coordinated by Megan Whitlatch, ACT/Nutrient Management Specialist, with financial support provided by the PA-DEP through the Clean Water Fund. Suzette Truax, NRCS Equine Specialist, gave a presentation for horse owners. She offered information about managing sacrifice areas and pastures, the importance of grass types for a healthy pasture, as well as answering questions from the audience.



Annabelle Grazing Farm

Agency representatives from Natural Resource Conservation Services (NRCS), Penn State Extension as well as the Conservation District were available for farmers to see what agricultural services are available to them. Free soil test kits were available to attendees as well as refreshments.

FARM PLAN WRITING WORKSHOP...

Funding was provided by the PA Department of Environmental Protection through the Clean Water Fund to hold a workshop for farmers to educate them on Pennsylvania's regulations relating to soil and manure management. The meeting was held in March, 2016 in the Conservation Center. Free soil test kits were available.

GRAZING FIELD DAY...

A Grazing Field Day was held at the Annabelle Grazing Farm in Mayport on Friday, July 8, 2016. Forty-nine participants gathered under rainy skies to learn important knowledge that will benefit their farms. This field day demonstrated the benefits of using sound grazing management practices. Discussions were held on animal health and increased yields and profit.

CLOE LAKE FIELD DAY

Cloe Lake is a 27-acre lake located in southern Jefferson County. The stream that feeds this manmade lake is Jackson Run. This stream provides an excellent opportunity for students from Punxsutawney High School to study the variable factors that impact a watershed.

Students check the chemical parameter of the water. They use kick nets to catch macro-invertebrates in the stream and learn to map the



stream to determine if the stream has changed its course. Also, physical parameters of the stream, such as, temperature, width, depth, flow and velocity are collected. All this information is calculated and compared with data from previous years to determine the relative health of Jackson Run.

WATERSHED CAMP

Students attending the Summer Camp at the YMCA in Brookville were taught about water pollution from Grace Pesselato, JCCD's Watershed Specialist. Using the Enviroscape, students learned how water pollution can get into our streams from every day activities in their neighborhoods.

Students placed storm drain markers on sixteen storm drains along Main Street to make the public aware that whatever is dumped in the storm drains may potentially pollute our streams.



OTHER FIELD DAY ACTIVITIES



Boy Scouts – Walter Dick Park



2nd Graders -Farm Safety Days



Clear Creek State Park

EDUCATION

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

TRI-COUNTY HIGH SCHOOL ENVIROTHON

The 2016 Tri-County Envirothon, coordinated by Melissa Buck, Admin. Assistant, was held at the Jefferson County Fairgrounds in Brookville and was sponsored by the Clarion County Conservation District (CCCD), Forest County Conservation District (FCCD) and Jefferson County Conservation District (JCCD). Eight school districts from the three counties were represented.

The day-long event is an outdoor environmentaleducation competition testing students' knowledge in five general areas: soils, wildlife, forestry, aquatics, and a current environmental issue "Invasive Species". Brockway



1st Place – Brockway Team A – Cody Wolfe, Ashton Loss, Cecilia Manno, & Tylyn Fink

High School (Jefferson County) Team A captured first place. Clarion-Limestone High School (Clarion County) Team A

placed second; and Punxsutawney High School (Jefferson County) placed third.

C.G. JOHNSON ELEMENTARY ENVIROTHON



Fourth and Fifth Grade students from the C.G. Johnson Elementary School in Reynoldsville participated in the 20th Annual Elementary Envirothon. A learning station was established in each of the five classrooms. Each station included an instructional period where the students listened to a presentation followed by a short quiz on what they learned. Topics included were – Deer Ticks, Water Pollution, Soil Health, Birds & Mammals, and Waste Management.

Presenters included staff from the USDA Natural Resources Conservation Service, DCNR – Clear Creek State Park, Jefferson County Solid Waste Authority; as well as District staff. Each classroom's quizzes were scored. First place went to Mr. Barron's 4th Grade class, and Second Place winners being Mrs. Bailey's 5th Grade class.

WATER QUALITY

NORTH FORK WATERSHED ASSOCIATION

North Fork Watershed is located in Northern Jefferson County, Pennsylvania. The North Fork Creek joins Sandy Lick at Brookville to form the Redbank Creek. The North Fork Watershed covers approximately 98.75 square miles with 713 miles of stream and 32.52 square miles being State Game Lands.

The members of the North Fork Watershed Association strive to protect this water supply in addition to raising



watershed awareness and addressing the problems that are presently deteriorating the health of the watershed. The ability to sustain suitable populations of aquatic organisms is a definite concern of the group. The District Watershed Specialist assists with macro-invertebrate sampling, mapping, collecting water samples and other technical support.

CONIFER AMD TREATMENT SYSTEM

Funding from a Growing Greener Grant was used to construct a Fealmn bed treatment System on an abandoned mine discharge site on Beaver Run. This treatment system was designed to precipitate and contain iron (Fe), aluminum (Al), and manganese (Mn) solids in a manner that would allow for periodic monitoring and maintenance of the treatment system. The bed is designed to progressively clog with precipitate and will require periodic agitation by an excavator to unclog the bed and restore permeability. This treatment system combines the advantages of ALDs (long flow path) and vertical flow ponds (VFPs) (large surface area, build up of head) into a single treatment system.

Annual maintenance of the system is coordinated by the Conservation District and funded through a grant from the Redbank Creek Watershe d Trust.



Fealmn bed



Wetland/Pond

SUGAR CAMP RUN AMD TREATMENT SYSTEM

The Sugar Camp AMD remediation efforts began in 2002 to treat a 3000 gallon per minute discharge that is the single largest contributor of pollution to both Sugar Camp Run and Stump Creek. The District coordinated with non-profit organizations and Pennsylvania Department of Environmental Protection to assess the mine pool and look for opportunities to treat the voluminous discharge economically. In addition to funding from the Commonwealth, JCCD and Sykesville Borough worked to engage private funding interested in assisting with remediation while looking for business development opportunities created by recycling the AMD water. In 2011, Winner Water Services leased a portion of land from the Sykesville Borough and invested monies to construct a truck pad, conveyance channel, and impoundment in hopes of attracting oil and gas companies to use the repurposed AMD water.

The District has worked with Winner Water Services and the US Office of Surface Mines to construct a series of wetlands to further treat the mine water for potable uses.



Maelstrom Oxidizer

Sediment Pond

Final Wetland

SYKESVILLE FLOOD CONTROL PROJECT REHABILITATION

A grant was awarded to the Conservation District by the DCED Commonwealth Finance Authority to rehabilitate the Flood Control Project located in Sykesville, Pennsylvania. The goal of the project was to correct the deficiencies identified in the U.S. Army Corps of Engineers' (ACOE) inspection report dated April, 2013. Approximately 17,000 cu. yd. of sediment from the channel.





STREAMBANK REHABILITATION

A grant was awarded to the Conservation District from the Redbank Creek Watershed Trust for the completion of the "Worthville Streambank Stabilization Project". The project included streambank stabilization along 500 ft. of Little Sandy Creek in Worthville Borough.

This project now provides streambank protection and reduces the amount of erosion taking place along the stream, thus reducing the amount of sediment entering Little Sandy Creek from the site. In addition to streambank stabilization, planting a riparian buffer is also proposed for spring of 2017. This area is approximately a 50 ft. buffer between the streambank and an existing crop field.

The Conservation District provided technical support and construction oversight and acted as the Administrator and Fiscal Agent. Worthville Borough also provided a cash match for the project.





WE CAN'T FORGET ABOUT CHIPPY! "HE'S NUTS ABOUT THE ENVIRONMENT!"



Western PA Laurel Parade



Brookville Elementary School