

JEFFERSON COUNTY CONSERVATION DISTRICT

# 75 YEARS

Protecting Our Resources 1946 - 2021





2021 Annual Report

# REFLECTION

Reflection on the past necessarily includes some speculation on the founding of the soil conservation movement in the Commonwealth of Pennsylvania and elsewhere.

World War II brought together millions of military personnel from all the then forty-eight states. One can only guess that those young folks would talk about their home areas during rare quiet moments. Thus, men who lived in the Rocky Mountains mingled with ones who had lost homes and family land during the devastation of the "Dust Bowl" of the 1930's.

Those memories were shared with personnel from the Western plains where wildfires were common and then interspersed with Pennsylvania troops, many of whom had grown up on then prevalent family farms.

In fact, data shows that in 1940 there were 2,356 farms in Jefferson County encompassing almost half of the total acreage in croplands, woodlands and plowable pastures.

Farmers were among those who were considered "critical" to the War effort and exempt from military service. In 1946, the first year of peace after World War II, it was a Jefferson County farmer who took a bold step in soil conservation and the roots of what is now the Jefferson County Conservation District (JCCD).

Although derided initially for his decision, the late Donald T. Smith laid out one of the first tracts of contour plowed acreage in the State of Pennsylvania on his farm in the Beechwoods of Washington Township, Jefferson County. The parcel was one-half mile long. Prevailing practice at the time was to plow in straight rows, regardless of the "lay of the land".

As the JCCD was in its infancy as the Jefferson County Soil Conservation District, they were basing early decisions on a 1934 soil erosion survey conducted by then-Pennsylvania State College, now Penn State University, which showed 25% to 75% of the topsoil was gone as of that mid-Great Depression era.

Donald T. Smith Farm (9-28-1939)

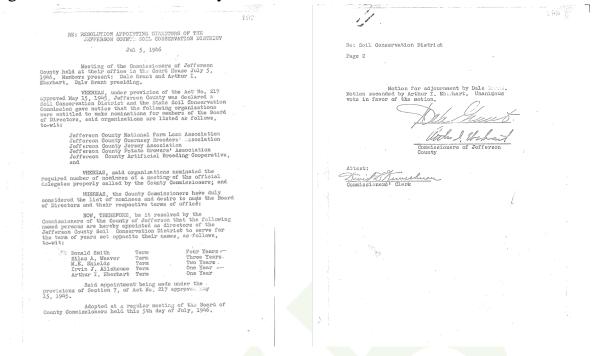
Donald T. Smith Farm (5-15-1969)





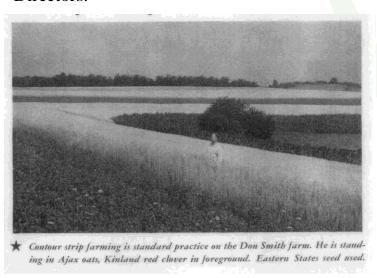
-Aerial Photography courtesy of: Historical Aerial Viewer, <a href="https://datacommons.maps.arcgis.com-">https://datacommons.maps.arcgis.com-</a>

Smith, and others, launched their cooperative effort with a written application submitted to the State of Pennsylvania on March 1, 1946 to create a Soil Conservation District in Jefferson County. At that time, U.S. Mail was the prime way to communicate. Jefferson County's bid to become a conservation district was the third one received in Harrisburg as determined by its postmark. That historic moment would be followed on July 5, 1946 when the Jefferson County Commissioners officially organized the Jefferson County Soil Conservation District.



The 1946 resolution document from the Commissioners of Jefferson County.

Smith was considered a pioneer in the new movement to better understand, work with and direct water run-off as well as associated matters. He further contributed to the effort by constructing the first conservation district pond on his farm. Later, Smith became the second President of the State Association of Soil Conservation District Directors.





In 1951 Smith was awarded the Conservation Farmer of the year award.

Those initial steps taken on the Beechwoods location would herald a change in the way fields, hill sides and water run-off were managed not only locally, but throughout the Commonwealth and beyond.

In 1963, then-directors Ross Reitz and Mervin Mowrey approached the late George Miller asking him to become the first Executive Secretary/Treasurer for the Jefferson County Soil Conservation District. While continuing his position as a Vocational Agriculture teacher in the Brockway Area School District, Miller accepted the part-time position which paid Two Dollars per hour and operated the office from his Brockway home.





Fifteen years ago, as the JCCD was celebrating their Sixtieth Anniversary, Miller expressed his thoughts about the mission of a conservation district, saying: "We had to teach water to walk, not run, downhill." His passion for conservation continued through the years as he served for 26 years as a Director and then an additional 18 as an Associate Director of the JCCD until his passing in 2021.

At JCCD's 75<sup>th</sup> Anniversary Banquet, on September 25, 2021, George was honored with a plaque commemorating his dedication and lifelong service.



# **Background**

Since its original inception as an agricultural-based organization with one part time employee, JCCD staff has grown to six full time employees and one part time employee and now handles 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 the JCCD's activities is to make all citizens aware of the inter-relationship between human activities and the natural environment





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

JCCD 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.

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 JCCD.

Funding for District operations is obtained from a multitude of sources, mostly State and Federal grants. Only about 19% of the District's operating budget came from the County Commissioners' general fund, which makes District programs a good investment.

# **Directors/Staff**

## **2021 District Directors**



(from left to right)

Allen Campbell, Sec/Treasurer (Public Director); Porter Duvall, Chairman (Farmer Director); Herb Bullers, Vice-Chairman (Commissioner Director); Theresa Shick, (Farmer Director); Tom McFarland, (Public Director); Terry Shields, (Farmer Director); Sam Farcus, (Public Director)

#### **Associate Directors** (not pictured)

Jerry Chamberlin, Laura Lynn Yohe, Tom Kundrich, Dennis Day, Deborah Wilson

# **2021 Staff**



(from left to right)

Rebecca Gaston, Conservation Technician; Shaun Wessell, District Manager; Evan DeLong, Watershed Specialist; Megan Whitlatch, ACT/Nutrient Management; Christine Hughes, Administrative Assistant; Carl Johnson, Resource Technician; Dana Grabowski, District Technician



1965 Staff and Directors



1969 Directors



1976 Staff and Directors



1990 Staff and Directors



2002 Staff and Directors



2015 Staff and Directors

# Conservation District Staff Throughout the Years

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Employee	Position	Start Date	Leave Date
George Miller	Executive Secretary	1963	1967
-	Executive Assistant	1969	1971
Roby Grose	Executive Assistant	1/1/1972	
	District Manager	7/1981	
	District Technician	1/1/1996	8/31/1999
Robin Mottern	Secretary	1980	1981
Marie Kerchinski	Secretary	1981	11/1986
Mary McNutt	Secretary	12/1986	11/1987
Deborah Wilson	Secretary	12/1/1987	
	District Technician	1/1/1993	
	District Manager	1/1/1996	
	Executive Director	7/1/2018	4/30/2020
Melissa Buck	Secretary	3/1994 (Part-time)	7
	Administrative Assistant	1/1/2001 (Full-time)	1/31/2021
Mark Buhite	District Technician	1/1/1999	5/5/2001
Shaun Wessell	AmeriCorps	9/5/1999	
	Second Technician	3/22/2000	
	District Technician	5/6/2001	
	District/Watershed Technician	10/2008	
	District Technician	2/10/2014	
	Assistant District Manager	6/1/2017	
	District Manager	7/1/2018	
Jessica Traister	Watershed Specialist	7/10/2000	1/10/2003
James Berry	ACT/Nutrient Mgmt. Specialist	9/3/2001	9/6/2011
Todd Beers	Watershed Specialist	2/11/2003	11/15/2005
Scott Schaffer	Second Technician	3/10/2003	2/4/2005
Amber (Gillung) Siar	Watershed Specialist	2/1/2006	8/2008
₩illiam Sheldon	Resource Technician	6/19/2007 (Part-time)	9/30/2008
Byrne (Buddy) Brown III	ACT/Nutrient Mgmt. Specialist	11/1/2011	5/11/2012
Megan Whitlatch	ACT/Nutrient Mgmt, Specialist	7/2/2012	
Gordon Snyder	Watershed Technician	2/10/2014	12/5/2014
Garce Pesselato	Watershed Specialist	2/2/2015	1/31/2018
Carl Johnson	Resource Technician	2/2/2015	
Dana Grabowski	District Technician	7/17/2017	
	Watershed Technician	2/1/2018	
	District Technician	3/16/2020	
Rebecca Gaston	Conservation Technician	4/15/19 (Part-time)	
Lexie Arkwright	Watershed Specialist	3/16/2020	3/31/2021
Christine Hughes		i e	
omismic magnes	Administrative Assistant	2/8/2021	

# **State Delegated Programs**

Dirt, Gravel and Low Volume Road Program

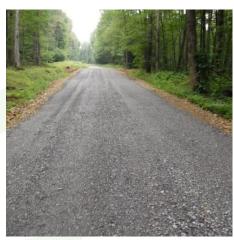
Pennsylvania's Dirt, Gravel and Low Volume Road (DGLVR) Maintenance Program provides funding to eliminate stream pollution caused by runoff and sediment from the State's comprehensive network of unpaved and low volume public roads. The Program was enacted into law in April 1997 as Section 9106 of the 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 2021, JCCD was able to provide nearly \$519,000 in DGLVR funds to 10 different Municipalities. Carl Johnson, Resource Technician oversaw the completion of 12 Dirt, Gravel & Low Volume Road Projects.



Saturated ditch and road base

Heath Township, Spring Creek Road



Stable roadway after drainage improvements

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 four DGLVR projects in 4 different Forest County Municipalities in 2021.



Saturated ditch and road base

Barnett Township, Forest County, Jack Hollow Road



Stable roadway after road base and drainage improvements

#### 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, JCCD 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 2021, 31 Erosion and Sediment Control Plans were reviewed and approved and 9 NPDES Permits were authorized by Dana Grabowski, District Technician. Dana, along with Conservation Technician, Rebecca Gaston conducted 126 construction site inspections while providing a total of 760 technical assistance contacts.



Love's Travel Station, Brookville



Columbia Gas Line 4010, Jefferson & Clarion Co.

### 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 acknowledges 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.

In 2021, 17 General Permits for water obstructions and encroachments were acknowledged. 15 Chapter 105-related complaints were investigated. The District provides information and technical assistance concerning permit and other requirements associated with Chapter 105 Regulations.

The District held two workshops to provide information and guidance to contractors and municipalities. Five additional conservation districts assisted with the organization of the contractor workshop, presenting on topics such as Chapter 102, Chapter 105, permitting, BMPs, creating an E&S plan, and Act 167 stormwater. The District also participated in a "Erosion Control in our Forests" webinar, hosted by the Clarion County Conservation District.



**Municipal workshop** 



**Contractor workshop** 

#### 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 2021, Megan Whitlatch, ACT/Nutrient Management Technician reviewed 4 amended Nutrient Management Plans (NMPs) for CAOs in the county, conducted 5 CAO annual status reviews, and wrote two NMPs for volunteers in the program.

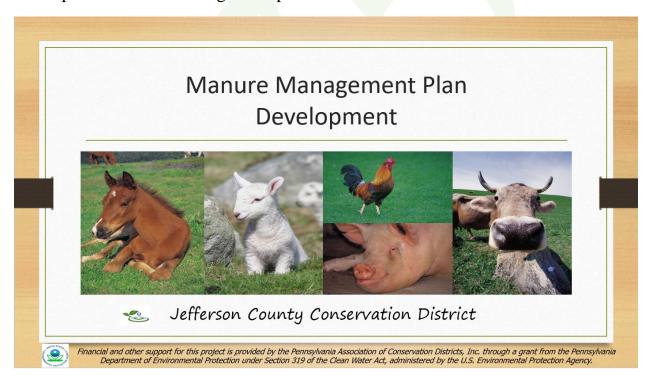
#### Agricultural Technical Assistance

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 2020-2021 REAP round, the District helped Jefferson County farmers apply for \$56,288.41 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. 32 conservation plans were developed through the District in 2021.

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 2021, the District developed 7 MMPs.

A Manure Management Plan Development webinar was created to provide farmers with an overview of the manure management regulations and offer a step-by-step guide on how to complete a manure management plan.



In 2021, 110 soil test kits were distributed to farmers in Jefferson County.

#### No-Till Equipment Rental

The District coordinated no-till equipment rentals for interested farmers in a cooperative partnership, utilizing Clearfield County Conservation District's no-till drill. Jefferson County farmers planted 258.3 acres with the drill.



#### 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.



# **Outreach & Education**

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

The District routinely performs technical assistance throughout the year. In 2021, well over 1,000 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.

#### 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.



**Brookville Library Events** 



**Jefferson County fair** 



**Presentations for Girl Scouts** 



Rain Barrel Workshop

#### **Envirothons**

Due to Covid-19, all of our 2021 Envirothon competitions were cancelled.

#### Outreach through traditional and social media

There were 107 Facebook posts with an average reach of 283 people. There were a total of 10 Facebook videos regarding various environmental education topics. In 2021, JCCD had 5 articles published in several local papers, covering a wide range of topics including stormwater management, vernal pools, plastics, and Erosion and Sediment control before winter.



Social Media Book Readings



**Job Shadowing** 

#### Other 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.



**Clarion River Mussel Sampling** 



**Kyle Lake Assistance** 



North Fork Stream Debris Removal



Earth Day Clean-up 2021







# **Special Projects**

In 2021, the District worked on projects funded by the PA Department of Community and Economic Development, the PA Department of Environmental Protection and the Redbank Creek Watershed Trust.

PA Department of Community and Economic Development- CFA Grant

Rattlesnake Creek Flood Mitigation

In 2021, utilizing a grant from the DCED Flood Mitigation Program, construction work began to reduce flooding in a one-mile section of Rattlesnake Creek along State Route 219.





Debris had collected over the years in remote sections of the stream corridor, exacerbating flooding issues. Great care was taken to remove this debris while minimizing any environmental impact.

The District's contracted Engineer continued design work for the replacement of failing existing drainage in the SR 219 corridor along Rattlesnake Creek. This project is an effort to assist 4 businesses and approximately 41 homes located in the project area that have had reoccurring severe flooding events.

Sugarcamp Run Water Testing

The Conservation District conducts quarterly water quality testing on Sugar Camp Run, an Abandoned Mine Drainage (AMD) passive treatment system in Sykesville. This AMD system consists of several settling ponds followed by a series of constructed

wetlands and a limestone-lined channel to encourage the iron to precipitate out before the discharge reaches the nearby stream.



#### 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



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

Throughout its history, the JCCD has been housed in several locations following its humble beginnings in George Miller's home. These include the old Jefferson County Service Center, 180 Main Street in downtown Brookville and its current location at the Jefferson County Conservation Center in front of the Jefferson County Fairgrounds.





For more information on the District, please visit our website at <a href="https://www.jeffersonconservation.com">www.jeffersonconservation.com</a>

#### **Mailing Address:**

1514 Route 28 Brookville, PA 15825

#### **Phone Number:**

814-849-7463