Washington County Conservation District 2024 Annual Report

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Photo credit: Jim Cheney - Henry Covered Bridge, Mingo Creek County Park, Washington County, Finleyville, PA

### **Mission Statement**

Washington County Conservation District coordinates and implements statewide and local programs to conserve soil health and water quality for the community through three (3) key components: outreach, education, and technical assistance.

*Outreach*: The district conducts outreach through information technology and social media, participation in key events in the county and state, and interactions with legislators.

*Education:* The district conducts education through Envirothon competition, school visits, municipality training, information briefings, and events such as Field Days.

**Technical assistance:** The district provides technical assistance based on delegated responsibilities from DEP, PDA, and SCC. These responsibilities include review of permit applications, inspections of best management practices (BMPs), complaint site inspections, and outreach and education for each program responsibility.

### **Vision Statement**

Assisting the community to conserve and improve natural resources through promotion and innovation.



# District Manager's Message...

The Washington County Conservation District (WCCD) saw many staff changes in 2024. At the beginning of the year, we brought on a new Watershed Specialist, Jeffery Kim and a new Resource Conservation Technician, Hayley McEvoy. Both employees came with extensive backgrounds and are fabulous additions to the team. Later in the year we brought on a new Dirt, Gravel, and Low Volume Road Technician, Jason Fillhart. Then we brought on a new Administrative Assistant, Susan Toth. These two have brought many years of experience and both jumped into the positions quickly and seamlessly. Our previous staff members all left for new opportunities. We wish them the best of luck in the future, and we are excited to see how our new staff help us expand our services.

This year the staff, board, and associate board members developed and published our new 5-year strategic plan. This plan lays out many of the items the WCCD will implement between 2025 and 2029. The strategic plan focuses on WCCD program expansion, outreach, and participating with partner organizations. The document can be found on our website if you would like more information.

The WCCD completed many projects in 2024, including two projects under the Agricultural Conservation Assistance Program, also known as ACAP. These projects were successful in conserving soil and water and assisting the farmers with improvements to their production. This program continues to accept applications and will fund projects to protect soil and water in Washington County. A grant to install streambank restoration and fencing at a farm in the Ten Mile Creek watershed was completed in 2024, leading to a significant reduction in sediment and nutrients entering the waterways.

As we enter 2025 the WCCD will be expanding our programming. Check in with our website and social media to know what is coming up and stay tuned for what is to come in 2025!

Sincerely,

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Jennifer Dann District Manager



Our staff at the December 2024 Board Meeting

The district completed two Agricultural Conservation Assistance Program (ACAP) projects. One project was to install a rotational grazing system with a pressurized watering system. This project was a partnership with NRCS providing funding and engineering support. The major item for the second project was the installation of a roofed heavy use area and manure storage structure. Both projects were started in the fall of 2023 and completed in 2024. The district has one more project contracted, and the design is being completed with the goal of construction in 2025. The district received an additional allocation from the state to use towards implementation of the program. The district has been promoting the program and is currently taking applications.

# Agriculture



Vitality Farms in Washington, PA received funds from the ACAP program for a rotational grazing and pressurized watering system.



ACAP funding used to create a heavy use pad for cattle as part of the Foster Family Farm project in Washington, PA.



WCCD Agricultural Technician, Tom Ulrich, addresses the group in regard to funding sources for agricultural projects at Crop Days. ~ February 2024

# Agriculture...continued



Ag Enhancement Program funds utilized as lime is spread on a farm in Washington County.

This year was the second application period for the Washington County Agriculture
Enhancement program which provides cost share to farmers in the county to implement agricultural best management practices
(BMP's). This year, the district expanded the program from lime to include comprehensive nutrient management plans (CNMP). The program received 27 applications for the lime program, of which 16 were new applications.
Applications for the CNMP was lower with only 3 applications. All applications were funded this year.

Work finished on the 2019 Growing Greener Grant for the Wherry Farm. With the partnership of California University Partners for Fish and Wildlife, we were able to install 10,697 ft of fence, 6 stream crossings, 2,851 ft of mudsill, 45 Log Cross Vanes, 84 ft of Toe Logs, 1 spring development, and installation of a box culvert. It was impressive to see the continued vegetative stabilization of the streambanks and improvement of the stream health in 2024.



Pictured above is the Wherry Farm prior to the work completed through the Growing Greener grant. Below is the completed project.



## Agriculture...continued

Lastly, the district partnered with Penn State Extension Agronomy Educator Justin Brackenrich to conduct a Nitrogen

Trial on hay. The question being investigated with this trial was whether different nitrogen sources and rates can provide producers an increase not only

in forage tonnage, but also in forage quality and at an affordable price. The results were positive from the trial, even in a drought year. The plan is to continue this trial in 2025 and collect more data. Our thanks go out to the Midla's and Flat Stone Lick Farm in Marianna, PA for hosting the trial and evening field day to discuss results.



Image caption: These images were taken on May 13. The top image is a control plot, while the bottom is an ESN and urea-treated plot. Notice the color and thickness of the stands. The scale board is approximately 30" tall, with each strip measuring 1.5".





The WCCD would like to congratulate "Baylor Cowden Show Cattle", Hopewell Township, as the 2024 Conservation Farmer of the Year. The 150-acre registered Shorthorn beef cow/calf operation worked with NRCS to install 10,000 ft of fencing, 5 watering facilities, and 3 spring developments, allowing for a rotational grazing system, excluding cattle from the stream. Their commitment to conservation in Washington County is greatly worthy of recognition.

# Washington County Conservation District

Thank you to the General Assembly for \$50 million in yearly dedicated funding and the continuation of the annual Transfer to Conservation District Fund in both the PDA and DEP budgets!

#### BMP Projects Accomplished in 2024

#### Foster Family Farm BMPs

Resource Challenge Soil erosion and nutrient management



#### Project Summary and Results

Installation of a covered heavy use pad with manure storage, fencing, ag crossing, and animal trail installation.

#### Key Project Partners

Funding provided by ACAP and Landowners

#### Vitality Farms BMPs

Resource Challenge Soil erosion and water access

#### Project Summary and Results

Installation of fencing, gutters, a rotational grazing system and pressurized watering system.

#### Key Project Partners

Funding provided by ACAP, NRCS EQIP,





#### Thanks to the General Assembly's Conservation District allocations, we were able to take these actions to reduce pollution

- Installation of streambank restoration and in-stream habitat work at four sites, for a total of 8,480 linear feet of stream improved.
- Continuation of the Washington County Agricultural Enhancement Program. A program which benefited 27 farmers in 2023 and 29 farmers in 2024 with soil improvements.
- We presented at 13 adult education workshops on numerous conservation subjects, attended by 258 people.
- WCCD partnered with Penn State Extension and a local farmer to conduct a local research project: Nitrogen Trials on Hay.

#### Funding Brought to the County from Conservation District Efforts: \$2,881,141.64

#### **Contact Information**

Jennifer Dann District Manager

William lams Board Chairman

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#### Future Projects Made Possible by the Additional Funding

- Additional farm best management practices, thanks to ACAP funding and Growing Greener
- Funding of Certified Nutrient Management Plans through our Agricultural Enhancement Program



The spring of 2024 saw the delivery of our new no-till drill. The drill is the same 10ft John Deere 1590 but with upgrades to the gauge wheels, seed firmer wheels, and closing wheels. The rental fee and deposit increased to \$60 for the deposit and \$15 per acre. Contact the WCCD office if you would like to rent the drill or download the information and reservation form from the web site. 724-705-7098 www.pawccd.org

## Watersheds

### Watershed Associations

The Washington County Conservation District continues to support the Washington County Watershed Alliance (WCWA) and its individual watershed associations through the assistance of the Watershed Specialist. Alliance associations include the Upper Chartiers Creek, Ten Mile Creek, Buffalo Creek, Pigeon Creek, and the Independence Conservancy -Raccoon Creek. Assisting the WCWA, the District and the Western Pennsylvania Conservancy completed one stream restoration project in Ten Mile Creek and one in Buffalo Creek.





Before (top) and after (bottom) images of the project completed along Brush Run (Buffalo Creek)



A Watershed is an area of land in which all water sources flow into a common body of water. The boundary of a watershed is formed by the topography of an area, and they're usually divided by hills and ridges. Small watersheds are part of larger watersheds, which in turn are part of even larger watersheds. Washington County's watersheds are part of the Ohio River watershed, which is part of the Mississippi River watershed, which flows into the Gulf of Mexico. What happens in one watershed effects water quality on a much larger scale. Washington County has fifteen main watersheds, some of which are shared with neighboring counties and West Virginia.



AMD discharge before treatment

**Grant Projects** 

# Watersheds continued...

Watershed Activities

The Washington County Conservation District assisted Headwaters Charitable Trust and Independence Conservancy with 6 months of sampling of the Joffre Branch 2 passive treatment system. With updated sampling data, plans for a rehabilitation project of the system are in the works.

The Washington County Conservation District was approved for a Growing Greener stream restoration project in the Chartiers Creek watershed. Awarded \$121,705.00, the District will complete stream restoration and install a wetland at the Ross Farm project site. Up to 395 ft of stream restoration and 0.5 acres of wetland will be installed. Construction is anticipated to be completed during 2025. New to 2024, the District received a \$5,000 mini-grant through the Watershed Specialist grant to implement education and outreach. A tree planting workshop on planting benefits and care was completed in the fall of 2024. A downspout rain planter workshop, stream restoration site tour, and educational videos are anticipated to be completed in 2025.



**Tree Planting Workshop** – The Watershed Specialist & DCNR Forester, Russ Gibbs, demonstrating proper tree planting methods and care ~ October 2024.

# **Environmental Education**



Trout in the Classroom WCCD Watershed Specialist Jeffrey Kim, along with Resource Conservation Technicians, Hayley McEvoy and Ian Reinstadtler, provided a lesson on aquatic macroinvertebrates at Mingo Creek County Park in May.



### **Washington County Envirothon**

The 2024 Envirothon competition was held at the Dormont-Mt. Lebanon Sportsmen's Club. 10 teams from 6 local high schools participated in the competition. The top 3 teams received prizes and the winning team members each received a \$500 scholarship reward towards continuing education. Assistance during the Envirothon was provided by the PA Game Commission, PA Fish and Boat Commission, DCNR Bureau of Forestry, and the Dormont-Mt. Lebanon Sportsmen's Club. Thanks to our 2024 sponsors, food, refreshments, and raffle prizes were provided for the participating students. Avella high school, who placed 1st in the county Envirothon, competed at the PA State Envirothon and placed 27th out of 64 teams. Congratulations, Avella Student Participants!

**Thank you to our sponsors!** Dormont-Mt. Lebanon Sportmen's Club, Laurel Communities, Range Resources, EQT, MPLX, Rivendale Farms, and Gateway Engineers



**Top 3 Teams** 1st place - Avella 2nd place – Canon-McMillan Gold 3rd place – Canon-McMillan Blue

## Dirt, Gravel, and Low Volume Roads

The Washington County Conservation District Dirt, Gravel, and Low Volume Roads Program (DGLVR) completed two (2) projects in 2024.

Dirt and Gravel Roa	Dirt and Gravel Roads Completed Sites		
Project	WCCD Payment	In-Kind	Total Value
Brady Road, North Bethlehem Township	\$92,021.25	\$19,459.52	\$111,480.77
McCready Culvert, Jefferson Township	\$160,776	\$40,341.95	\$201,117.95
Totals	\$252,797.25	\$59,801.47	\$312,598.72

- In total, WCCD spent \$252,797.25 on finished projects.
- Municipalities spent \$59,801.47 as In-Kind Payments on their projects.
- Total Spent on projects \$312,598.72.
- The average of In-Kind of all projects is 19.13%.



McCready Road Culvert #1: The McCready Road Dirt and Gravel Project replaced a failing multi-pipe culvert with an open bottom arch culvert/bridge. This was the 3rd culvert replacement on McCready Road. Bank stabilization was also completed as part of the project and the roadway was also raised to meet the bridge height.



Brady Road Drainage Project: The Brady Road Dirt and Gravel Project raised a portion of the entrenched roadway, replaced 3 cross pipes and added 2 new pipes and installed new inlets and outlets. 770 Feet of Riprap lined ditches were added. 360 Feet of 18" HDPE Storm Pipe was used for the project.

# Chapter 102 and 105 Permitting

The goal of the permitting program is to protect the soil and water resources of Washington County by reducing the impacts of accelerated erosion and encroachments on water resources. Through our Chapter 102 delegation from PA Department of Environmental Protection (DEP) we review erosion and sedimentation control plans, conduct routine site inspection and complaint investigations. One of the duties we are tasked with is inspections of permitted sites to confirm compliance with the Chapter 102 regulations and the Clean Stream Law. The goal of the 102 program is voluntary compliance.



Pictured to the left is the beginning of a "subsurface infiltration facility" located in Chartiers Township. The design of these facilities encourages infiltration and pollutant removal of stormwater runoff before it enters back into the water supply. To the right is the finished construction.



Even earth disturbance that does not require a permit, falls under the scope of PA Code Chapter 102, including those associated with agricultural plowing and tilling, timber harvesting, and road maintenance. A variety of Best Management Practices (BMPs) are installed at earth disturbance sites to reduce the effects of accelerated erosion and sedimentation. A large portion of the Resource Conservation Technician's time is spent reviewing and acknowledging NPDES permits and conducting inspections of BMPs on construction sites.

On the right is a "sediment basin" in Peters Township. This temporary pond is built to capture eroded or disturbed soil that is washed off during rainstorms, and protect the <u>w</u>ater quality of a nearby streams and other water sources.



# Chapter 102 and 105 Permitting continued...

A significant event that occurred in 2024 was the expiration of the 2019 PAG-02 permit (General NPDES). All PAG-02 permits had an expiration date of 7 December 2024 and would need to be renewed in order to continue earth disturbance or terminated. Our office received 121 PAG-02 renewals. We were able to renew 57 of them by the end of the year. The remainder are continuing to be processed in 2025. The 2024 PAG-02 permit expiration is set for 7 December 2029.



In the early part of 2024, our district was selected to undergo a routine Chapter 102 Program Evaluation. Essentially this is an audit conducted by DEP staff on how the Chapter 102 program is being administered. The last program evaluation took place 15 years ago in 2009. The evaluation provided suggestions on ways that the 102 program could be improved, but the overall evaluation found that the District has been administering the Chapter 102 Program well and that no follow-up evaluation

or performance improvement plan was required.

Permitting staff also participated in KEES testing. The KEES system (Keystone Environmental ePermitting System) is used for submission and review of PennDOT applications. District staff throughout the state will use this system when reviewing PennDOT applications.



# **Chapter 102 Permitting**



This completed project in Mt. Pleasant Township shows a "dry extended detention basin". The earthen structure provides temporary storage of water runoff to prevent downstream flooding impacts.

Permitting staff participated in several outreach events in 2024. We continued in our ongoing partnership with Allegheny, Beaver, & Butler Conservation Districts for the Joint Workshop hosted virtually each February. District staff provided content and presentations for this event. On the first Wednesday in November we hosted our annual fall permitting workshop for engineers and consultants at the Chartiers Township Community Center. This year we partnered with the Greene County Conservation District. There were 52 in attendance, an increase from the previous year. District staff provided presentations on various regulatory topics, as did DEP staff from the Waterways and Wetlands Program as well as the Department's Waste Program.

### Chapter 102

Total Review fees: \$142,862.5 Total Permit Appl. Proc. Fees Collected \$97,500

Initial Chapter 102 Plan Reviews - 78 Follow-up Chapter 102 Plan Reviews - 64 NPDES General Permits Authorized - 62 NPDES General Permit renewals - 121 (received) NPDES Individual Permits Authorized - 16

> Disturbed acres - 6587.7 Total acres - 4561.8

### **102 Inspections**

Project Sites Inspected - 99 Total inspections - 295 N.O.T. Inspections(final) - 37

### Complaints

Chapter 102 received and investigated - 40 (37 delegated)

## **Chapter 105 Permitting**

### Chapter 105

Total Review fees: \$5,000 Total Permit Appl. Proc. Fees collected: \$15,600

Incomplete Applications - 25 Chapter 105 GP Permits Acknowledged - 40

### Complaints

Chapter 105 received and inspected - 34

The Chapter 105 program involves review of General Permits, as well as complaint investigations.

Encroachments are "any structure or activity that in any manner changes, expands, or diminishes, the course, current, or cross-section of any watercourse, floodway, or body of water" and obstructions are "structures located in, along or across or projecting into a watercourse, floodway or body of water." Chapter 105 General permits are needed for any work that creates an encroachment or obstruction of waterways, wetlands or floodways. This type of work could include construction of roadways, utility line crossings or fish habitat structures.



This GP-8 stream crossing in Charleroi, PA is part of a temporary road crossing requiring a GP105 permit. The purpose of the structure is designed for short-term use and installed across a watercourse to allow construction vehicles to safely cross without damaging the stream bed or channel.

## **Public Relations and Outreach**



District Manager, Jennifer Dann, and Resource Conservation Technician, Jenna Waller, represented the WCCD at the PA Farm Show in January teaching visitors how to keep our air, water, soil, habitats, and farmland healthy for all.





January also saw the WCCD participate in the Soil Health Conference learning about planting set-ups and cover crops, managing drought and invasive species, nutrient cycling, precision farming, and rotational grazing. *Photo at left.* 

Engaging in soil compaction studies enables us to identify types of soil, moisture content, and provides for soil classification.





# More Public Relations and Outreach...



District Manager Jennifer Dann displays a macroinvertebrate found during a water sampling.

In March, WCCD Watershed Specialist Jeffrey Kim and District Manager Jennifer Dann conducted macroinvertebrate water sampling at a Growing Greener project site in Scenery Hill, PA. The stream is an unnamed tributary to Daniels Run.

The Volle Farm in Washington, PA was the site of another water sampling location. This stream is part of Chartiers Creek.

At right, Watershed Specialist Jeffrey Kim conducts a water sampling from Chartiers Creek.





On April 17th, Washington County Conservation District and Range Resources Corporation teamed up to clean a site in the Donora Borough of Washington County, PA. Volunteers collected multiple dumpsters full of trash and tires.





# Public Relations and Outreach continued...





The WCCD's display at the Washington County fair in August drew a lot of attention, as visitors were very intrigued by the "Soil Your Undies Challenge". The project focused on the importance of soil health, how to test soil, and how the results can be used. A new pair of cotton underwear was placed 3"- 4" in the soil, and dug up 60 days later to see how much was eaten by the microbes. The more the underwear is broken down, the better the quality of the soil is.

WCCD employees volunteered their time to work the "Milkshake Booth" at the fair.
Shown are: Lead Resource Conservation Technician Matt Golden, Resource
Conservation Technician Ian Reinstadtler, and Watershed Specialist Jeffrey Kim.





The WCCD hosted neighboring county Conservation District staff at the Fall SW DEP Roundtable in September.



## More Public Relations and Outreach...

In September, the WCCD and partnering agencies were given a guided tour of the Partners for Fish and WIldlife restoration project at Cecil Park.



Thanks to WCCD Board Member Jose Taracido, for his time and efforts.



The Washington and Greene County Conservation Districts partnered to host an Engineers Workshop in November. Presentations were given by Conservation District staff and DEP guest speakers.







This is always a great presentation. We're looking forward to seeing you there!

### Washington County Conservation District 2024 Board of Directors

Chairman William Iams Vice-Chairman John Hunter Secretary/Treasurer Janice Marchezak-Tomsic Washington County Commissioner Representative Larry Maggi Directors: Donald Logue Michael Lusk Jose Taracido

## Washington County Conservation District 2024 Associate Directors

Byron Black Dr. Jason Kilgore Chet Krcil Thomas Sierzega Jessica Ullom

### Washington County Conservation District 2024 Staff

District Manager Agricultural Technician Lead Resource Conservation Technician Resource Conservation Technicians

Watershed Specialist Dirt, Gravel, & Low Volume Road Technician Administrative Assistant

Jennifer Dann Tom Ulrich Matt Golden Jenna Waller Ian Reinstadtler Hayley McEvoy Jeffrey Kim Jason Fillhart Kelsey Montozzi Susan Toth