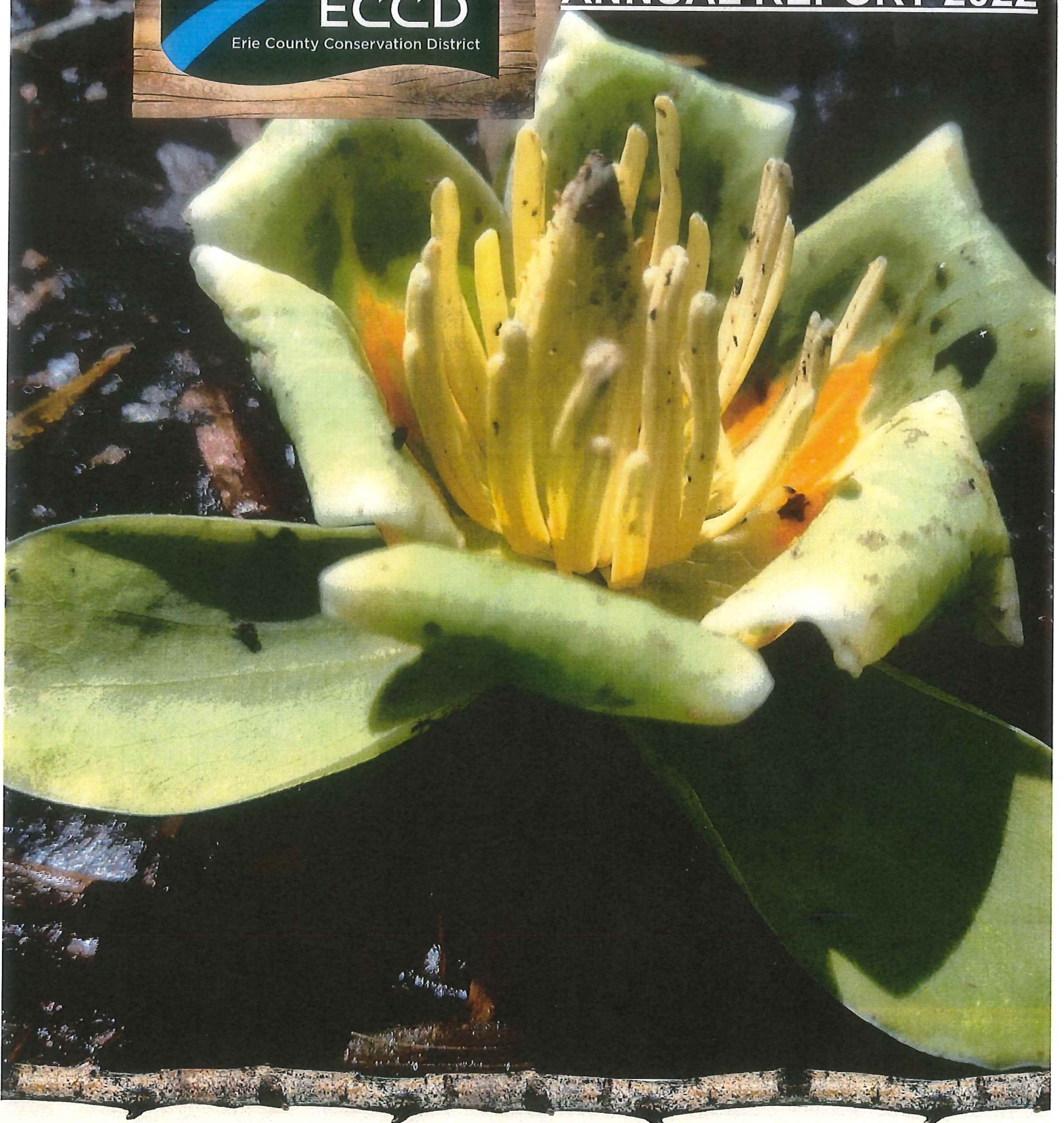


ANNUAL REPORT 2022



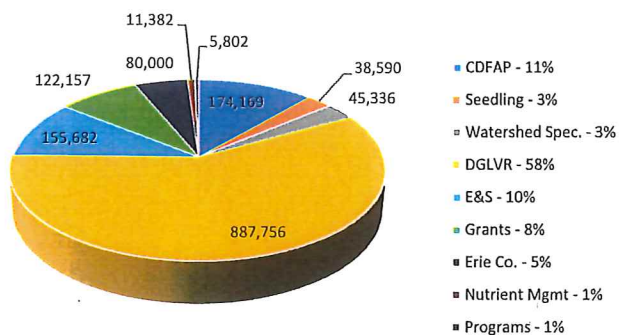


Erie County Conservation District – A Look Back

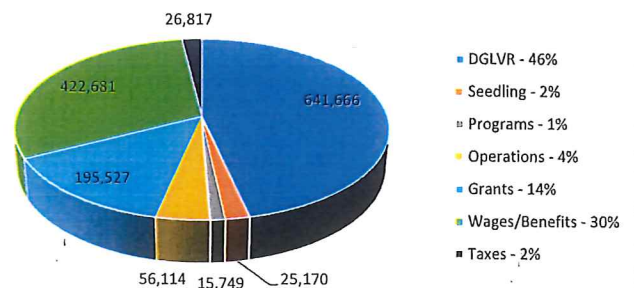
Many thanks are in order for all the hard work and contributions by the District Staff, Board of Directors and our many partners dedicated to the conservation movement in Erie County this past year. This work consists of outreach to our residents by hosting environmental education events at Headwaters Park, and by installing conservation on the ground with our agricultural cooperators, municipalities and agency partners. This report outlines our projects and programs in 2022, and provides insight on the impact in our community. Our Vision and Mission are realized now more than ever, after having to adapt and adjust to the ever-changing landscape.

The Erie County Conservation District continues its wise use of Federal, State and Local funds to put conservation practices on the ground. Leveraging these funds is critical for new grants and the longevity of our programs, and it is our responsibility to apply these funds to the advancement of the watersheds in Erie County.

ECCD Income



ECCD Expenses

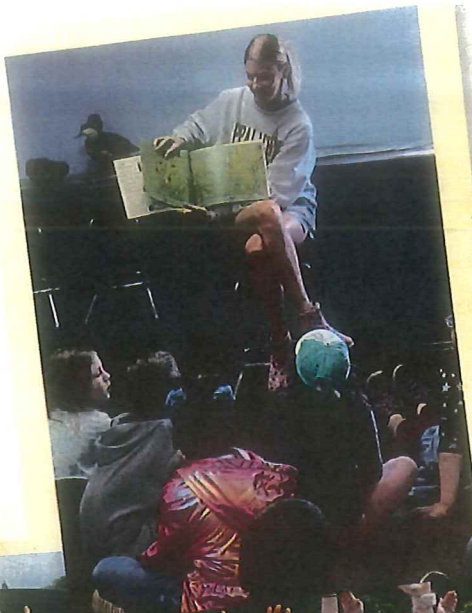


VISION STATEMENT

The Erie County Conservation District strives to become a leading conservation organization in Erie County to provide assistance, management, and education for the wise use of our natural resources.

MISSION STATEMENT

Erie County Conservation District is a service based organization providing for the conservation of natural resources and the creation of a healthy environment. We educate local residents, municipalities, landowners, educators, and organizations that are involved with or concerned about wise environmental stewardship.



ENVIRONMENTAL EDUCATION

The District was excited to open our doors again to formal programming in person in 2022. We were able to engage with students grades Pre-K through post-secondary in a variety of environmental programming, both at Headwaters Park and at various sites within Erie County. We were also excited to return to the Home and Garden Show for stormwater management outreach, Tall Ships Erie for stream table fun, and the 5-day Children's Water Festival. Our 2022 summer intern was key in the success of our outreach, both formally and informally, as with our popular annual scavenger hunts within the Park.

- Hosted the high school and middle school county Envirothons.
- Offered stormwater management outreach at the Home and Garden Show.
- Participated in the Tall Ships Erie Festival, offering Stream Table experiences to the public.
- Continued our summer intern program.
- Participated in the Children's Water Festival, working with Erie County 5th graders on stream studies

OUTREACH NUMBERS

>1,200

ELEMENTARY STUDENTS

>200

MIDDLE AND HIGH SCHOOL STUDENTS

>8,000

PUBLIC OUTREACH



CHAPTER 105 – WATERWAY MANAGEMENT PROGRAM

In 2022 the Conservation District's Chapter 105 Program reviewed and acknowledged the single largest volume of Chapter 105 Registrations in over a decade, double the volume of previous years. Applications are reviewed with the Conservation District and the Department of Environmental Protection's highest standards for quality and expediency in mind at all times.

The Chapter 105 Program responded to 595 technical support requests from the community, and 160 from local municipalities. This represents a 266% increase in technical support needs from the county. The Conservation District prides itself on the no-cost expert technical support that it provides the agencies and citizens of Erie County.

The Program responded to twenty Chapter 105 violations, and was able to achieve voluntary compliance in 95% of the events. This represents both the District and the Chapter 105 Program's investment in education and outreach to agencies and citizens of the community, as well as a significant cost savings to the Department of Environmental Protection.

The Conservation District's Chapter 105 Program is pleased to continue to serve Erie County with excellence.

Unpermitted stream excavation



95%
COMPLAINTS RESOLVED WITH
VOLUNTARY COMPLIANCE
755
INSTANCES OF ASSISTANCE

Unpermitted stream obstruction



CHAPTER 102

EROSION AND SEDIMENTATION CONTROL AND NPDES PROGRAMS

The District has worked with the PA DEP implementing the Chapter 102 program for well over forty years. Initially the program simply addressed minimizing the potential for off-site sedimentation and similarly, to Waters of the Commonwealth. Since, then, the program has progressed to address maintaining water quality via post construction stormwater, through various Chapter 102 permits.

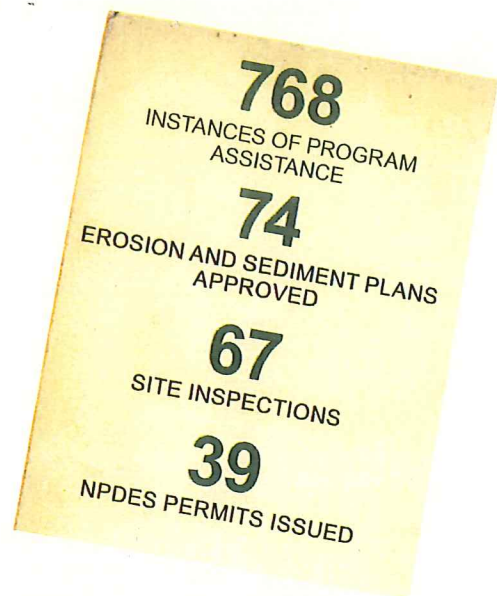
All earth disturbances, even those that do not require a permit, fall under the scope of Chapter 102, including those associated with agricultural plowing and tilling, timber harvesting, and road maintenance.

While the primary Chapter 102 permit processed within the District, and likely most familiar, is the National Pollution Discharge Elimination Systems (NPDES) Permit, the Erosion & Sediment Control (E&S) Permit and Erosion & Sediment Control General Permit (E&SGP-3) also exist. The latter permits address timber harvesting and roadway maintenance, and oil and gas, respectively.

The District continues to work closely with local municipalities, in relation to local stormwater ordinances, to minimize duplication of efforts and reduce permit processing times. In addition, due to the cooperative efforts with many of the local consultants in the pre-application process, the District's permit processing times remain below the Department's recommended standard.



Incorrectly installed inlet filter bag



The District has seen limited use of the e-permitting system as well as the newly created NPDES PAG-01 permit, however this is expected to increase as more consultants and applicants become comfortable with these options. In an effort to increase efficiency, the District has moved to accepting all Chapter 102 submissions in a digital format, and the feedback from applicants, consultants, and staff has been positive.

DIRT AND GRAVEL ROAD PROGRAM - 2022

There are approximately 550 miles of dirt and gravel roads in Erie County. The maintenance of these road can be a challenge to the municipality and can present potential environmental impacts to our local waterways. The Erie County Conservation District receives funds from the State Conservation Commission to assist municipalities through the Dirt & Gravel Road Program to improve road bases, drainage systems and road surfaces.



Stream Crossing Before: McGahan Hill-LeBoeuf Twp



Stream Crossing During: McGahan Hill-LeBoeuf Twp

Dirt & Gravel Road Projects

<u>Road</u>	<u>Municipality</u>	<u>Grant Funds</u>	<u>In-Kind Funds</u>	<u>Total Project Cost</u>
Old Wattsburg	Union Township	\$230,760	\$0	\$230,760
Ormsbee	Concord Township	\$76,720	\$0	\$76,720
Conneauttee	LeBoeuf Township	\$55,750	\$25,530	\$81,280
McGahan Hill	LeBoeuf Township	\$148,300	\$170,500	\$318,800
Dougan	Greenfield Township	\$50,000	\$0	\$50,000
2022 Totals		<u>Grant Funds</u>	<u>In-Kind Funds</u>	<u>Total Project Cost</u>
		\$561,530	\$196,030	\$757,560

Pipe Replacement-Greenfield Twp



DSA Rolled Surface – Union



4,676
TONS DSA PLACED

2
STREAM CROSSINGS
INSTALLED

4,000
LINEAL FEET OF UNDERDRAIN

3,147
TONS ROAD FILL ADDED

7
CROSSPIPES INSTALLED

LOW VOLUME ROAD PROGRAM - 2022

The Low Volume Roads program administered locally by the Erie County Conservation District concentrates on road improvement efforts that provide an environmental benefit on paved, concrete or tar and chip roads with a daily traffic count of less than 500 cars. This program is funded by the State Conservation Commission and assists municipalities with drainage and road base issues along with stormwater solutions.

Featured Project

Jones Road Stream Crossing Replacement – Unnamed Tributary to Six Mile Creek – Greene Township
Replacement of an undersized 5' 7" round pipe with an 11' 4" Arch Pipe that meets the bank full requirements.



Placement of Arch pipe



New Arch pipe inlet



Streambed and bank margins

Low Volume Road Projects

<u>Road</u>	<u>Municipality</u>	<u>Grant Funds</u>	<u>In-Kind Funds</u>	<u>Total Project Cost</u>
Jones	Greene Township	\$115,000	\$29,450	\$144,250
<i>2022 Totals</i>		<u>Grant Funds</u> \$115,000	<u>In-Kind Funds</u> \$29,450	<u>Total Project Cost</u> \$144,250



Final stream crossing



VINES PROGRAM 2022



PA VinES is a voluntary program that promotes sustainable viticulture practices through a grower Self-Assessment Workbook. After the participant completes the workbook, they are eligible to apply for Growing Greener grant funds to install best management practices (BMP's) on their operation. The goal of the program is to reduce the environmental impact of the approximately 10,000 acres of vineyards in the county by limiting the amount of sediments and excess nutrients that enter our Lake Erie tributaries.



ABOVE: STREAM RESTORATION STRUCTURES INSTALLED ON AN UNNAMED TRIBUTARY OF 12 MILE CREEK IN ERIE COUNTY, PENNSYLVANIA.

In 2022, the District completed construction of two large-scale stream restoration projects in the Lake Erie Watershed. The first project repaired 850 feet on an unnamed tributary to 12-mile creek on a vineyard/fruit farm in Erie County. The second was a joint project with the Crawford County Conservation District, which restored over 1,050 feet of an unnamed tributary of Conneaut Creek located in a livestock pasture in Crawford County. The projects combined for a reduction of 240 tons of sediment per year from entering the waters of the central and eastern basins of Lake Erie.

1,900
FEET OF TRIBUTARY REPAIR
240
TONS OF SEDIMENT REDUCTION



FEATURED PROJECTS



Rooftop Solar Array Project Grant

One of the five Facility Improvement Measures from a 2020 ASHRAE Level II Energy Audit was for the District to install a 23.6 KW Solar Array, and would make the biggest impact on ECCD's energy use. In 2022, the District was awarded a \$50,000 grant from the Penelec Sustainable Energy Fund, administered by the Community Foundation of the Alleghenies to install the array.

Although the District already operates at a high efficiency rating, the solar array would close that energy gap and perform as a net zero facility. The array is predicted to produce over 24,000 kWh, and offset over 28 tons of Carbon Dioxide annually.



Seedling Sale

Sales from our 2022 seedlings broke our previous sales records! The sale directly benefits our environmental education program, Envirothon, and Headwaters Park. Thank you for your support!

over 430
ORDERS FILLED

~13,000
SEEDLINGS SOLD

\$13,420
PROGRAM PROFIT

Live Stake Nursery

Our partnership with the Penn State Master Watershed Stewards Program was enhanced through the realization of a Live Stake Nursery, planted on the grounds of Headwaters Park. Live stakes are branches of trees that are cut while the trees are dormant and then planted directly in the soil. These branches are able to develop roots and grow into new trees. The native species used for this Growing Greener project will be used as vegetative plantings for future streambank stabilization projects.



HEADWATERS PARK

Headwaters Park is always looking for opportunities to provide outreach and information to the public, both through formal programs and through informal visits. In 2022 staff focused upon smaller additions to the Park and facilities. We maintained and refined the Park and trails, keeping the natural quality that is embedded into the industrial park. However we were also able to make small additions and offer our perennial scavenger hunts in the warmer months for a bit of fun during patrons' visits.

Accomplishments in 2022 include:

- Summer scavenger hunt focusing on the diverse habitats within the Park
- Hosted several storytimes in our Resource Center with an activity included
- Worked with the DEP and Penn State Watershed Stewards for educational programming
- Increased plantings in our rain garden
- Added a musical element for visitors in our Nature Play Area from an Eagle Scout Project

Thank You to our Donors!

*Jennifer Fox
Kathleen Bowden
Daniel Drabic
Patti Myers
Anitra Gates
Thomas Kennedy
Conor Marr
Peter and Elizabeth Oven
Steven Ropski
Ruth Speice
Lynette Straite
Peter Tibbetts
Roxanne Tonn
Natalie Waddell-Rutter
Rod and Judy Troester
Numerous anonymous donors*

All donations directly benefit our environmental education programming and care and maintenance of Headwaters Park. Through the generosity and support of our donors, the Trust is able to continue offering this unique treasure to the community. Please visit our website for more information on how to support Headwaters NRC Trust and the Park.



AGRICULTURAL ACTIVITIES

The goals of the Agriculture program in Erie County are:

- Assist farmers and landowners with nutrient management planning
- Assist farmers and landowners with planning and implementing best management practices (BMP's)
- Provide technical assistance to minimize soil erosion for landowners and farmers
- Assist with all concerns related to agriculture
- Assist farmers and landowners with conservation planning
- Assist farmers with writing their manure management plans

The District has three agriculture programs at this time. They are the Nutrient Management Program (NMP), Manure Management (MM), and the Agricultural Conservation Technical Assistance Program (ACT). These three programs provide assistance to farmers and landowners and help meet the goals of the agriculture program at the District. Our Nutrient Management Specialist and ACT technician is Bethany Fritz. She is available to assist farmers and landowners with their concerns. She also helps with several workshops and meetings throughout the year.



GROWING GREENER GRANT

The District continued to implement Best Management Practices in 2022 using a \$200,000 grant that ended in 2022. For the final project of this grant the District partnered with NRCS to fund a large manure storage on a beef farm. We were also able to install some much needed drainage and stabilization at the farm. The District has had much success with reducing erosion and sediment on properties using the Growing Greener Grant and hope to continue utilizing this funding source in the future.

BOARD OF DIRECTORS 2022

Francis Surovick - Chairman
Deb Phillips - Vice Chair
Bob Buhl - Treasurer
Amanda Shreve - Secretary
Brenton Davis - Erie County Executive
John Hallenburg, Jr. - Public Director
Dean Curtis - Farm Director
Julie Leonard - Public Director
Bonita Herman - Associate Director
Brian McNamara - Associate Director
Charlie Bayle - County Council Liaison
Mary Rennie - County Council Liaison - Alternate
Susannah Harris - DEP Field Representative

CONSERVATION DISTRICT STAFF 2022

Tom McClure - District Manager
Gene Clemente - Technical Resources Manager
Tom Revak - Resource Conservationist
Kristen Currier - Environmental Educator
Bethany Fritz - Agriculture Specialist
Joseph Hudson - Watershed Specialist
Amanda Shreve - Office Manager
Ryan Nageotte - VinES Field Technician
Brian Zeppenfeld - Coastal Zone Specialist

