TIOGAICOUNTY SOIL VIANTER CONSERVATION DISTRICT

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Annual Report 2024

Board of Directors

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A Note From the District Manager...

2024 was a hard year as we lost a long time director, supporter, friend and advocate for Soil and Water, Dale Weston. Dale served 19 years on the Soil and Water board providing his insights and quick wit to our meetings. He will be fondly remembered and missed by the board and staff.

Mendy Walth



Agricultural Program

The majority of our work with farms in the county is done through the Agricultural Environmental Management (AEM) Program. It is a statewide voluntary program led by Soil and Water Conservation Districts to help farmers make smart costeffective decisions that meet business objectives while protecting natural resources.

We work with interested farmers to create conservation plans that make them eligible to apply for funding. From large state and federal programs to local District and watershed programs, we planned and implemented many best management practices (BMPs) on farms in the county this year.



2024 Highlights

Top Left Photos: We awarded 2 farms the AEM Road-Side Sign for their continued commitment to conservation best management practices and land stewardship.

Lower Photos: We held a series of 3 Pasture Walks over the growing season with our partner CCE Tioga and their Dairy & Field Crops Team. The Pasture Walks featured 3 different farms in the county and covered a variety of topics: basics of rotational grazing, grazing cattle, grazing small ruminants, record keeping for a successful grazing season, plus how conservation practices can fit into your farm's landscape and why they are important for the overall ecosystem on the land for agriculture. We practiced using grazing sticks to measure forage, discussed the value of manure for pasture fertility, how to deal with weeds in the pasture and different types of protection for livestock on pasture, such as livestock guardian dogs.





Soil Health Meeting Held

38

Previously Installed Systems were Re-Inspected

Farms Participated in Soil/ Manure Sampling

56

Best Management Practices Installed

9 Pasture Walks Held

Stream Program

The District stream program is focused on assisting municipalities and private landowners with environmentally sensitive maintenance and repair of streams, while keeping in mind the need for safety, stability, and private property rights. The District works toward these goals by providing a variety of services: monitoring, mapping of stream issues, education, outreach, technical assistance and advice in regards to permit application and design, securing funding for implementation, construction oversight, hazard mitigation planning, flood recovery, and culvert assessments.





Owego Creek Confluence Project

A 40 ft. high; 400 ft. long eroded bank with a failing slope in this location was threatening two homes for years. The original slope was fully vegetated with large trees, and at some point in the past gabion baskets were installed at the toe.

The flood of 2006, and subsequent flooding and flash flooding events caused the bank to fail, and continue to erode toward the two homes. The SWCD applied for FEMA funding to buy out one of the residences, and also received funding to address the eroding stream bank. The bank was addressed with heavy rock rip rap with large root balls cantilevered out into the flow, live willow plantings and a riparian forest buffer. The property will transferred to the Town of Tioga and will forever be open space per FEMA guidelines.

Hazard Mitigation Support and Disaster Recovery

Since 2013, the District has contracted with the County to provide hazard mitigation coordination services. In 2004, we worked with the County and all 15 municipalities to update our hazard mitigation plan, which needs to be done every 5 years. The Federal Disaster Mitigation Act of 2000 requires local governments to prepare and update a hazard mitigation plan that addresses natural disasters. Priorities of the plan include flooding and flood mitigation projects, with the goal of reducing flooding and flooding impacts to our communities. The SWCD completed a FEMA flood buyout in 2024 and assisted numerous municipalities in applying for future funding to implement hazard mitigation projects.



Rock Riffle with live willow stakes installed on Long Creek

Channel re-established with root balls and live willow stakes on Pumpelly Creek





Channel re-established with live

willow stakes on Ellis Creek

Background photo: root wads with toe stone and bioengineered soil lifts with live willow stakes and coir fabric on Owego Creek

10

Projects Implemented

DEC Stream Disturbance Permits Received

4,765

Feet of Stream Bank Stabilized

Landowners Assisted with Stream Related Technical Assistance

71



Army Corps of Engineers Nationwide Permits Received

Engineering Program

The District's engineering team, comprised of one P.E. (professional engineer), one engineering technician, and one seasonal intern, works with landowners in the county with planning, design, and implementation of conservation practices through multiple funding opportunities provided by state and federal programs. Due to requirements through the majority of these programs to meet NRCS engineering standards, the availability of the engineering team through the District allows for a more efficient and cost effective process for the District and landowners to be able to implement these practices. The engineering team also helps increase the District's capacity to provide effective technical assistance to landowners and municipalities in the county.



Animal laneway construction in Candor photo taken in November 2024



Construction of Waste Storage Facility in Truxton (Cortland County) - photo taken in June 2024

2024 Project Photos



Completed Covered Barnyard & Waste Storage Facility in Truxton (Cortland County) - photo taken in January 2025

Image: Constraint of the constra

Engineering Assistance throughout the USC Watershed

Through the Upper Susquehanna Coalition (USC), the engineering team is able to provide engineering assistance to other counties in the USC. This is able to be done through collaborative agreements between the District and other counties, as well as through the engineering team's collaborative agreement with the NRCS. This allows other counties without engineering staff to receive assistance with inventory & evaluation, design, and implementation of projects to install conservation BMP's. In 2024, the engineering team helped implement projects in Tompkins, Cortland, and Otsego counties through such agreements.

Project Spotlight: Tubbs Hill Road Culvert Replacement

With assistance from FEMA, the town of Richford Highway Department was able to replace a failing, undersized culvert passing under Tubbs Hill Road. The culvert was further damaged during a declared disaster event in 2021. The culvert was also a major barrier to fish passage due to a 3-4 foot drop off at the outlet, with a steep slope with high erosion from the culvert to the edge of the roadway shoulder. Using the District's Engineering and Stream staff, a new 15'x6' Concrete Box culvert was designed to replace the existing 6' diameter metal culvert, in order to adequately pass the 100-year storm event without overtopping the road. This allowed the town to submit the plans to FEMA for disaster assistance funding. The failing wingwalls were also replaced. New headwalls were also installed, as well as rock riffle structures on both ends of the culvert, in order to reduce erosion during big storms. Extra consideration was given when constructing the rock riffle structures in order to create adequate pools for trout habitat, as the stream is a known trout spawning location. Construction was completed by the town of Richford Highway Department, with the assistance of several neighboring town highway departments. Abbey Storage & Crane Services assisted with the placement and construction of the new culvert. The photos below show conditions before and after construction. This was an exciting project for the District as it was a newer project type for the engineering team to take on.



Existing 6' Culvert Outlet - photo taken in March 2023



Completed Culvert Replacement (outlet side) - photo taken in November 2024



Flood Control Project Implemented

Culvert Replacement Project Implemented

Streambank Protection Projects Implemented

USC Counties Assisted (outside Tioga County)



In Construction Costs

Forest Buffer Program

The Tioga County Soil and Water Conservation District had another successful season of forest buffer establishment in 2024. The District has been dedicated to expanding our Buffer Program to promote the restoration and long-term functionality of forest buffer areas for water, soil, and habitat quality. The promotion, implementation, and vitality of forest buffer projects continues to be a high priority for the District. The District promotes forest buffer creation and restoration via education, outreach, and technical assistance.

Forest Buffer Volunteers

An integral part of what makes Tioga County's forest buffer program possible is the support from our community of volunteers. The District is always looking for ways to create new partnerships and forge new friendships with those in the community who wish to make a meaningful difference in the watershed. In 2024, 286 volunteers worked with the District to help plant riparian and upland buffers all across the county. 22 volunteers from the 4H Ranch Riders group planted 330 trees and shrubs on a farm in Newark Valley along a tributary of Nanticoke Creek.



A farm in Speedsville buffered their land along the West Branch of Owego Creek. 26 Student and Teacher volunteers from Waverly Middle & High School joined in and planted 300 trees and shrubs.



The District and NYSEG partnered together to establish a riparian forest buffer along the Owego Creek. The site is owned by NYSEG and the planting was designed to support NYSEG's pollinator initiative.

Forest Buffer Monitoring & Maintenance

Our Buffer Steward intern collects and reports critical plant data, and performs continued monitoring & maintenance activities to ensure successful establishment of the trees and shrubs planted in the county by the District. Our partnership with the Upper Susquehanna Coalition (USC) makes it possible for us to hire on stewards through their Buffer Steward Program funding. This information collection and extra set of hands has allowed the District to better support landowners and manage problems that arise in buffer plantings more effectively. The work done by our Buffer Stewards has positively impacted the survival and success of Tioga County's buffer plantings, and has aided in achieving nutrient reductions, decreases in flood damage, improved water quality, and expansion of wildlife habitat!



Our Buffer Steward monitored 16,197 planted trees and shrubs in Tioga County during the summer monitoring season.

> The District collaborated with the Upper Susquehanna Coalition and hosted a Buffer Steward Training/Work Day at a large buffer site in the county.



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143.3

Total Acres of Maintained Buffers in Tioga County

> Acres of New Buffer Created

25

4,851

Trees and Shrubs Planted

13

New Project Sites

23,698

Total Trees and Shrubs Planted in County Buffers Since 2018

Ontreach & Education

We believe that engaging and involving county residents in our work creates a strong and more resilient community. In 2024, the District supported the regional Envirothon, led a Soil Health meeting for local producers, organized grazing education events, initiated several stream clean-ups, hosted various volunteer plantings, staffed education booths at other events, and took the lead on organizing the County's beloved Sundaes at the farm event. These efforts resulted in meaningful engagement with thousands of our county residents.



Tioga County's Second Annual Soil Health Meeting was held in the beginning of the year. Local farmers and local service providers met at the Campville



Two stream clean up events were hosted. Community volunteers removed 1,280 lbs of trash from the county's waterways.





The District tabled the week of the Tioga County Fair conducting agriculturally related educational demos for children and parents alike.

> Tioga Central High School took first place at the 2024 Tioga County Regional Envirothon held at the Tioga Sportsman Association which was hosted by the District.



Sundaes at the Farm

District staff and the Agricultural Resource Group (ARG) coordinated the Sundaes at the Farm Event that was held at Frisbie Bros Farm in July of 2024. The event celebrates and honors local agriculture, and is held at a different dairy farm in the county each year. Close to 1,000 people attended!

3,295

Members of the Community Reached

Community Members Volunteered with the District to Assist with Projects

304

22

Outreach and Education Events Held

Local Schools/Community Groups Volunteered with the District

49.5

Volunteer Hours Donated







Rental Program

The District has a machine rental program which makes some specialized equipment available for community use. Currently the District rents out 2 sizes of No-Till Drills, a post pounder, a sidewall tire cutter, and a tree planter.

Tree/Shrub Sale

Our annual Tree and Shrub Sale takes place in the beginning of the year and most things are sold out by April. The annual Tree and Shrub sale is highly anticipated and gives us another opportunity to make relationships with the community while providing them trees and shrubs essentially at cost. In 2024, the District organized, packed, and wrapped 221 different tree/shrub orders for resident pick-up.



New York Soil and Water Conservation Committee Funding Support

Through the NYS Soil and Water Conservation Committee, districts statewide are eligible to receive funding to complete implementation projects that further our mission and goals. In 2024, Tioga SWCD requested Part B Funding and received \$6,000 to support the implementation of a mini-grant program made available to local school districts. Additionally, Part C funding is awarded competitively to Districts who meet the required performance measures established by the state. The District was awarded \$207,832.85 total in Part C funding.

Part B Funding

The District utilized Part B funding in 2024 to develop a mini-grant program that was released to local school districts in order to support their developing agriculture education programs as well as Future Farmers of American (FFA) and environmental clubs. A request for applications was developed and was sent to the school districts, a monetary threshold was set at \$1000 and a review process was conducted of those applications received. Schools could submit more than one application. We funded 2 school districts: Newark Valley Central School District and Waverly Central School District. The Waverly Central School District was funded to support a cafeteria composting program, associated raised garden beds, education and outreach support for their envirothon club along with a touch tank. The Newark Valley Central School District purchased Envirothon study materials as well as evergreen trees to plant on the school property. This is a joint endeavor between High School Ag classes and the entire 6th grade class. This year with the funding they planted 400 trees, and the students learned how to shape trees for future use as Christmas trees.

Part C Funding

Part C funding was used to support technical assistance provided by staff to landowners and municipalities. Technical assistance was also provided by staff on culvert assessments, stream permitting, non-ag buffer planning and implementation, education and outreach events and training. In addition, the District utilized funding to support staff professional development at trainings, printing of our annual newsletter and report for distribution. We supported several education and outreach events such as attending the County Fair, organizing volunteer buffer plantings, and hosting our annual Sundaes at the Farm event. The District also utilized Part C to supplement our cover crop program which continues to gain the attention of farmers as it expands further across the county each year.

175

Water Quality and Land Use Management Technical Assistance Requests



Stormwater Management Plans reviewed

1,553

Acres of cover crops

Invasive Species Treatment Projects

Total Permit Assists (Wetland, Stormwater, Historic Preservation, Streams, CAFO, & Grass Carp)

28



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