



Contours of Conservation

Winter 2023 Newsletter

www.tiogaswcd.org

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SWCD in the Community



Maggie the milking cow and Ronny the Raindrop visited the 2022 Tioga County Fair with our staff.



Sundaes at the Farm returned in July 2022 at Spencer Farms in Newark Valley with over 800 attendees!



Tioga SWCD Board of Directors:

Dale Weston, Legislative Representative, Chairman

Tom Zorn, Farm Bureau Representative

Mark Kwiatkowski, Grange Representative, Treasurer

Eileen Selnekovic, Member at Large

Tracy Monell, County Legislative Representative/Vice Chairman

Board of directors monthly meetings are held on **every 3rd Wednesday of the month at 9am** at the Tioga County office building. The public is always invited to attend.

Envirothon returned to in-person competitions this year. We host our region (Broome, Chemung, Schuyler, Tioga and Tompkins) in Owego at the Sportsman's Club.

The Tioga Tigers from Tioga Central School won first place in the county and second overall. The OM Otters from Odessa Montour won the overall first place.



Agricultural Environmental Management



The AEM Program is the foundation of our work with the Ag Community in the county. The program provides the framework and technical assistance needed to move through grant programs at no cost to the farm. Additionally, it has offered some cost-share funds for small projects and soil sampling in recent years. See below a snapshot of the work we have accomplished this year with AEM as our blueprint and farmers as our partners in stewardship!



35

Farms assisted this year



2

Rotational Grazing Systems Installed



13,675

Acres of Nutrient Management



1,943

Acres of Cover Crops



685

Feet of Diversion Ditch Repair



5

Stream Projects on Farms



4

New Acres of Riparian Buffers on Farms



6

Awarded Grants in Construction Phase



4

New State Grants Awarded



10+

Farms in the Planning Phase

Stay Tuned!

Our team is working a **Soil Health Meeting in February 2023** for farmers interested in cover crops, reduced tillage and nutrient management and

Pasture Walks in Summer 2023 for farmers interested in rotational grazing for all types of livestock



The SWCD Ag Team with NYS Department of Agriculture and Markets Staff and farmer on a site visit in March. The visit was part of the closeout process for grant funds utilized for rotational grazing, wetland restoration, riparian buffer establishment, watering system and fence.

2022 Buffer Plantings: A County Wide Success

By: Heather Scott, AEM Specialist

As 2022 wrapped up, we looked back and reflected upon our accomplishments across the seasons. In 2022, the District really put the hours in to expand and re-establish riparian forest buffers across 31 acres in the county. 18 different sites in Owego, Berkshire, Apalachin, Newark Valley, Nichols, and Candor have had a total 6,161 native trees and shrubs introduced to their ecosystem. These plantings will provide more water retention in the soil, help stabilize our stream banks, decrease erosion damage from flood events, provide nesting and foraging habitat for wildlife, and increase water quality (just to name a few benefits!) These trees and shrubs were carefully and lovingly planted by a combination of volunteers from the community, contractors, and staff. 150 volunteers from 3 different public schools and several after school organizations donated over 24 hours to planting more trees and shrubs right here in our community. The work is gratifying as there is nothing quite like putting down the shovel and looking behind you to see hundreds and hundreds of trees and shrubs erected in their tree tubes ready to grow and full of potential! This work is an investment for the future, and it's a pleasure to see the people of Tioga County come together to make a difference in their community. We couldn't have done it without them! If you are interested in volunteering during our Spring or Fall planting seasons, please contact scotth@tiogacountyny.gov and we'll be sure to get a shovel in your hand and put a smile on your face.



From top Left to Right: Waverly Middle School Science/Ag Class, Owego Free Academy Earth Science/Ag/Horticulture Classes, Owego Free Academy Participation in Government Class, and Newark Valley High School Science/Ag Class.

Engineering Support in other Counties

In partnership with other counties in the Upper Susquehanna region, the district provided engineering support in various counties in 2022. The support includes design, design review, construction oversight, and technical assistance. The photos below show some of the projects that were implemented in 2022. Any other counties in the Upper Susquehanna watershed interested in engineering assistance should contact the district.



Streambank Protection Project in Cortland County (above)



Streambank protection project in Otsego



Grade control structures at a road culvert outlet into field in Chemung County (Town of Chemung)



Trees For Tributaries

By supporting plantings along tributaries, small streams that feed larger rivers and lakes, the program helps create healthier, more climate-resilient communities



Do you own property along a stream, creek or body of water within the Headwaters of the Susquehanna River? Even Intermittent streams qualify!

Would you like to increase flood protection and reduce stream bank erosion? Or interested in increasing wildlife value on your land?



We have many different trees and shrubs that attract anything from pollinators to deer and other animals

The Trees for Tribs Program allows us to help improve the water quality throughout our watershed by offering Free Trees to plant Riparian Buffers



For More Information: Email: Bufferteam@u-s-c.org

Machine Rental Program

12' Esch No-Till Drill- 100 HP tractor min., \$100 delivery/ Set-up, \$20/ Acre

7' Esch No-Till Drill- 40-50 HP tractor min., \$50 delivery/ set-up, \$15/ Acre

Wheatheart Post Pounder- Tow behind with its own gas motor. \$50 delivery and \$50/day assuming 5 hrs of use and \$10/hr over 5 hrs.

Sidewall Tire cutter- \$20/day. New rule states that waste tires must either be cut or drilled holes in if left on property. NYSDEC Part 360

Tree planter- \$25/ day. Can plant between 2,000 to 5,000 trees/day with 4 people. 30 HP (3 point needed) tractor



Wheatheard Post Pounder (above)
Esch 7' No till Drill (left)



**Contact Alex
with machine rental
and pond questions**

Pond Advice and site visits

Having pond issues? Want to build a pond? We can help with that. We will make free site visits to determine your pond issues. We will help identify aquatic plants and animals and what to do with them, we can help get you grass carp permits, help finding excavator contractors, and help with maintenance advice.

Below: Grass Carp. Right: Hydrilla- Highly invasive submersed aquatic plant



Tioga County Construction Projects

By Connor Hubbard and Heather Scott

The District was very busy in 2022 with construction projects. A number of streambank protection projects were implemented, as well as some grazing system projects.

Streambank protection projects were implemented on farms in Candor and Berkshire, with a total of 510-ft of streambank protection measures were constructed. A combination of sloped rip rap, stacked rock walls, and rock-lined riffles were implemented for both projects. An old culvert was also replaced at the Candor farm, while an existing culvert was reset at a new stream grade at the Berkshire farm. Also at the Berkshire farm, grazing system components were implemented in the form of exclusion fence and a watering system. The watering system is fed off of an existing spring development at the farm.

Again in the town of Berkshire, over 1,000-ft of exclusion fence was constructed to help the farm further develop their existing sheep pasture. This also helps protect an existing buffer along the East Branch of the Owego Creek that was previously planted by the District.

In the town of Nichols, the District worked with a small equine farmer to address erosion issues at the end of their diversion ditch. To address the issue, the District designed a small stormwater retention basin with wetland plantings inside to reduce flow velocities in smaller rain events. Construction of the basin was done by the USC Wetland Team. The Wetland Team also provided technical assistance during the design phase. Around 100 trees and shrubs were planted in the basin by SWCD and USC staff. Eight different tree and shrub species were selected based on present soil types, and selected to mirror the existing forest surrounding the site. These species included witch hazel, serviceberry, nannyberry, silky dogwood, red-osier dogwood, red oak, hackberry, and tulip poplar. Within the physical storm water retention basin, four tree and shrub species were selected and planted based on their water retentive qualities, tolerance to flooding, and wildlife value including buttonbush, winterberry, arrow-wood and black willow.

Again in the town of Nichols, the District worked with a small beef farm to address issues with the farms existing diversion ditches. The ditches had significant erosion present in the steeper sections, and loss of dimensions in sections where livestock could access them. The District designed and implemented rock-lined riffles in eroding sections, and designed for ditches to be reshaped and regraded to their respective proper dimensions. A small tributary of the Wappasening Creek that starts on the property also required work due to headcuts in the reach. Check dams and a rock-lined riffle were installed to address this issue. Fence was installed along the ditches to exclude livestock, with a culvert and forded crossings constructed in specified areas for vehicles and livestock to cross.



Left: New culvert installed in Candor

Right: Culvert enhancement with streambank protection in Berkshire



Tioga County SWCD Emergency Stream Intervention Training

By Mike Jura

After a storm or flood event, streams may look unraveled with gravel and debris strewn all over the place. Our first reaction is to start up the dozers and start pushing. While this reaction is common, it is often inefficient and ineffective. Experience has shown that taking some simple steps to assess and understand how the stream has changed can save time and money. The Post Flood Emergency Stream Intervention Protocol (ESI) is a program that gives contractors and municipal employees a better understanding of how streams work, and ultimately in how to deal with damaged stream systems, and stream and infrastructure issues.

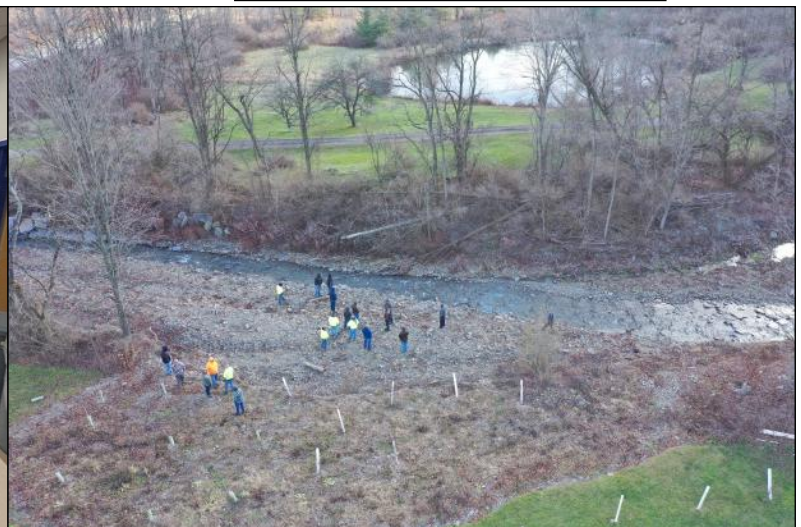
In emergency flood response, the first few days and weeks are the most critical to ensuring safe passage of roadways for emergency responders, protection of critical infrastructure, and protecting the life and safety of the general public. These are the critical concerns of our municipal employees who are often the first on the scene in the case of damaged roadways, washed out culverts or bridges, and plugged stream crossings. Having more tools to determine the highest priority work sites, and the amount of work needed will help increase the efficiency of our post flood emergency work. With these tools municipal employees will create cost savings in the short and long term while conducting this work in an environmentally sensitive way.

In December 2022 the Tioga County SWCD conducted a one day ESI Training where almost every town within the county was represented, with 34 total attendees. As part of the training session, at the end of the day the entire group walked a stream site where the SWCD had conducted some post flood work in the past for a discussion of the methods. The Tioga County SWCD continually works with the local municipalities and private landowners in all things stream related including flood response, technical assistance on stream and culvert issues, and permit assistance.

Classroom portion of training



Field portion of training



Tioga County Soil and Water Conservation District
183 Corporate Drive
Owego, NY 13827

Non-profit Organization
U.S. Postage
PAID
Owego, NY
Permit No. 5



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Conservation Planting Program for 2023

The Tioga County Soil and Water Conservation District offers a wide variety of species for reforestation, Christmas trees, wildlife food, windbreaks, borders, erosion control and ground cover. We offer the species and sizes best suited for all types of conservation planting in this area. All stock is bare root and packed with a water gel to keep moist. District staff is available to answer questions on species and site selection.

The order deadline is April 3, 2023, but we will continue sales as long as there is stock left. Order pick up will be drive thru. More information can be found on the order form.

Generally, more evergreens can be ordered if our stock runs out. Deciduous species, however, are not as likely to be available when our stock runs out, especially toward the deadline so please **ORDER EARLY!!**

Order forms are available from the Soil and Water Conservation District office at **183 Corporate Drive, Owego, NY**. By Phone at **(607)687-3553**, by **E-mail or USPS**. Order forms are also on the Conservation District page:

<https://www.tiogaswcd.org>

and will also be posted on our **Facebook Page**:

<https://www.facebook.com/TiogaSWCD>



DISTRICT STAFF

District Manager	Wendy Walsh
Administrative Assistant	Lisbeth Monell
Conservation District Technician	Mike Jura
Conservation District Technician	Alex Marks
AEM Specialist /PE	Brian Reaser
Water Quality/Nutrient Management Specialist	Danielle Singer
Engineering Tech	Connor Hubbard
AEM Specialist	Heather Scott