



Contours of Conservation

Winter 2022 Newsletter

www.tiogaswcd.org

In this Issue:	Page
2021 Construction	1
AEM Program/Projects	2
Riparian Forest Buffer	3
Engineering Support	4
Machine Rental	5
Cover Crops	5
Brooktondale Wetlands	6
Wetland Restoration	7
Conservation Planting	8

Tioga SWCD Board of Directors:

Dale Weston, Chairman/
Legislative Representative

Tom Zorn, Farm Bureau
Representative

Mark Kwiatkowski, Grange
Representative

Open, Director-at-Large/
District Treasurer

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.

2021 CONSTRUCTION PROJECTS

by Connor Hubbard

The 2021 construction season was pretty busy for the district. Projects implemented this year include a covered barnyard and waste transfer system in Candor and a grazing system in Barton.

In the Town of Candor, a covered barnyard was constructed along with manure scrape alleys connecting the new barnyard and the existing barn to the farm's manure storage. Along with this, access roads were improved and site grading was done allow drainage away from the heavily used areas on the farm. Traction milling was also implemented in the alleys that the animals will use to pass between barnyards.

In the town of Barton, a new rotational grazing system was implemented. The project consisted of installing watering systems and fence on multiple sections of the farm. Existing ponds on the property were used to provide water for the system. One of the watering systems utilizes a solar pumping system that pumps water from the pond to a holding tank at the top of the hill, and then gravity feeds back down to the watering points. Another watering system utilizes an electric pump that simply pumps water from the pond to the watering points. Hydrants with hardened gravel pads were installed in the wintering areas as well. New hi-tensile fence was also constructed on the farm. This allowed for livestock exclusion from water courses and ponds on the property.



Covered barnyard in Candor

AEM PROGRAM & PROJECTS

by Danielle Singer & Connor Hubbard

One of the programs that farmers in Tioga County have access to through our organization is Agricultural Environmental Management (AEM). This is a NYS program that over 12,000 farms have participated in over the last two decades by working with their local Soil and Water Conservation District to develop and implement comprehensive farm-specific conservation plans. AEM is a voluntary, confidential, and locally-led approach to advancing environmental stewardship on all farms in our state. The fundamental principles of the program are to ensure New York's farms remain viable and continue to meet their business objectives while improving their impact on natural resources and water quality through technical support and financial incentives. Our office is continuously enrolling new farms and revisiting farms we have worked with in the past through the program. We are currently reviewing potential projects for upcoming funding through the AEM process.

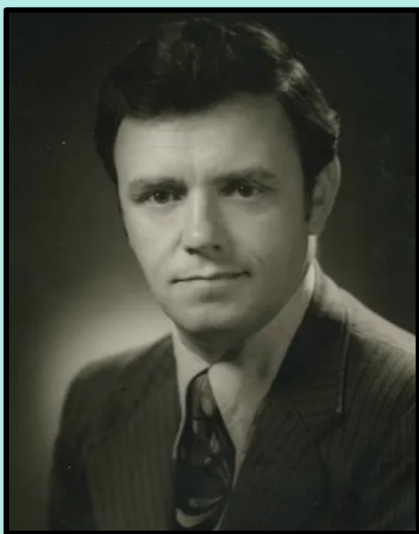
In the 2020-2021 round of AEM implementation funding, we planned, designed and constructed rotational grazing systems at Heritage Haus Farm and Bottomland Farm in Berkshire/Newark Valley. The implemented BMP's include watering systems, exclusion fence, and riparian forest buffers. Construction for the projects took place during the spring and summer of 2021. The farms are located in the same watershed and planted a combined total of 6.5 acres of riparian forest buffer along their tributaries to the East Branch of Owego Creek. The addition of these trees and the practice of rotational grazing will improve water quality on the farms and improve their climate resiliency.

We were also able to plan and fund 4.4 acres of riparian forest buffer planting on the Stoltzfus property in Nichols adjacent to active crop fields and constructed wetland ponds. These plantings will create valuable wildlife habitat around the wetland ponds and provide a buffer between the crop fields and the stream to capture sediment and excess nutrients which will contribute to better water quality.



AEM FUNDING

Contact Danielle Singer for AEM program information at (607) 972-8009 or by email at singerd@tiogacountyny.gov



IN MEMORY OF RONALD E. DOUGHERTY

The District had a great loss this year, with the passing of a long time board member Ron Dougherty. Ron was a member of our Board of Directors for 21 years and much of that time he served as our Treasurer. He had a passion for conservation and put so much of his time and energy into our work. He contributed many ideas to our programs and always had a thoughtful comment or question. He was a wonderful and special person and he will be greatly missed by all of us.

RIPARIAN FOREST BUFFER WORK

by Danielle Singer

Riparian forest buffers are comprised of trees and shrubs that provide soil stabilization with their roots which keep the soil from eroding away along stream banks. Buffers also reduce the impacts of floods and provide natural filtration of nutrients and pollutants, lessening impacts downstream. These buffers additionally provide valuable habitats for ecosystems. For example, stoneflies, salamanders and lichens require specific microhabitats which are found in forested buffers. Stoneflies are a great lure for brook trout and other species of game fish. The trees offer shade to the stream which regulates the water temperature providing better conditions for cold-water fish such as brook trout. Diversifying the species in the stream, will diversity the wildlife on land which eats the fish, bugs and plants. Many species of birds such as wood ducks, kingfishers, great blue herons and even bald eagles will find refuge in riparian ecosystems.

Buffers are important practices to get on the ground because of all the benefits they provide to wildlife ecosystems, the watershed and our local community. In 2021, the District planted over 31 new acres of riparian forest buffers in Tioga County. These were implemented on farms and rural land along streams through various programs including AEM, USDA CRP, USC Water Quality Funding, DEC Trees for Tributaries and state Ag Non-Point Source Abatement and Control grants. The buffers were planted by contractors, District staff and volunteers from the Ranch Riders 4-H Club and Newark Valley School Students.

The District also applied and was awarded funds to monitor and maintenance the existing 33 acres of buffer in the county. Buffers require 3-4 years of consistent care to get good plant establishment and the District has been working to grow the program each year to provide assistance to landowners and improve plant survival. This year, we hired two interns to do the monitoring and maintenance over the summer. They stood up tree tubes and stakes, removed weeds from the tubes, recorded the survivability in each buffer and noted any

invasive species pressure or other issues impacting the buffer. The interns were also able to assist with stream surveys, work days to maintenance large buffers in partner counties and assist Broome County with monitoring their buffers.

If you are interested in establishing a buffer on your property please contact Danielle Singer in our office at (607) 972-8009 at singerd@tiogacountyny.gov.



*Landowner helping replant his buffer (above)
Completed buffer planting along Owego Creek (below)*



ENGINEERING SUPPORT IN OTHER COUNTIES

In partnership with other Districts in the Upper Susquehanna region, staff provided engineering support to various projects in 2021. The photos below show some of the implemented projects.



Streambank Protection Projects in Cortland County (above)



Streambank Protection Project in Otsego County (above)

Geologic Investigation for a Manure Storage Project in Otsego County (above)

Streambank Protection Project in Steuben County (above)

DO YOU HAVE AN UNPROTECTED STREAM BANK?

Check out the Trees for Tributaries Program:



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 Tribes 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

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 minimum



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

TIOGA COUNTY COVER CROPS PROGRAM

This fall, nine farms in the county planted over 1,300 acres of cover crops on their fields. These cover crops are essential to protecting our productive farmland from erosion through the winter months and keeping that sediment out of streams for better water quality. Cover crops also provide soil health benefits such as better water infiltration, adding organic matter and keeping soil microbes alive through the winter on living roots. Take a peek at the fields as you drive throughout the county and applaud the farmers who prioritize this practice that benefits us all.



The program is open to any farmers in the county with no prerequisites, only to follow the guidelines of the program to qualify. For more information about payment rates and details of the program call/text Danielle Singer at (607) 972-8009 or email singerd@tiogacountyny.gov.

NEW HIRE HEATHER SCOTT



Heather started as the Agricultural Environmental Management Specialist for Tioga County Soil & Water this December. In January of this year, Heather and her partner Jared moved to Owego, NY from Howard County Maryland along with Jared's brother Adam and his partner Alla. Heather served in the Navy for four years and began her career in conservation following her service. Heather worked as a Frederick County Park Ranger and then worked for several years with Maryland State Parks in their Conservation Corps Programs. In her free time, Heather enjoys spending her time hiking outdoors practicing plant, tree and mushroom identification, as well as studying wild medicines and foraging. Heather is elated for the opportunity to work for the community of Tioga County and desires to serve the farmers and the environment by implementing pragmatic and dually beneficial agricultural solutions.

BROOKTONDALE WETLAND PROJECT

an Upper Susquehanna Coalition Wetland Restoration



*Pre-restoration (pictured)
during restoration (below)*

In summer 2021, the Upper Susquehanna Coalition Wetland team constructed a series of wetland potholes on neighboring properties in the Town of Brooktondale. With adjacent landowners interested in improving wildlife habitat and supporting wetland restoration, the USC wetland team went to work designing and working with the landscape and the available water and soil to develop a diverse wetland complex.

Between the six potholes constructed, and the management of pothole runoff, the total complex is over seven acres, increasing habitat and groundwater infiltration throughout.

The USC Wetland Team is thrilled to partner with landowners committed to improving their environmental stewardship, and has additional funding to continue wetland restoration throughout the watershed.



Post-restoration (pictured and below)



WETLAND RESTORATION BENEFITS OUR WATERSHED

Article by: Melissa Yearick, Upper Susquehanna Coalition, Wetlands Coordinator



Wetlands, those transition areas between deep water and dry land, are important parts of our landscape. They come in many forms, and occur throughout our watershed, providing a variety of benefits.

Wetland benefits range, from absorbing flooding river flows, to holding rain in headwater areas, decreasing flooding downstream; from providing habitat to animals and recreational opportunities to people, to slowly releasing water into the ground, maintaining groundwater levels for streams during low flow periods; from cleaning surface water, to fixing carbon and mitigating climate change, and many more.

Unfortunately, wetlands often occur in areas that appear suitable for other landuses, areas along rivers and in flats where development is desirable. This conflict between wetlands and other uses has resulted in the removal of thousands of acres of wetlands from our watershed, resulting in the loss of all of the benefits those wetlands provided.

Researchers believe New York has lost more than 60% of our wetlands since the 1800s.

The Upper Susquehanna Coalition's Wetland Program is actively searching for opportunities to restore wetlands of all shapes and sizes, to return those benefits and to improve water quality, both locally and downstream in the Chesapeake Bay.

Wetlands can be restored through the plugging of drainage ditches, the removal of drain tile line, the construction of low berms, or the excavation of potholes, all of which serve to keep water on the land longer, slowing the pace by which it reaches our streams and rivers.

The highest priority wetland restoration sites are large, flat fields, with ditching throughout and heavy soils. But wetlands can be restored in many areas. If you are interested in being a wetland steward, and in having wetlands restored on your property contact our team at wetlandteam@u-s-c.org or visit our website for more information www.u-s-c.org/Wetlands.

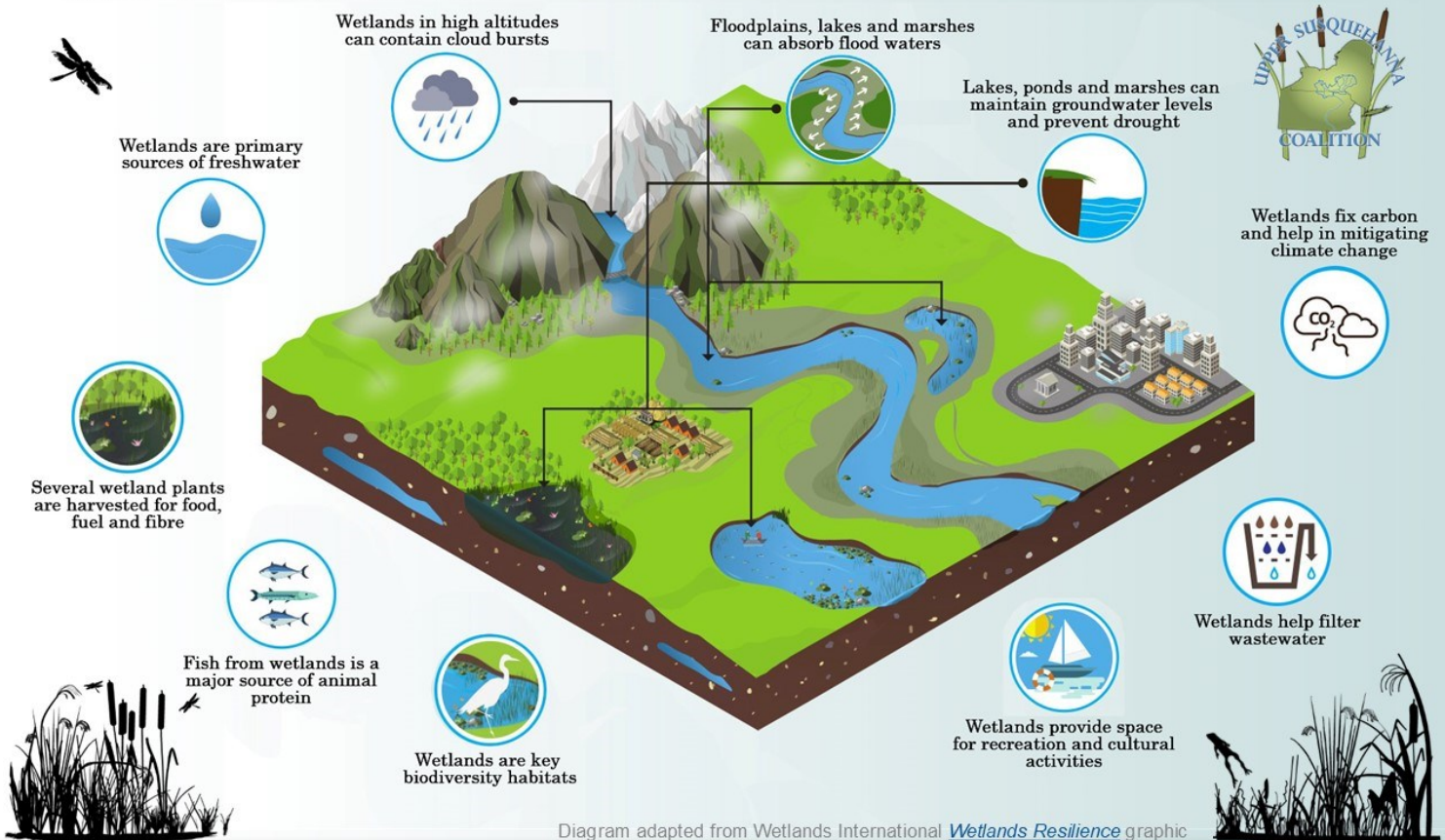


Diagram adapted from Wetlands International [Wetlands Resilience](#) graphic

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



Winter 2022 Newsletter

Conservation Planting Program for 2022

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 1, 2022, but we will continue sales as long as there is stock left. Order pick up will be drive thru, with buyers remaining in their vehicles. 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