

T I O G A C O U N T Y  
**SOIL & WATER**  
 C O N S E R V A T I O N D I S T R I C T

*Contours of Conservation Winter 2021 Newsletter*

<https://www.tiogacountyny.com/programs-agencies/soil-and-water/>

## AEM Program

By: Danielle Singer

Agricultural Environmental Management (AEM) is a voluntary program led by Soil and Water Conservation Districts to help farmers make smart cost-effective decisions that meet business objectives while protecting natural resources. It is a 5 tiered process which begins with a short questionnaire to summarize farm activities and identify the farm's interests moving forward. 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, the options plentiful and easy to navigate with the help of District staff. All funding sources are competitive and are usually a 75% cost-share with the farmer responsible for 25% of project costs.

Current programs will fund ag waste storage cover and flare systems, water management (runoff water, erosion control, stream work, forested stream buffers, livestock/equipment stream crossings), practices that enhance soil health (ex: cover crops), livestock rotational grazing, and management practices that reduce water pollution (ex: milk house waste collection system, silage leachate collection system, nutrient/sediment control projects, barnyard runoff management).

If you are interested in joining the AEM Program and/or would like to move forward in the process, please contact Danielle Singer at (607) 972-8009 or email [singerd@tiogacountyny.gov](mailto:singerd@tiogacountyny.gov). More information on the AEM Program can be found at [www.nys-soilandwater.org/aem](http://www.nys-soilandwater.org/aem).



District Manager Wendy Walsh presenting the 2020 AEM award to the Kwiatkowski Family that operates Tri-Kay Farm. AEM award goes to farms that are committed to environmental stewardship and Best Management Practices

Newly constructed covered barnyard with manure stacking pad and a riparian forest buffer planting along the stream

## Twin Brook Farm Farmstead Improvement Project

**By: Miranda Palmer**

Nestled in a valley in the Town of Owego sits a local beef farm. Running through the beef operation is Little Nanticoke Creek, a tributary to the Susquehanna River. The owner and operator of the farm, preaches the importance of soil health to all those around, and his farm echoes this message. A rigid grazing plan is kept to ensure his cattle are 100% grass-fed, keeps tabs on his soil biota, and continues to improve forage quality through various no-tilled pasture mixes. Most recently he acquired adjacent farmland that has been traditionally row cropped for many years which he plans to convert to permanent grasses for grazing. This spring he installed a five acre riparian forest buffer with cattle exclusion on both sides of the 1,400 feet stream reach on this new property. In order to implement this buffer, a berm on either side of the constrained stream needed to be removed. Once the floodplain was reconnected to the stream, a buffer was planned out with a minimum width of 35 feet, extending in some areas to 70 feet. This buffer will reduce runoff of nutrients and sediment into Little Nanticoke Creek creating a healthier ecosystem in the stream, as well as, the Chesapeake Bay. As a result of implementing a riparian forest buffer, the farm was also able to install 11,000 feet of fencing and 4,800 feet of waterline for three watering systems throughout his newly acquired 65 acres surrounding the stream.



**Above: Constructed Berm on farm prior to removal**

**Below: Buffer area mowed prior to planting**



**Above: Removal of berm along Little Nanticoke Creek**

**Below: Buffer area after planting**



## 2020 Construction Projects

By: Connor Hubbard

Despite the COVID-19 pandemic delaying the 2020 construction season, Tioga SWCD was still able to manage a good list of construction projects for Tioga County farmers. These include projects in the Towns of Tioga, Candor, and Newark Valley.

In the Town of Tioga, a covered barnyard with a corresponding manure stack pad were constructed along with a new milkhouse waste system for an existing barn at the farm. In the Town of Candor, another covered barnyard was constructed. This project required a lot of carefully planned site grading to account for a large hill on site. Both of these covered barnyards feature traction milling for the barnyard floors, which is a new design option that Tioga SWCD is using. Traction milling provides better safety for animals in the covered barnyard, and can help prevent them from slipping and becoming injured. In the town of Newark Valley, rip rap, along with 2 stream barbs, were constructed along streambank of the Doolittle Creek. Willows were also

planted behind the streambanks for extra erosion protection.



Left: Covered barnyard in Tioga

Below: Covered Barnyard in Candor



Left: Streambank protection in Newark Valley.

## New Hire – Connor Hubbard

Connor Hubbard started at the District in August as an Environmental Engineering Technician to assist with the District's growing list of engineering projects. Connor graduated from SUNY Polytechnic Institute (Utica, NY) with a B.S. in Civil Engineering. He currently lives in Oneonta, NY with his family. Connor's hobbies include playing guitar, skiing, baseball, and football.



## Engineering Assistance in Other Counties

By: Connor Hubbard

In partnership with other Soil and Water Conservation Districts in the Upper Susquehanna region, Tioga County SWCD provided engineering assistance for projects in Cortland and Otsego counties throughout 2020. Projects mainly dealt with streambank protection, but also included fence and watering system projects.

In Cortland County, the District designed barbs and rip rap for a streambank protection project along the Trout Creek in the town of Solon. On the same farm, a new watering system was also designed.

In Otsego County, the District is providing design assistance (in collaboration with Bradford County Conservation District) for two streambank projects. One project features rip rap installation along the Keyes Brook in the Town of Laurens. The second project features rip rap installation and a stream crossing rehabilitation along the Elk Creek in the Town of Maryland.

Future projects include a grazing system design and streambank protection project, both in Cortland County, and two more streambank protection projects in Otsego County.

Any other counties interested in engineering assistance should contact the District at 607-687-3553.



## Help Support Environmental Education While You Shop!

- 1 Step 1: Go to <https://smile.amazon.com> and sign in with your Amazon account
- 2 Step 2: You'll automatically be prompted to select a charity - search for "Environmental Education Foundation of Soil and Water Conservation" - once you locate it, hit select!
- 3 Step 3: Shop! ... But make sure when you do you always start by going to <https://smile.amazon.com>



## Dean Creek Sediment Basin Clean Out

By: Alex Marks

Back on August 13<sup>th</sup>, 2018, the Town of Spencer got a little over 4 inches of rain in 2-3 hours that caused some serious flash flooding. We had quite a few phone calls from this storm and we responded to land owners that needed advice on what to do about the damages that occurred. The damages that we were really concerned about were the 4 sediment basins that are on Dean Creek and Burheight Creek in the Dean Creek Watershed that we manage. 3 out of the 4 basins (Bast Farm Basin, SVE Highschool Basins, and Burheight Glen Rd Basin) filled up with roughly 2500-3000 cubic yards of sediment, debris, and gravel. These basins are designed to catch sediment coming down stream so we can keep a lot of the sediment in central locations so we don't get piles of sediment in areas we don't want them to be. Our maintenance agreement states that we need to monitoring these basins for possible clean out in order to maintain design capacity. The last undertaking of cleaning out of the basins happened in 2012 after the effects of the 2011 flood.

District staff worked with FEMA after they declared this storm a disaster and they would provide funding to help with the clean outs. This summer was so dry it made for perfect timing to do stream excavation work, so we got started in the beginning of August and it took a week for all 3 basins. Tioga SWCD was the excavator contractor for the cleanout of the SVE High school basin and the Bast Farm basin. The Town of Tioga highway department, Tioga County DPW, and the Bast Farm were the dump truck operators for those 2 basins and they could do what they wanted with the gravel as long as they didn't store it in a flood plain. The Burheight Glen Rd basin was contracted out to O'Rourke Inc. and they took care of the excavation and hauling of material. In total there was about 2700 cubic yards of sediment removed from the 3 basins.



Above: Removal of sediment in the upper SVE high school sediment basin



Above: After sediment was removed at SVE basin

## Gunther Stream Improvement Project

By: Miranda Palmer

In the spring of 2019, the Tioga County Soil and Water Conservation District applied for and received Ag Non-point Source funding to help resolve issues on a local farmstead where there had been a large, multi-component project identified in the Doolittle Creek Watershed. Gunther Farm runs along a tributary to the West Branch of Owego Creek. From historical photos, the District could tell that between 1937 and 1955 the stream was mechanically straightened and has been currently maintained in this fashion through current time. In recent years, the working relationship between the family and District has grown, and on multiple occasions they have reached out to the District for permit and technical assistance. This occurrence has become almost annually as the stream continues to cause large gravel deposits, destruction of fence, and erosion to their property. Through the completion of this project, there is an acknowledgement and acceptance from the Gunther's that this stream is going to continue to cause erosion issues, because it is trying to create meanders to dissipate energy. In 2018, the Gunther's agreed, to buffer the stream and enroll the whole pasture area into CREP CP-22 practice to reduce the streams impact on the farm and their need to do work to the stream corridor. Using multiple different funding sources and programs, the District aimed to remove a ½ acre berm (DEC WQIP funding), complete a stream corridor and shoreline management system (USDA EQIP funding), plant a 7.2 acre riparian buffer with livestock exclusion fencing (AgNps Round 25 funding), install a livestock heavy use area system (AgNps Round 25 funding), and repair an existing waste storage and transfer system (AgNps Round 25 funding). This project will ultimately conclude with the implementation of 4 different management systems and 18 practice components that address water quality in the Doolittle Creek Watershed. Throughout 2020 the District worked to begin the first phase of the project, berm removal and streambank stabilization. The riparian buffer is projected to be planted during the spring of 2021, and the remaining project components are slated for implementation in the spring/summer of 2021.



Above: USC Wetland Team working on streambank stabilization

## Tioga County Cover Crops Program

By: Danielle Singer

In 2020, the program saw its largest participation yet and paid out incentives to 18 farms on over 1,600 acres of planted cover crops. 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. And check out our video on Facebook showcasing plantings from 2020.

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](mailto:singerd@tiogacountyny.gov). We will roll out the 2021 round of the program this summer and the deadlines are as follows:

**By July 2<sup>nd</sup> – Sign up for the program by providing an acreage estimate to Danielle**

**By August 27<sup>th</sup> – Contract must be signed by this date to ensure funds are reserved for you**

**OCTOBER 15<sup>th</sup> – LATEST PLANTING DATE ALLOWED (date depends on species)**

**By October 22<sup>nd</sup> – Receipts for seed purchase are due so we can process your payment ASAP**

## Trees for Tributaries Program

### Trees for Tributaries Program: An Opportunity to Reforest Your Streamside Areas

Do you have a stream running through your property? Streams are their best when the riparian area, or land area next to the stream, is forested. The New York State Department of Environment Conservation's "Trees for Tributaries" Program provides landowners with native trees and shrubs at no cost to reforest these streamside areas.

If the riparian area is not vegetated, or if the vegetation is of poor quality, stream stability is vulnerable. This vegetation, or riparian buffer, provides many services in regard to stream stability, but also to terrestrial and aquatic habitat. The riparian area aids in stream stability by slowing flood waters as well as reducing bed and bank erosion. Both aquatic and terrestrial habitats benefit from this area too- shaded streams have lower temperatures and higher oxygen content providing for a more habitable area for invertebrates and fish. Riparian buffers filter out nutrients from storm water, therefore protecting waterways from nutrient pollution, and the diverse, shaded riparian area provides for a refuge and corridor for land animals. Plus, pollinators and migratory birds are attracted to these areas!



Additionally, riparian forest buffers enhance aesthetic and economic value of our properties, may create privacy green screens, or create hunting ground.

Upper Susquehanna Coalition is here to help you plan and plant your buffer through this program. The main eligibility requirement is to have a stream on your property. Private and public sites qualify for the program.

If you or someone you know is interested in learning more about the program, please contact Danielle Singer ([Singerd@co.tioga.ny.us](mailto:Singerd@co.tioga.ny.us)) at Tioga County Soil and Water Conservation District or call (607) 687-3553.



Department of  
Environmental  
Conservation



Tioga County Soil and Water Conservation District  
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### WINTER 2021

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### Conservation Planting Program for 2021

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.

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. **ORDER EARLY!!**

**The order deadline is April 1, 2021, but we will continue sales as long as there is stock left. We will be doing the order pick up as a drive thru so people will not have to get out of their vehicles. More information is on the order form.**

District staff is available to answer questions on species and site selection. Order blanks are available from the Soil and Water Conservation District office, **183 Corporate Drive, Owego, NY. Phone (607)687-3553. E-mail or sent by USPS.** Order blanks are also on the Conservation District page on the Tioga County website: <https://www.tiogacountyny.com/programs-agencies/soil-and-water/> and our **Tioga SWCD Facebook Page.**

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Director-at-Large/ District Treasurer	Ronald Dougherty
County Legislative Representative/Vice Chairman	Tracy Monell

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.

#### DISTRICT STAFF

District Manager	Wendy Walsh
Administrative Assistant	Lisbeth Monell
Administrative Assistant	Miranda Palmer
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
USC Ag Coordinator	Emily Dekar