



# 2019 Annual Report





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## A NOTE FROM THE DISTRICT MANAGER

Tioga County SWCD continues to work on flooding, nutrient and erosion issues across the landscape. Our programs are focused on providing technical assistance to rural landowners, municipal staff, and agricultural operators. We work to plan and secure resources to ultimately address these needs.

Once again portions of the county were impacted by severe storms and staff worked to assist municipalities with permitting and apply for funding to address these impacts. We assisted the county and all 15 municipalities in the drafting, approval and finally adoption of the Multi-Jurisdictional Hazard Mitigation Plan that will assist many of these municipalities secure funds to address reoccurring flooding issues. 2019 was an opportunity for reflection on our program, past successes and future opportunities as we celebrated 75 years of conservation. Conservation that wouldn't be possible without an engaged, supportive board of directors and staff that is committed to finding solutions to numerous concerns.

Wendy Walsh

## 2019 Board of Directors

Dale Weston, Chairman, County Legislature  
Tracy Monell, Vice Chairman, County Legislature  
Ronald Dougherty, Treasurer, Member At Large  
Mark Kwiatkowski, Grange Representative  
Tom Zorn, Farm Bureau Representative

## 2019 DISTRICT STAFF

Wendy Walsh, District Manager  
Lisbeth Monell, Administrative Assistant  
Miranda Palmer, Administrative Assistant  
Mike Jura, Technician  
Alex Marks, Technician  
Brian Reaser, AEM Specialist  
Danielle Singer, Nutrient Management Specialist





## SWCC Funding

Through the New York State Soil and Water Conservation Committee, Soil and Water Conservation Districts are eligible to receive additional funding to complete implementation projects that further our mission and goals. In 2019, Tioga SWCD requested and received \$6,000.00 to assist in flood control and mitigate flood damage. Additionally, Part C funding was made available to Districts who meet all the required performance measures established by the state. This funding is awarded competitively, Tioga County Soil and Water Conservation District was awarded \$99,595.22, qualifying for the highest award amount because we met all established performance measures!



## Part B Funding

In 2019, the District utilized Part B funding to assist with flood mitigation and flood control at a site in the Town of Nichols. This site previously housed an undersized 6-foot culvert and was historically problematic having numerous instances of plugging and overtopping causing flooding to neighboring properties and extensive damages to the road. In 2019, the Town of Nichols replaced the culvert with an appropriately sized 22-foot by 5-foot open bottom aluminum arch culvert. To add to the success of this project, the District utilized their Part B funding to install a hardened rock riffle to prevent headward erosion from the new culvert installation and removed some bed load sediment from the downstream end of the culvert to promote some flushing of materials and a more even slope from the downstream side of the culvert up to the hardened riffle. As a result of the completion of this project, the new appropriately sized culvert installed will reduce occurrences of overtopping the road and flooding neighboring properties, a natural stream bottom is now un-interrupted through the culvert, and the riffle will prevent headward erosion.



## Part C Funding

In 2019 the District utilized Part C Funding for a variety of projects. Funds were utilized to cover staff time for both our Ag and Stream programs, as well as staff training. Continued training is key for staff to increase proficiency in their fields of experience and building skill sets. Through the stream program, staff conducted a total of 73 site visits to consult on various stream issues, of those site visits 37 of them were to assist local municipalities. Additionally, there were 13 culvert assessments completed throughout the county in 3 watersheds. Through the ag program, Part C funds assisted covering soil sampling, and 236 acres of cover crops. Aside from staff time, the District utilized these funds to cover expenses associated with the Southern Tier Regional Envirothon, various education and outreach events, printing of the 2019 annual report, and printing and mailing of the 2019 annual newsletters. Lastly, the District office underwent some construction this year, receiving a much needed upgrade to our entry way and a new roof!



## Part C Funding Changes

Beginning in 2019, Districts are allowed to carry over funds awarded through the Part C funding. This allows Districts the ability to save funds for projects that don't occur in the same year as the award was received. This year, the District opted to carry over \$40,611.65 in funds to assist meeting local match requirements for FEMA projects associated with flash flooding events of 2019, and to assist with planning of flood retention projects throughout the county.

# 32

Farms assisted through the AEM Program

# 73

Site visits conducted as a result of flash flooding events utilizing Part C Funds

# \$162,595

Available for planning and implementation through Part B, Part C, and AEM Funding

# 253

Farms enrolled in the District's AEM program

# 15,033

Feet of livestock exclusion installed through USC Water Quality Funding





# Stream Program

In 2019, the District assisted several landowners and municipalities with technical advice as well as stream stabilization and rehabilitation projects. Funding came from a variety of sources including: municipal highway funds (flash flood recovery), landowner match, WQIP grant, NFWF funding, and Part B & C funding. Design and construction oversight was provided and permits were secured by the District, reducing the burden on landowners and municipalities. A total of 7 projects were completed; 2,321 feet of streambank was stabilized.

## Pipe Creek Stream Stabilization

In 2019, the District completed a streambank stabilization project in the Town of Tioga in partnership with NRCS and the Upper Susquehanna Coalition. A 166-foot segment of the left bank of the stream was severely eroded and threatening lateral migration, eroding away a high quality agriculture field. Through this project, 502 tons of R6 rip-rap was installed to stabilize the bank, a large tree root mass was used on the upper extent of the site to extend the bank protection, and a 35-foot forested buffer was planted along the top of the bank on the project site.



## New York Rising Communities Project

Through funding secured through the US Department of Housing and Urban Development (HUD) Community Block Grant-Disaster Recover (CDBG-DR) for long-term recovery and resiliency projects, the Tioga County SWCD was able to contract with a company to complete watershed assessments in Huntington, Apalachin, and Wappasening creek watersheds. The goal of these assessments was to evaluate watershed health and their impact on the communities, and to identify potential actions that can increase watershed health while reducing negative impacts on the communities. Through the assessment and reporting phase, an extensive list of potential improvement projects in each watershed was developed. A second phase of this project was to select one project in each watershed to develop conceptual design to 30% design completion. The next stage of the project is to identify the one of the 30 % design projects to move forward to implementation. Through the assessments there were numerous projects that were recommended throughout these watersheds to assist in mitigating the damaging effects our community continues to see by flooding and flash flooding events. With funding for these types of projects being very limited and competitive in nature, it is necessary to have support and buy in from community members, local municipalities, and county officials to make lasting and positive change.

The Upper Susquehanna Coalition (USC) is a network of 21 Conservation Districts in NY and PA. The mission of the USC is to protect and improve water quality and natural resources in the Upper Susquehanna River Basin with the involvement of citizens and agencies through education, partnerships, planning, implementation and advocating for our water resources. The USC is led by the Tioga County SWCD

through a signed Memorandum of Understanding with all members. The USC utilizes a multiple barrier approach on a watershed basis and focuses on 3 key areas - Agriculture, Streams, and Wetlands.




## USC Water Quality Program


The USC Water Quality Program builds on USC's existing, team-based structure and regional scale implementation delivery system for addressing nutrient and sediment loads in the Chesapeake Bay Headwaters. This program acknowledges that our primary focus areas: agriculture, streams, and wetlands are interconnected across the watershed, and the integration of team projects makes sense. In addition to benefiting water quality, practices installed improve cattle health, increase habitat diversity, and reduce flooding across the watershed. USC plans to continue this program for years to come to fill gaps with state and federal programming, and as stand alone funding for project implementation.

Tioga County SWCD applied for funding through this program and were funded for the implementation of 4 projects totaling \$138,987.78.




## 2019 Activity Snapshot

**Ag**  8,812 acres of cover crops funded  
172,849 acres of conservation planning reported to the Chesapeake Bay Program

**Stream**  7 Watersheds Assessed (3 in Tioga County!)  
1,840 Feet of Streambank Stabilized

**Buffer**  10,000 trees planted  
750 acres of buffers received

**Wetland**  14 Acres of Restored Wetland  
451.8 Acres of Mitigation Site Planning



# Ag Program

In 2019, the District assisted several farms to address non-point source runoff, erosions issues, assist with the development of prescribed grazing plans, assist with the development of nutrient management plans, implement practices that improve both soil health and soil stability, and provide technical advice on management concerns. Funding for a variety of projects were obtained through a variety of sources including: landowner match, WQIP grant, USC Water Quality program, District Part C award, AEM Base funding, Ag-Non Point Source grant, DEC Cover Crops grant, NRCS contribution agreement, and the Southern Tier Ag Industry Enhancement Program.



## AEM - Funding Conservation on Our Farms

Through our voluntary AEM program, the District focuses on providing sound environmental planning and implementation on our farms, while focusing on maintaining farm sustainability and protection of our natural resources. This year the District assisted 32 farms with conservation planning, survey & design work, and implementation of grazing and livestock waste practices.

## DEC WQIP Funding

In coordination with a DEC Water Quality Improvement Program (WQIP) grant obtained by the Upper Susquehanna Coalition, the District was able to complete a berm removal project in the Town of Owego. The project removed 1,091 linear feet of berm along Little Nanticoke Creek, a tributary to the Susquehanna River. This berm removal not only allowed for reconnection of the floodplain to the stream, but was also able to enhance the project through the addition of a second component. Once the berm removal was completed, phase two of the project commenced utilizing the USC's Water Quality Program, a riparian buffer planting.



## USC Water Quality Funding

Through the USC's Water Quality Program, the District secured funding to install a riparian buffer along the section of Little Nanticoke creek where the berm removal was completed. In the spring of 2019, a five acre riparian forest buffer with cattle exclusion was installed on both sides of the 1,400 feet stream reach on the landowners property. The buffer, ranging in width from 35 feet to 70 feet, will provide numerous benefits including reduced runoff of nutrients and sediment, the creation of a healthier ecosystem in the stream, the Susquehanna River, and ultimately the Chesapeake Bay.





## Cover Crop Program

In 2019, the District rolled out a new program to assist farmers with covering implementation costs associated with the planting of cover crops. Cover crops were identified as one of the top practices that New York is relying on to meet the Phase 3 Watershed Implementation Plan (WIP) goals. Through the implementation of this practice farmers can expect to see benefits such as the prevention of soil erosion, increased water infiltration, relief of soil compaction stress, improved soil

structure, increased organic matter which encourages beneficial soil microbes, and protecting water quality by slowing erosion and nutrient runoff. This year the District provided funding for the planting of 1,206 acres of cover crops across 14 farms in the county.

## Buffer Steward

Through the USC's Buffer Steward Program, the District secured funding to perform maintenance and monitoring activities on all riparian buffers in Tioga County. Riparian buffers are a growing practice that require management activities to ensure successful establishment. Through this program the Tioga County Buffer steward was able to accomplish:

- 35.23 acres of buffer received steward attention
- 14 sites evaluated



# Ag Program Highlights

**2,181**

Acres enrolled  
in Ag  
Assessment  
Program

**1,206**

Acres of cover  
crops and  
conservation  
tillage

**15,033**

Feet of livestock  
exclusion  
installed

**8.13**

Acres of buffer  
installed

**140.7**

Acres of  
prescribed  
rotational  
grazing  
implemented

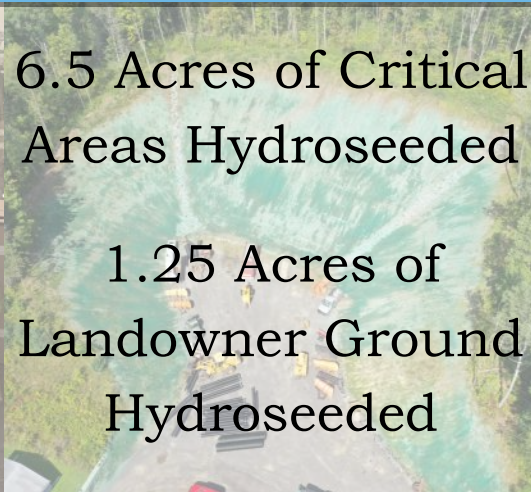


## Conservation Programs

At the foundation of the Districts mission is providing the community with a variety of conservation programs. Some of these programs include our annual tree and shrub seedling sale, no till drill rental program, hydroseeding, riparian buffer plantings, and nutrient management planning. Through these programs we are able to conserve and preserve the county's natural resources.



16,590  
Seedlings Sold  
  
20 Wildlife  
Houses Sold



6.5 Acres of Critical  
Areas Hydroseeded  
  
1.25 Acres of  
Landowner Ground  
Hydroseeded



Post Pounder  
Rented for  
21 Days



7,391 Acres of  
Nutrient  
Management  
Reported to  
Chesapeake  
Bay

## Education & Outreach Events

During 2019, the District participated in multiple education and outreach events, varying from community to academic events. Educating the citizens of our community is key, as without education we cannot expect others to understand the value of agriculture and natural resource conservation. It is key to help people recognize that agriculture is not just farming, but also a precise task of correctly utilizing our natural resources in order to continue to be sustainable. The agriculture industry helps to feed and clothe our community, and contributes substantially to our local economy.



500+ attendees  
at Sundaes at  
the Farm



250 Students  
Participated in  
Southern Tier  
Regional Envirothon



1,500 Tioga  
County Residents  
educated at  
community  
events



13,872  
Facebook Page  
Views  
& 122 Posts





## Climate Resilient Farming Round 4

This grant will provide \$244,130 in state funding for the Tioga County SWCD and a farm in the town of Spencer to implement a project that has a multifaceted approach and provides funding for conservation practices that will benefit the farming operation. Key components of the project include installation of riparian forest buffers and tree planting providing for carbon sequestration and, to mitigate greenhouse gasses by implementation of a buffer on active cropland, and flood mitigation including streambank protection and floodplain reconnection with berm removal, and wetland enhancements. All of these practices will allow the farm to be more resilient and adaptive to climate change. CRF grant funding will be used to implement the 5-stream stabilization projects needed, plant 14 acres of riparian forest buffer, and create 3.4 acres of wetland enhancement with another 3.5 acres of upland planting. The District then plans install four stream cross sections so that we can continue to monitor the stream corridor and streambank stabilization work to promote this type of work throughout the county.

## DEC WQIP Round 16

This grant will provide \$30,000 in state funding for the Tioga County SWCD and the Town of Owego to hire a firm to complete an engineering design to address a undersized



culvert on Fox Road. This site was identified through a watershed assessment that was completed on the Apalachin Creek Watershed through the New York Rising Communities program. The assessment documented several issues with the existing culvert. Once the design has been completed , there would be an opportunity to seek additional funding in order to potentially move forward with the replacement of the culvert.

## Ag Non Point Source—Round 25

This grant will provide \$435,094 in state funding with a required sponsor and landowner match. This project has multiple components and through the following conservation systems and practices water quality concerns will be addressed. A 50 acre berm remove to all stream access to the flood plain and dissipate energy during high flow events, 405 feet of stream bank with rip rap and three angled barbs, planting of 4,000 willow live stakes on the toe of the slope and top of bank, 7.4 acres riparian buffer with livestock exclusion fence, and a livestock heavy use runoff management area including a covered barnyard and manure push off to existing storage with access road improvements.





@TiogaSWCD

