



*Tioga County Soil and Water Conservation District*

*2021*

*Annual Report*





## *In Memory of Ronald E. Dougherty*

The District had a great loss in 2021, 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.



### *District Staff*

Wendy Walsh, District Manager  
Lisbeth Monell, Administrative Assistant  
Connor Hubbard, Engineering Technician  
Mike Jura, Field Stream Technician  
Alex Marks, Field Conservation Technician  
Brian Reaser, Engineer  
Danielle Singer, Nutrient Management Specialist  
Heather Scott, AEM Specialist

### *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



## A Note From The District Manager...

Another year has come and gone, and 2021 like many others was busy, challenging and a successful year for implementation of a multitude of conservation practices. With our newly awarded AEM program funding we were able to complete several grazing projects that had multiple benefits for the landowner including riparian corridor and wetland restoration. We started a lengthy process to evaluate and plan for the future of 2 flood control dam structures in the Town of Spencer that are nearing their 100-year design life. We completed several stream restoration sites with FEMA funding and the support of DHSES. We planted new buffers, maintained existing buffers and monitored a number of acres in order to make sure they become established. We continue to focus on meeting Chesapeake Bay watershed goals by meeting our local needs. We also welcomed new staff and lost a dedicated, passionate director, Ronald Dougherty, whose hand print on the District will remain for years to come. As we wrap up projects, and close out grants for 2021, we are already looking forward to new relationships, new projects and new grant funding for 2022.

Wendy Walden



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# 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 lead by Soil and Water Conservation Districts to help farmers make smart cost-effective 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.

## *Project Spotlights 2021*

A new funding source was made available in 2020 for BMP implementation through the state AEM Program. The District utilized the funds on 5 farms between 2020 and 2021. Three farms constructed new BMPs - rotational grazing systems (16.2 acres) that included pond or well watering systems and permanent exterior fencing, a combined total of 12 acres of riparian forest buffers and 2.3 acres of wetland restoration. The other two farms completed maintenance on their existing riparian forest buffers (16 acres total) which included mowing around the plants and re-planting in places where survivability was low. All of the projects were very successful in meeting needs of the farms and improving their environmental stewardship. The state asked the District to present at the annual Water Quality Symposium to showcase this work to other Districts and partners around the state.





The District moved forward with an Ag Non-Point Source grant (Round 24) and matching federal RCPP grant funds in 2021 on a beef farm. This project is still finishing up in 2022, but the majority of the work was completed over summer 2021. Three watering systems (one off an existing well and two from existing pond sources) were installed with over 20,000 feet of permanent exterior fence to create a 135 acre rotational grazing system.



Conducting fence checks for an established grazing plan in 2021.



### *For the Future...*

The District was awarded another state Ag Non-Point Source Grant to do work on three farms in the county in 2021. This work will start in 2022 and finish up in the next three years. The District secured funding in 2021 for an additional 6 farm projects through other state and local grant funds that will also begin in 2022. The work will include fence, watering systems, rotational grazing, riparian forest buffers, stream crossing work and stabilization, water management on the farmstead and manure storage repairs.

**14,387**

*Acres of Nutrient Management*

**1,403**

*Acres of Cover Crops*

**4**

*Finished Conservation Plans*

**43**

*Farms served in 2021*

**140.7**

*Acres of prescribed rotational grazing implemented*



# Stream Program

The District stream program is focused on assisting municipalities and private landowners with environmentally sensitive maintenance and repair, 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.

## *Municipal Assistance*

The District provided technical and implementation assistance to several Highway Departments this year, one such project that is worth highlighting is the work we completed in conjunction with the County Department of Public Works (DPW) and the Upper Susquehanna Coalition (USC). In early 2021, as result of heavy snow and rain runoff, Long Creek had high flows that caused excessive lateral migration just upstream of the Pennsylvania Avenue bridge. This change in stream path had to be addressed quickly in order to prevent future damage to infrastructure as the new route threatened to bypass the county owned bridge. The District secured equipment and operator thru the USC, the County DPW mobilized our equipment and within a matter of just a few days the channel was reshaped and flow was redirected back to its original course. This was a showcase site for the use of the Emergency Stream Intervention (ESI) Program and training the District offers, as such the site was used in the development of the USC's virtual ESI training that will be available watershed wide.





# Hazard Mitigation Support and Disaster Recovery

Since 2013, the District has contracted with the County to provide hazard mitigation coordination services. The Federal Disaster Mitigation Act of 2000 requires local governments to prepare and update a hazard mitigation plan that addresses natural disasters. The District, as coordinator of the plan, works with the County and all 15 municipalities on project implementation. Priorities of the plan include flooding and flood mitigation projects, with the goal of reducing flooding and flooding impacts to our communities.

Throughout 2021 the District aided with the following activities:

- Assistance with flooding and disaster declaration write-ups
- Notification of Hazard Mitigation funding opportunities to municipal leaders
- Provided stream permitting and technical assistance to municipalities in disaster recovery work
- Culvert assessments
- Ongoing monitoring of previously implemented and current projects, especially following flooding events.



Performing culvert assessments for municipalities in 2021.

In the case of federally declared disasters, both District and municipal sites which incur damage are eligible to apply for FEMA public assistance funding. Since 2018 there have been 3 federally declared disasters in Tioga County, and numerous other impactful flash flooding events. The FEMA process for funding takes time, as such in 2021 the District oversaw the bidding, contracting and completion of work on five sites associated with the declared disaster in 2018. The District assisted the Tioga County IDA in completion of repairs on the Huntington Creek, and began the process of writing up damages that occurred during the 2021 storm events.

11

Projects Implemented

4

DEC Stream  
Disturbance  
Permits

3,915

Feet of Stream Bank  
Stabilized

29

Army Corps  
of Engineers  
Nationwide  
Permits



# Buffer Program

The Tioga County Soil and Water Conservation District had another successful season of riparian forest buffer establishment in 2021. Over the last three years the District has been dedicated to establishing a Buffer Program to promote the restoration and long-term functionality of riparian areas for water, soil, and habitat quality. The promotion, implementation, and vitality of riparian buffer projects have emerged as a top priority for the District. The District promotes riparian buffer creation and restoration via education, outreach, and technical assistance. The District started the countywide program through the annually awarded Upper Susquehanna Coalition (USC) Buffer Steward funds in 2019 to hire interns to monitor and maintain buffers planted in the county regardless of the cost-share program used for implementation.

Our Buffer Stewards collect and report critical plant data, and perform continued monitoring & maintenance activities to ensure successful establishment of the plants. These funds have allowed the District to better support landowners and manage problems that arise in buffer plantings more effectively. The work done by our Buffer Stewards over the past three growing seasons has positively impacted the survival and success of buffer plantings, and has aided in achieving nutrient reductions, improved water quality, and expanding wildlife habitat!





## Buffer Monitoring & Maintenance

This year the District brought on two Buffer Steward Interns to assist with the workload. Our Buffer Stewards conducted monitoring at 22 sites in Tioga County, and 12 in neighboring counties, totaling 75 acres. Buffer site data indicated a survival rate of 76% across the board! Stewards also completed critical tube and stake maintenance at all sites and performed invasive species/weed removal. They were also able to provide support and assistance to Broome County SWCD to benefit their buffer program.



All smiles at one of our many buffer plantings

**9,614**

Trees and shrubs  
monitored

**31.6**

Acres of New  
Buffer  
Created

**34**

Project Sites

**75**

Acres of Buffer  
Monitored



# Tioga SWCD and the USC

For 30 years, the Upper Susquehanna Coalition (USC) has worked to protect and improve water quality and natural resources in the Upper Susquehanna River Basin. Tioga County is located at the watershed's center, and is committed to watershed management and the development of the USC. We lead the Coalition through a signed Memorandum of Understanding between the 22 SWCDs comprising the watershed in New York and northern PA. We employ most USC staff, several of whom are housed in our office, administer grants and budgets, our programs exchange knowledge and support USC initiatives, and our board is committed to guiding the USC as they strive to meet Chesapeake Bay nutrient reduction goals. The USC program focuses on 3 key areas - Agriculture, Streams, and Wetlands, and recently has developed a Water Quality Program where grant funding is used to implement projects that address multiple nutrient reduction measures on one site.



## 2021 USC Activity Snapshot

### Ag

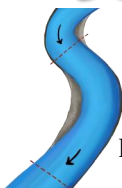


157 Farms with Whole Farm Verification and 407,110 acres of conservation practice documented for the Chesapeake Bay



18,303 acres of Cover Crops Installed

### Stream



103,530 feet of stream exclusion fence installed in the watershed

Development of Online Emergency Stream Intervention Training Video Series

### Buffer

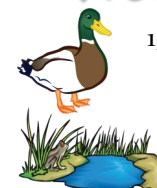


46,326 plants planted in the watershed



236.5 acres of Riparian Area Planted and 698 acres of Buffer Monitored

### Wetland



1,937 acres of watershed evaluated for wetland restoration opportunities

Planning and construction of 64.6 acres of wetland restoration sites



309 Webinar Participants



352 Minutes of YouTube Videos

13 Webinars

13 Presenters



312 Online Video Views



USC's youtube page [www.u-s-c.org/youtube](http://www.u-s-c.org/youtube) with a Watershed Wednesdays Playlist

In 2021 USC developed YouTube content including project spotlight videos, planting time lapse videos, Stream Training Videos and Webinar Videos for their YouTube page: [www.u-s-c.org/YouTube](http://www.u-s-c.org/YouTube)



# *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 2021, Tioga SWCD requested Part B Funding and received \$6,000 to further support implementation of cover crops an important best management practice to cover bare exposed soil from one planting season to the next. Additionally, Part C funding was made available to Districts who meet the required performance measures established by the state. This funding is awarded competitively, and the District was awarded \$112,874.08 due to meeting all established performance measures!

## *Part B Funding*

The District also utilized Part B funding to assist local municipalities, most notably the Town of Berkshire in repairing critical yet malfunctioning culverts in accordance to Army Corps of Engineers standards. Culvert assessments were performed with support from Part B Funding.



## *Part C Funding*

In 2021, the District utilized awarded funds to support technical capacity by funding staff to work on buffers, streams and our ag program. Funds were also utilized for staff training, as continued training is key for staff to increase proficiency in their fields and building skill sets. Through the Stream Program, staff conducted numerous sites visits to consult on various stream issues, including many site visits to assist local municipalities. Through the Ag Program, Part C funds assisted covering soil sampling, water testing, and the cover crop program.

**11,226**

*Feet of Stream & Buffer  
Exclusion fence installed*

**1,618.7**

*Acres of county land  
Improved*

**\$168,874**

*Available for  
Program support  
Through Part B, Part C, and  
AEM Funding*

**256**

*Enrolled and active  
AEM Program Farms*





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