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A Note From The District Manager

Challenging is the word that comes to mind when looking back on 2020. Adaptability, flexibility and perseverance are words that I feel the District Board and staff utilized to overcome the challenges that were thrown at us. This year tested our resolve, but also showed us what we are capable of if we just put our minds to it. The District successfully rolled out our new AEM implementation funding program to 4 farms, providing funding support for buffer establishment, pasture and stream corridor management. We assisted numerous municipalities and landowners with permitting and stream restoration projects such as Pipe Creek Town of Tioga, New York Rising Project, and a streambank stabilization project on a tributary to Owego Creek. We also completed the Spencer Lake spillway modification project that addressed the instability of a privately owned NYSDEC hazard class dam and added flood attenuation benefits along with stream corridor reconnection. As for 2021, we are looking ahead and planning to implement several stream stabilization projects with FEMA funding, begin implementation of two agricultural nonpoint source projects and complete a project started in 2020. We also will continue our planning efforts for agricultural producers to address water quality and natural resource concerns, assist municipalities with hazard mitigation efforts, provide stream technical assistance as well as look for and complete funding applications to support numerous planned projects. Which Walk Danielle Singer, Nutrient Management Specialist

2020 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

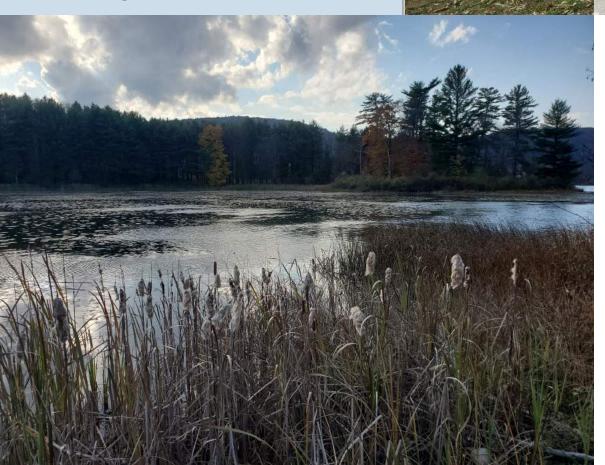
2020 District Staff

Wendy Walsh, District Manager Lisbeth Monell, Administrative Assistant Miranda Palmer, Administrative Assistant Connor Hubbard, Engineering Technician Mike Jura, Technician Alex Marks, Technician Brian Reaser, AEM 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 2020, Tioga SWCD requested and received \$6,000.00 to assist in the implementation of the best management practice, cover crop planting. 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 \$113,879.02, qualifying for the highest award amount because the District met all established performance measures!



Part B Funding

One practice that continues to grow in popularity across the state is cover crop planting. 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 utilized the \$6,000.00 in Part B funding to add dollars to the District's growing Cover Crop Program that aided in the planting of 1,626 acres of cover crops across 18 farms in the county. The photo above shows cover crops planted on a field in the Town of Newark Valley.

Part C Funding

As mentioned above, the District utilizes our earned Part C program funding to support SWCD staff and project implementation from year to year. This year the District utilized funds to support work being conducted at Spencer Lake as well as other project work. The photo to the left was taken at Spencer Lake, one of the projects that utilized Part C funding in 2020.

Part C Funding

In 2020 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 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 1,626 acres of cover crops. Aside from staff time, the District utilized these funds to cover expenses associated with providing technical assistance to projects in the Town of Spencer and Town of Tioga.

Part C Funding Spotlight: Pipe Creek

This segment of Pipe Creek runs directly through/adjacent to the hamlet of Tioga Center. In high flow events, floodwater from both the creek and the river, enters the hamlet and causes severe flooding. The Town of Tioga and the Tioga County SWCD have partnered since 2009 to actively manage this reach of stream to reduce sedimentation and erosion, prevent excessive lateral migration, and work toward a reduction in damages due to flood events in the stream channel and the surrounding floodplain areas. This area is prioritized in the Town of Tioga's Hazard Mitigation Plan. During 2020, the District provided technical assistance, construction oversight, and staff support for willow planting at the site. Construction included the installation of eight stream rock barbs on two bends, which will aid in preventing the channel from plugging and overtopping it's banks in lower flow events, and live willow stakes planted to create additional stability. Additional funding for this project came through New York Rising Community program that was secured through the Town of Tioga.



Utilizing Part C Funds

\$430,491

Available for Planning and Implementation Through Part B, Part C, and AEM Funding



Farms Enrolled in the District's AEM Program

Ag Program

In 2020, the District assisted several farms to address non-point source runoff, erosion 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, District Part B & C award, AEM Base funding, Ag-Non Point Source grant, DEC Cover Crops grant, NRCS contribution agreement, USC Water Quality funding, and NRCS RCPP funding.



Agricultural Environmental Management

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 45 farms with conservation planning, survey & design work, and

AEM Award – Recognizing Conservation Efforts Of Local Producers

Tri-Kay Farm is the 13th farm in Tioga County to be presented with an AEM sign award. Both past and present AEM honorees have shown that they are exemplary stewards of our soil and water resources in the county, and the roadside AEM sign is a way to make both the public and the farming community aware of their high level of commitment to protecting the environment, which benefits us all. Tri-Kay farm is owned by brothers Jim, Mark, and Matt Kwiatkowski. They operate 760 acres and milk 170 cows in Owego, NY. The farm is in the Owego Creek Watershed with the majority of their operating ground directly adjacent to the West Branch of Owego Creek and its tributaries. The farm has implemented several conservation practices with the District to improve and protect this watershed and the land they operate including but not limited to a full farm conservation plan called a CNMP (Comprehensive Nutrient Management Plan), the installation of several stream stabilization projects, they have recently installed a riparian forest buffer, they plant cover crops on an annual basis, use reduced tillage practices on their fields, and on their own the farm has built a manure storage, and a silage leachate collection system which are functioning to meet our standards and deserve to be noted as further conservation practices on the farm.



Agricultural Non-point Source Abatement and Control

In 2017, the District was awarded two Agricultural Non-point Source Abatement and Control (AgNps) contracts. The AgNps funding program is a state cost-share grant program that provides funding to address and prevent potential water quality issues that stem from farming activities. Financial and technical assistance supports the planning and implementation of on-farm projects with the goal of improving water quality in New York's waterways. The program seeks to support New York's diverse agricultural businesses in their efforts to implement best management practice systems that improve water quality and environmental stewardship. Between the two projects, one in the Town of Owego, and one in the Town of Candor, there was \$602,900.00 awarded in stated funding, with another \$425,500 pledged in local funds (which can include landowner match and/or federal funding) to complete: (2) Waste Storage and Transfer Systems, (2) Process Wash Water Management Systems, (2) Livestock Heavy Use Area Runoff Management Systems, (1) Riparian Buffer System, and (1) Stream Corridor and Shoreline Management System. A bulk of the construction for these projects occurred during the 2020 summer and fall, and both projects will be 100% completed by the end of 2021. Town of Candor Heavy Use Area Construction



Town of Owego Heavy Use Area Construction

2,305

Acres Enrolled in Ag Assessment Program

1,703

Acres of Cover Crops and Conservation Tillage

Covered Barnyards Constructed

2

Manure Storage Installed

Buffer Program

Over the last two years the District has been dedicated to establishing a Buffer Program to promote the restoration and long-term functionality of riparian areas for water and habitat quality The promotion, implementation, and long term functionality of riparian restoration projects has emerged as top priority for the District, and this is done through ensuring practice functionality via education, outreach, and technical assistance. Key components of the program include data collection during buffer plant monitoring and performing maintenance activities to ensure successful establishment of the plants . These are a top priorities as they help us make strides in achieving nutrient reductions and improved water quality, as well as being a huge benefit to wildlife habitat value!



2021 Planning

The number of sites slated for buffer planting in 2021 continues to grow by the day! Here is a look ahead to planned buffer implementation that the District is planning for 2021:

Planting at 11 sites

A total of 3,520 stems to be planted

15 new acres of buffer



In 2020, the District made a conscious effort to continue making buffer establishment a priority via the continuation of both monitoring and maintenance throughout the county. The District was able to secure funding through the Upper Susquehanna Coalition to support a buffer steward that evaluated all existing riparian buffers throughout the county, identified which buffers needed re-planting, and which buffers needed any type of additional maintenance.

Throughout the summer of 2020, the buffer steward was able to conduct monitoring on 17 sites, totaling 34.8 acres. There were a total of 1,954 plants that were counted at these sites, and we found the average site survival rate was 62.41%. In addition to completing evaluation of the buffers, all 34.8 acres of buffer had tube and stake maintenance completed, and there were two sites that were replanted totaling 2.7 acres. The buffer steward was also able to spend a significant amount of time going through historical buffer records in the office and worked to create a more efficient reporting system for the buffer steward in 2021. Looking forward to 2021, a prioritized buffer list was developed so that buffers that receive less landowner maintenance are prioritized due to high and dense levels of vegetation later on in the growing season.

Stream Program

In 2020, 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, NY Rising Community funds, landowner match, FEMA Disaster assistance, NRCS, and Part 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 3 projects were completed; 2,171 feet of streambank were stabilized with an estimated total cost of \$37,090.00.

FEMA—Sediment Basin Cleanouts

In August of 2018, Tioga County was saturated in torrential downpours. The Town of Spencer had 4 inches fall in just two hours. With water levels rising, sediment collected in three different sediment basins located in the town. These sediments basins were constructed in 1955 and provide an opportunity to keep gravel and sediments deposits in a centralized location that can be easily accessed and cleanout out as needed. Sediment basins keep sediment, debris, and gravel from traveling too far down stream which aids in reducing high levels of sediments in the water, damage to infrastructure, and gravel deposits in unwanted areas. The District worked with FEMA to secure \$40,572.75 in funding to clean out the basins. There was roughly 2,700 cubic yards of gravel and sediment removed from the three basins.

Hazard Mitigation Support

Since 2013, the District has contracted with the County to provide Hazard Mitigation Coordinator 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 2020 the District aided with the following activities:

- Assist with flooding and disaster declaration write-ups
- Notify municipal leaders of Hazard Mitigation funding opportunities .
- Provide stream permitting and technical assistance to municipalities •
- Complete culvert assessments throughout various municipalities •
- Continually update the plan and monitor previously identified projects ٠



3

Projects

Permits

9

Permits

The Upper Susquehanna Coalition (USC) is a network of 22 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



Ag

Stream

Buffer

Wetland

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.

sessions

9

speakers

participants

online

webinar viewers...

and counting

Watershed Wednesday Series

Planning for this years annual Watershed Forum was ground to a halt in early spring, leaving the planning committee with loose ends in the midst of a chaotic time. With so many working remotely, the group decided a virtual forum would make the most sense, split into half-hour mini-sessions from July to December, with a break for September and October. Session topics ranged from USC team presentations, ongoing programs and projects, how to's, highlighting partner activities and beyond, all with a watershed management implications. These sessions had 394 total participants, and because they were recorded and are posted on YouTube and the USC website (www.u-s-c.org/watershedwednesdays), their reach continues to expand as online viewers engage. The total webinar YouTube views are currently at 366, and are steadily increasing, making the 2020 Upper Susquehanna Watershed Forum a success. Tioga County was featured in the Customer Testimonial series that the USC developed and presented on as part of the webinar lineup.

2020 Activity Snapshot 8,812 acres of cover crops funded

186,978 acres of conservation planning

reported to the Chesapeake Bay Program

Program

2 new implementation projects in Broome and Tioga County through NY

Rising Communities

5,691 new feet of stream restoration

reported to the Chesapeake Bay

650 + acres of buffers received

stewardship attention

17.32 Acres of wetland

implementation

813 acres of wetland planning &

management projects

25,000 trees planted

District Education & Outreach

Despite the hurdles 2020 brought to continuing education and outreach, the District persevered and made a push to reach our audience on a virtual scale more than ever. As in past years, this year the District was still able to play a key role in varying forms of events including both community and academic events. Reaching the residents of Tioga County is key, as it helps us teach community members about the value of agriculture and natural resource conservation. Though education and outreach looked a little different this year, we were able to reach more people this year than in any year past!

Planted 600 Seedlings with the NVCSD at their Christmas Tree Farm in April. Hosted 4 Milk and 1 Food Distributions totaling over 16,000 Gallons of Milk and 22,000 Pounds of Food Premiered a New Video Series—Tioga County Dairy Tails and reached over 8oK viewers & had over 100K Facebook Page Views

Hosted the First Ever Virtual Envirothon for 30 School Districts Throughout New York State!

2021 Planned Implementation

Ag Non Point Source—Round 24

This grant will provide \$61,730.00 in state funding to implement a rotational grazing system on a beef farm in the Town of Barton. This system will allow for livestock to be excluded from hydrologically sensitive areas throughout the farm and improve water quality in the Pipe Creek Watershed. FEMA Disaster Number 4397 & 4472

This grant will provide \$162,513.02 in federal funding for streambank stabilization projects in the Apalachin Creek Watershed. A total of 4 sites will have mitigation work completed to repair damage sustained from flash flooding events in August of 2018 and October of 2019. A total of 1,395 lineal feet will be stabilized through this funding.

AEM BMP Implementation Funds

In the Town of Berkshire, a rotational grazing system will be built for sheep and horses with animal exclusion from the tributaries on the property. A forested riparian buffer will be planted along the tributaries. In the Town of Newark Valley, a rotational grazing system will be built for goats and sheep and will also include animal exclusion from the tributary on the property. Wetland restoration and enhancement have been completed on the headwaters to the tributary in 2020 and riparian forest buffer plantings will be added in 2021 to finish the project.

Looking Ahead To 2021



@TiogaSWCD



