Tioga County Soil and Water Conservation District

February 2017 Tioga County SWCD



Inside this issue:

AEM Program	2
No Till Drill	3
Hyrdroseeding and USC	4
Stream Program	5-6
By the Numbers	7
Looking Ahead	7

Special points of interest:

- SWCD received the CASE Dire States Grant in 2016. This award is for \$25,000 in equipment rental and services from CASE to be used on upcoming projects in 2017.
- SWCD was awarded funds under the NYSDEC WQIP grant to replace our 1999 Hydroseeder which is used for critical area stabilization projects in the County.
- SWCD purchased a new notill drill to promote soil health practices in the County.
- SWCD updated our logo!



Overview of District

Formed in 1944 Tioga County SWCD is one of 58 Soil and Water Conservation District's in the State.

Our Mission:

The District's mission is to protect, preserve and restore the natural resources of Tioga County for today, tomorrow and the future through locally-led conservation projects and programs.

In 2016 the District achieved this goal by providing assistance to agricultural operators, landowners, municipalities, school districts and the County on such issues as conservation planning, stormwater management, streambank rehabilitation projects, critical area seeding, flooding and hazard mitigation planning.

By working with municipalities and landowners, the District puts conservation on the land, with cost effective projects benefiting both the residents and visitors of

District Board of Directors:

Dale Weston, Chairman, County Legislator Robert Aman, Vice Chairmen, Farm Bureau Representative Ronald Dougherty, Treasurer, Member At Large Mark Kwiatkowski, Grange Representative Tracy Monell, County Legislator Representative **District Staff:** Wendy Walsh, District Manager Alex Marks, Technician Mike Jura, Technician Brian Reaser, AEM Specialist Rick Neuman, Nutrient Management Specialist Lisbeth Monell, Administrative Assistant Miranda Davey, Administrative Assistant

AEM Program—Funding Conservation on our Farms

Through our voluntary AEM program the District focuses on providing sound environmental planning and implementation on our farms while constantly focusing on maintaining farm sustainability and protection of our natural resources. This year we assisted 24 farms with conservation planning, survey and design work and implementation of grazing and livestock waste practices. Below are few photos of completed projects in Tioga County. Funding for these projects were a combination of NRCS EQIP, NYS Ag Non-point Source funds, and the landowners.



Left: Completed Covered Barnyard in Town of Newark Valley

Below: Completed manure storage in the Town of Spencer





<u>Sundaes at the Farm:</u> The Tioga County Agriculture Resource Group (TC ARG) has been holding this event for the last 9 years, with the goal of educating both rural and urban landowners in the county by giving them an opportunity to spend a few hours on a working dairy farm. This year we had 710 people attend the 3 hour event held at King Dairy Farm in Spencer on July 31.

STAIEP Program— Southern Tier Agricultural Industry Enhancement Program

On March 12, 2015, Governor Andrew M. Cuomo announced plans to help boost the agricultural economy in the Southern Tier—one of the most diverse agricultural regions of the state with a large potential for growth. Under this initiative, \$25 million would help farmers increase agricultural production on farms and improve profitability . Projects has to be critical to increasing production, enhancing profitability and or increasing environmental compatibility of the farm operation. Also projects must implement a farm business or environmental plan or components of a plan. Tioga County was awarded \$1.5 million in funding to complete these projects. Round 1 of the funding was awarded in the summer of 2016, with \$1,237,013.00 being funder for 14 farms through out the county. We are still waiting for Round 2 of funding to be announced as all awarded funds we not awarded during round 1. This program does have a 25% cost match requirement for all participating farms.



Left: A manure storage pit for one of the STAIEP recipient farms prior to installing a ramp. The farm is located in the Town of Nichols.

Right: Manure Storage Pit after the installation of the ramp.



No Till Drill

No-till farming is a way of growing crops or pasture from year to year without disturbing the soil through tillage. No-till is an agricultural technique which increases the amount of water that infiltrates into the soil and increases organic matter retention and cycling of nutrients in the soil. In many agricultural regions it can reduce or eliminate soil erosion. It increases the amount and variety of life in and on the soil, including disease-causing organisms and disease suppression organisms.



Left: Our ESCH No Till Drill hard at work. The ESCH Drill is new to our fleet this year. This year local farmers planted 164.5 acres with the ESCH Drill, and an additional 367.7 acres were planted with this drill through Round 21, a \$112,000 grant funded through Ag NonPoint Source grant that we secured in 2016 to assist with the planting of Cover Crops. The protective canopy formed by a cover crop reduces the impact of rain drops on the soil surface thereby decreasing the breakdown of soils aggregates. This greatly reduces soil erosion and runoff, and increases infiltration. Decreased soil loss and runoff translates to reduced transport of valuable nutrients, pesticides, herbicides, and harmful pathogens associated with manure from farmland that degrade the quality of streams, rivers and water bodies and pose a threat to human health.

Below: Our Truax No Till Drill, planted 253.9 acres of seeding this year. This drill is smaller than the ESCH, making it convenient for seeding smaller area and food plots.



Hydroseeding Program



In 2016, the District completed 9 hydroseeding projects, for a total of 14 acres. Work was funded by the District, a grant obtained through NYS Department of Environmental Conservation, municipalities and private landowners.



USC Staff:

Melissa Yearick, Wetlands Coordinator

Jeremy Waddell, Wetlands Biologist

Patrick Rainey; Wetlands Scientist

Ryan Ceruti, Technician

Chris Brogdale, Technician

Mike Lovegreen, Stream Team Leader

Lydia Brinkley, Buffer Coordinator

Emily Dekar, Ag Coordinator

Chris Yearick, GIS Specialist

Upper Susquehanna Coalition

The Upper Susquehanna Coalition is a network of 16 Soil and Water Conservation Districts in New York and 3 Conservation Districts in Pennsylvania. 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.



Right : The USC's often overlooked vernal pools will soon be the site of some incredible amphibian breeding activity. These small pools add diversity to the landscape and are critical areas for wildlife. The one pictured was built by the USC wetland team.

Left: : Volunteers from the Youth Conservation Corp out of Chenango County, helped to plant trees at our very own Hickories Park project in Owego on June 23, 2016 .We're grateful to have such great volunteers engaged in conservation! Trees and shrubs were provided by the DEC Trees for Tributaries program.



Streambank Stabilization & Rehabilitation Program

In 2016, the District assisted landowners and municipalities with several stream stabilization and rehabilitation projects. Funding, design and permits were all secured by the District, reducing the burden on landowners and municipalities. A total of 6 projects were completed; 1,770 feet of streambank was stabilized with an estimated costs of \$192,869.00.



Photo Above: Apalachin Creek Stream Rehabilitation Project.

A total of 750 Ft of stream rehabilitated in this location through rock rip rap and large wood installation including a rock cross-vane to protect the stream bed from erosion and promote fish/aquatic organism passage. This project was funded through a combination of the NYS DEC Water Quality Improvement grant, NYS DEC Environmental Benefit Fund and the Upper Susquehanna Coaltion NFWF Buffer Grant.

<u>Highlights:</u>

- HMP annex update meetingscompleted, continuing followup with municipalities.
- 6 Stream Projects
- 1,770 Linear feet of stream bank protection
- Work with NRCS to Design
 and oversee stream projects in
 the county. Receive reimbursement from NRCS for
 involvement in program.
 - Conducted "Toe Wood" training detailing alternative methods of stream bank stabilization that regulators are in favor of.
- 14 NYS stream permits
- 45 Technical assists/site visits
 with various municipalities,
 County DPW and landowners.

The district continues to be the leader on post disaster recovery (through ESI and other methods), pre disaster resiliency work (through the Hazard Mitigation Plan), and continues to work with private citizens and municipalities through public education, training, technical assistance, grant writing and coordination, project design, hiring and oversight.

Streambank Stabilization & Rehabilitation Program Continued

NRCS funded projects completed in 2016:, Tioga County SWCD staff and Upper Susquehanna Coalition Stream team nembers completed all necessary landowner contacts, permitting, survey, design and construction oversight on these projects. Projects consisted of stream bank protection measures such as rock rip rap and in-stream rock structures to prevent erosion of high value agricultural land.



<u>Pipe Creek</u>: Top photos Before and after (450 ft. of rip rap installed and 4 stream barbs).

<u>Tributary to Doolittle</u> <u>Creek:</u> Middle photos before and after (76 ft. of rip rap installed).

Bottom photos:

<u>Cole Brook project:</u> photo Left: (315 ft. of rip rap installed).

Doolittle Creek Project: photo right (230 ft. of rip rap and two stream barbs installed).











By the Numbers.....

- Tioga County SWCD has been in existence for 73 Years assisting residents of the County.
- The District's total 2016 operating expenses were approximately \$400,000.
- Our 2016 funding allocation from Tioga County was \$189,234. The remainder of District budget comes from competitive grants, project income, and some reimbursement from NYS.
- In 2016, Tioga CO. SWCD leveraged the County's annual appropriation and leveraged additional funding to support staff and SWCD programs:: State Reimbursement (\$60,000), AEM Base (\$85,000), Special Project funding (\$22,173)
- Stormwater: Trained 178 contractors in 4 hour Erosion and Sediment Control course.
- Agriculture Assessments: Completed 67 worksheets, and 3671 acres.
- Completed and assisted with 24 stream permit applications.
- The District sold 24,047 bare root tree/shrub seedling during the 2016 sale and 16 wildlife houses.

Looking Ahead

- The District will continue to assists rural and urban landowners, contractors, towns and business in the county with stormwater and stream permits.
- District staff will coordinate implementation of the Hazard Mitigation Plan for the year, as well as continue to provide staffing support with the NY Rising Community Program and lead the Regional River Initiative proposal.
- District received funding to inventory and assess two watersheds during 2017. We will be working in Apalachin Creek Watershed, Town of Owego and Monkey Run (Huntington Creek), in the Village of Owego. The watersheds will be assessed under the Upper Susquehanna Coalition NFWF I-4 Project grant funds in 2017.
- District will work to identify projects and sites to utilize the \$25,000 Dire States Award.
- The District will continue to administer the Upper Susquehanna Coalition including numerous federal, state and local grants.
- In 2017, the District will work along side NYSDEC along with the assistance of USC member SWCDs and partners to revise and submit phase III of the Watershed Implementation Plan (WIP) to meet load allocations set under the Total Maximum Daily Load (TMDL) for the Chesapeake Bay Watershed. Nutrients such as nitrogen and phosphorous as well as sediment are the pollutants of concern. Best Management Practices continue to be installed on local farms, by local businesses and municipal sewage treatment plants in order to meet these load allocations. If the TMDL load allocations are not met by 2025, it will mean additional regulations felt by our agricultural community and our municipalities.