



Schuyler County SWCD 2019 Annual Report

High-Boy Interseeder Cover Crop Innovation Project



Inside this issue:

Education	3
Community	4
Equipment Upgrades	5
Municipal Assistance	6
Agriculture	16
Part C Project	18
Stream Stabilization	19

The Schuyler and Chemung County Soil and Water Conservation Districts both fully believe that cover cropping is the best bang for your buck conservation practice in existence today. Cover crops provide immense reductions in soil loss and its associated nutrients, increased organic matter levels, improved soil health, reductions in need for imported commercial fertilizer, and an increase in infiltration to better handle high intensity short duration storms.

The farmers of Schuyler and Chemung Counties both believe in the benefits of cover crops as well. However, there has always been several issues in our farms being able to install a substantial amount of cover crops. Up front cost with our poor agricultural economy, our farms having enough labor during an already stressed time at harvest, and our limited time window in NY from harvest to the end of the growing season have all precluded our farmers from maximizing the use of cover crops.

Through research, the Chemung County SWCD, found an example of a potential solution to our farmers concerns. The successful program they found was done by Sussex Conservation District in Delaware. They converted a high-boy pesticide sprayer into an airflow seeder. This unique interseeder was used to plant cover crops throughout the growing season in standing corn and soybeans on over 5,000 acres annually.

The Schuyler County SWCD was able to secure over \$180,000 in funding to build a unit to be used in Schuyler and Chemung Counties. Working with Buckeye Solutions in Ohio a machine was built for the two county area. While the machine was being constructed Schuyler and Chemung SWCD's rented a machine in 2018 from Bradford County PA in order to learn as much as possible and to showcase to our farms what was coming.

In 2018 the two Districts were able to implement over 1,300 acres of cover crops both with the interseeder and through conventional methods. With great anticipation our interseeder arrived in August 2019. Even with the late arrival, and the immense amount of organization needed the two counties were able to complete over 2,000 acres of cover crops on 17 farms both with the interseeder and conventionally.

The immense effort wouldn't have been possible without the excitement, anticipation, understanding, and willingness from our farmers. The acreage also wouldn't have been possible without Scott Bush and Derrick Tanner, dairy farmers, who helped learn and operate both machines. Mike Manwaring and Jim Barrett, Schuyler County SWCD equipment operators, both also ran the machine. These folks efforts were no small task with the machines 90' span controlled and run through GPS technology.

EDUCATION - A Key Focus Area

Water Quality Coordinating Committee

The WQCC chaired by Elaine Dalrymple, again put on several educational events for area residents. Elaine brought in area professionals to assist with the events. One was an event focused on the American Chestnut.

The second was an invasive species training and a hands on water chestnut pull in Schuyler County.



Conservation Field Days

Once again our Conservation Field Days event was put on by Schuyler County Soil and Water Conservation District. This years event was held at the Millport Rod and Gun Club. The event is supported by many area volunteers that make this annual program possible. This year saw over 160 6th grade students attend the outdoor hands on event that had a multitude of stations.



EDUCATION - A Key Focus Area

Envirothon

Bradford Central School was the local county winner for the Schuyler County Envirothon this year, defeating 6 other Schuyler teams and coached by high school science teacher, Rebecca Schrader. The Bradford "Bush Buddy Club" also finished tied for fourth overall out of 33 teams from around the region. Schuyler, Chemung, Broome, Tioga and Tompkins County Soil and Water Conservation Districts combine efforts to provide high schools in the 5 counties with a regional, Southern Tier Envirothon competition to determine county champions. Battling for the chance to represent their county at the statewide event, the student's knowledge was put to the test as the teams completed tough exams in Aquatics, Soils, Forestry, Wildlife, and this year's Current Issue: "Agriculture and the Environment: Knowledge and Technology to Feed the World" (written by the Schuyler County Soil and Water Conservation District's own Jackie and John Wickham).

Two schools, seven teams, and 31 students from Schuyler County participated in the event held at the Tioga County Sportsmen's Center in Owego on April 25, 2019, involving a total of 33 teams from 13 regional schools. Odessa Montour had five teams, and Bradford Central School had two.

The "Bradford Buddy Club" was this year's Schuyler County winning team, the Bradford "Los Toros" came in second, and the Odessa Montour team, the "Martens," was third. Doug Chapman is the coach for the Odessa Montour teams.

The Bradford "Bush Buddy Club" represented Schuyler County at the 2019 New York State Envirothon held at Hobart William Smith College, Geneva NY in May.



Cargill Inc. funds Under the Vine Mower Demonstration Project

Cargill, Inc. awards Schuyler County Soil and Water Conservation District \$16,000 to assist with a unique state of the art demonstration project that will be utilized on over 250 acres of vineyard land surrounding Seneca Lake. This innovative project will allow for the purchase of an under the vine mower. This mower will be utilized to maintain vegetation within the vine row. This permanent cover will save over 250 tons of soil. Saving over 500lbs of nitrogen and 250lbs of phosphorous from entering Seneca Lake. Seneca Lake is an AA drinking water source for over 100,000 residents. Conserving soil and its associated nutrients is crucial to promote and protect the water quality of Seneca Lake and to reduce the occurrence of harmful algae blooms (HAB's).

This piece of equipment will be utilized on Lakewood Vineyards, Atwater Estate Winery, and Forge Wine Cellars. The machine will be used as a demonstration to showcase its potential and to replicate its use to vineyards throughout the region and throughout Seneca Lake Watershed. Not only will the machine have a significant impact on the reduction of sediment and its associated nutrients, but it will also allow for a significant reduction in herbicide use over that 250 acre area.



Community Programs

Annual Tree and Fish Sales

Once again the Soil and Water held an annual tree and shrub sale. Over 13,000 seedlings were sold. A spring fish sale was also held for area residents which included several species of fish sold including trout, and triploid grass carp.



Agricultural Pesticide Plastics Collection

The Schuyler and Chemung County Soil and Water Conservation Districts once again had a very successful free of charge collection of agricultural pesticide plastics from Schuyler and Chemung Counties. This plastic will be recycled and used for drain tile.



Hydro-seeding

The Soil and Water Conservation District continued its efforts of critical area seeding with the use of its hydro-seeding program. Over 87 acres were hydro-seeded to help prevent erosion of road ditches and conservation/municipal projects. This program saved over 240 tons of sediment from entering surface water bodies this year alone.



Equipment Upgrades

Tractor and Lowbed Trailer

The Schuyler County Soil and Water Conservation District was able to obtain the necessary funding in order to purchase a tractor and lowbed trailer in order to move its equipment from job to job. The Schuyler County SWCD installs 60 projects on average in a six month period with its own equipment and talented equipment operators. This means moving over 120 pieces of equipment to job sites and moving equipment to and from over 200 times in that short six month window. Quite an effort in its own right that would not be possible without Jim Barrett, equipment operator, for Schuyler County Soil and Water. Jim has a class A license and over 35 years experience moving equipment on rural roads in the tightest of areas. Having our own ability to move our equipment allows us to reach new levels of efficiency. We cant thank our local County Highway Department, and the Town of Hector Highway Department for all of the assistance they have provided us moving equipment over the years. This equipment will benefit the entire region.



Municipal Assistance

Barkley Hill Road

A 115 tons of rip rap and a new culvert were utilized to stabilize 200' of eroded stream. This project will conserve 115 tons of soil annually.



Before



After

Buck Hill Road

829 tons of rip rap was utilized to stabilize an 1,000' of road ditch and 225' of stream on Buck Hill Road in the Town of Hector. This project will conserve over a 500 tons of soil annually.



Municipal Assistance

Burlingame Road

Over 66 tons of rip rap was utilized to stabilize two culvert outlets in the Town of Cayuta. This project will conserve over 75 tons of soil annually.



Catlin Hill Road

A collapsed culvert was replaced and over 508 tons of rip rap was utilized to stabilize over 200' of stream on Catlin Hill Road in the Town of Dix. This project will save over 300 tons of sediment annually.



Coon Hollow Road

A collapsed culvert was replaced and two additional culvert outlets were stabilized along Coon Hollow Road in the Town of Orange. This project utilized 421 tons of rip rap and will conserve over 600 tons of sediment annually.



Municipal Assistance

Cotton Hanlon Road

112 tons of rip rap were used to stabilize over 100 feet of stream on Cotton Hanlon Road in the Town of Montour. This project will conserve over 259 tons of sediment annually.



County Road 1

We replaced a temporary culvert pipe with a permanent larger diameter culvert on County Road 1 in the Town of Hector that was installed after a culvert failure during the August 2018 flood.



County Road 6

413 tons of rip rap was utilized to stabilize over 960 feet of road ditch on CR 6 in the Town of Hector. This project will conserve 1068 tons of



Municipal Assistance

County Road 6

In preparation of paving the SWCD assisted the county highway department with several cross culvert replacements, outlet stabilization and land access culvert replacements along County Road 6



County Road 7

770 tons of rip rap was utilized to stabilize 2,241' of road ditch on County Road 7. This project will conserve 1245 tons of soil annually.



County Road 28

146 tons of rip rap was utilized to stabilize 374' of stream on County Road 28. This project will conserve 277 tons of soil annually.



Municipal Assistance

County Road 23/28

Over 116 tons of rip rap was utilized to stabilize over 143' of stream on County Road 23/28. This project will conserve over 211 tons of soil annually.



Dugue Road

We replaced a failed cross culvert on Dugue Road in the Town of Hector.



Varney Hill Road

A failed cross culvert was replaced and 557 tons of rip rap were utilized to stabilize 365' of stream on Varney Hill Road in the Town of Cayuta. This project will conserve over 675 tons of sediment annually.



Municipal Assistance

Hayes Road

Over 1300 tons of rip rap was utilized to stabilize a road collapse on Hayes Road in the Town of Montour. This project helped to conserve over 500 tons of soil annually.



Hitchcock Road

171 tons of rip rap was utilized to stabilize an eroded culvert outlet on Hitchcock Road in the Town of Montour. This project conserves 185 tons of soil annually.



Mathews Road

Over 400 tons of rip rap was used to stabilize over 1,300' of road ditch on Mathews Road in the Town of Hector. This project will save over 1,500 tons of sediment annually.

Municipal Assistance

Meads Hill Road

450 tons of rip rap was utilized to stabilize 1,200' of road ditch on Meads Hill Road in the Town of Dix. This project will conserve 550 tons of soil annually.



Wedgewood Road

180 tons of rip rap was utilized to stabilize 500' of road ditch on Wedgewood Road in the Town of Dix. This project will conserve 250 tons of soil annually.



Peach Orchard Road

300 tons of rip rap was utilized to stabilize 244' of stream in the Town of Hector. This project will conserve 542 tons of soil annually.



Peach Orchard Road

We removed a culvert pipe, and stabilized a road ditch utilizing 75 tons of rip rap and installed a storage basin for a flooding issue on Peach Orchard Road in the Town of Hector.



Municipal Assistance

Pertl Road

231 tons of rip rap was utilized to stabilize 1,100' of road ditch on Pertl Road in the Town of Catharine. This project will conserve 855 tons of soil annually



Roloson Hill Road

500 tons of rip rap was utilized to stabilize 620' of stream and 300' of road ditch on Roloson Hill Road in the Town of Dix. This project will conserve over 333 tons of sediment annually.



Shumway Road

170 tons of rip rap was utilized to stabilize 400' of road ditch on Shumway Road in the Town of Hector. This project will conserve 90 tons of sediment annually.



Spaulding Road

119 tons of rip rap was utilized to stabilize 489' of eroded streambank on Spaulding Road in the Town of Hector. This project will conserve 362 tons of sediment annually.

Municipal Assistance

North Summit Ave

60 tons of rip rap were used to stabilize a collapsed culvert outlet on North Summit Ave in the Town of Reading. This project will save 111 tons of sediment annually.



North Summit Ave

112 tons of rip rap was used to stabilize a waterway that was causing flooding to North Summit Ave in the Town of Reading. This project will conserve 139 tons of sediment annually.



Terry Hill Road

85 tons of rip rap was utilized to stabilize over 500' of road ditch. This project will conserve over 200 tons of soil annually.



Municipal Assistance

Texas Hollow Road

A culvert replacement, inlet and outlet stabilization was performed on a cross culvert on Texas Hollow Road in the Town of Catharine.



Clute Park—Kayak Launch

The Schuyler County Soil and Water Conservation District was asked to stabilize the newly installed kayak launch site in the Village of Watkins Glen. We also installed an access walkway to connect the new kayak launch with the rest of Clute Park.



Ball Diamond Road

180 tons of rip rap was utilized to stabilize over 550' of road ditch. This project will conserve over 220 tons of soil annually.



Agriculture

Hay Storage Barn

A hay storage barn was completed on the Rhodes farm in the Town of Dix. This project was part of the STAIEP program. An economic program aimed to assist the agricultural community in the Southern Tier.



Covered Barnyard Project

A covered barnyard project was completed on the Chotcowski beef farm. This project allows for the animals to be under cover during the non-grazing times of the year. This allows manure to be collected and then spread according to the nutrient needs of the crops on the farm. The roof itself keeps clean water from mixing with the nutrients and pathogens from the manure and any manure from running off to nearby surface waterbodies.



Buffer and Compost Project

A small pasture project excluding horses from surface water, creating buffers, and providing alternative water sources was completed at the Painted Bar Stable. In addition to the pasture project a roofed composting area was also completed in order to keep stored manure from mixing with surface water and to allow for a useable stable product to help build organic matter on nearby vineyard land.



Agriculture

Silage Leachate Collection

A lined total collection silage leachate system was installed at Seneca Valley Dairy Farms. This project allows for all silage leachate from the farm to be collected and then safely used for irrigation of crops or spread with manure.



Silage Leachate Collection

A total collection silage leachate system was installed on the Lloyds dairy farm. Again this system will allow for all leachate to be safely collected and utilized for irrigation or spread with manure according to the farms certified nutrient management plan.



Stream and Vineyard Headland Stabilization

Rock rip rap was utilized to stabilize a significant collapse on Phil Davis' Vineyard in the Town of Hector. This was damage caused from the August 2018 flood.



Part C Project

Salt Storage

Utilizing Part C funding from New York State Agriculture and Markets through the Environmental Protection Fund, the Schuyler County Soil and Water Conservation District was able to partner with the Town of Dix to complete a salt storage building for the Town of Dix Highway Department. Prior to the newly constructed salt storage, salt used for winter safety on roads in the Town of Dix was stored adjacent to a nearby tributary of Seneca Lake. This roofed salt storage building will help to keep salt from entering our surface water bodies while being stored. Additionally it will aid the Town in the reduction of salt lost from being exposed to the elements.



Stream Stabilization

County Road 1

A significant head cut on a stream in the town of Hector washed out a driveway and all access to the private home. It also was contributing hundreds of tons of sediment to Seneca Lake. We were able to stabilize the stream and upsize the culvert.



Voohries Road

Stream erosion threatened a barn and was also washing out the road itself on Voohries Road in the Town of Hector. We were able to stabilize the stream and replace the under sized cross culvert.



Altay Road

We were able to stabilize a slope failure of a stream on Altay Road in the Town of Reading.



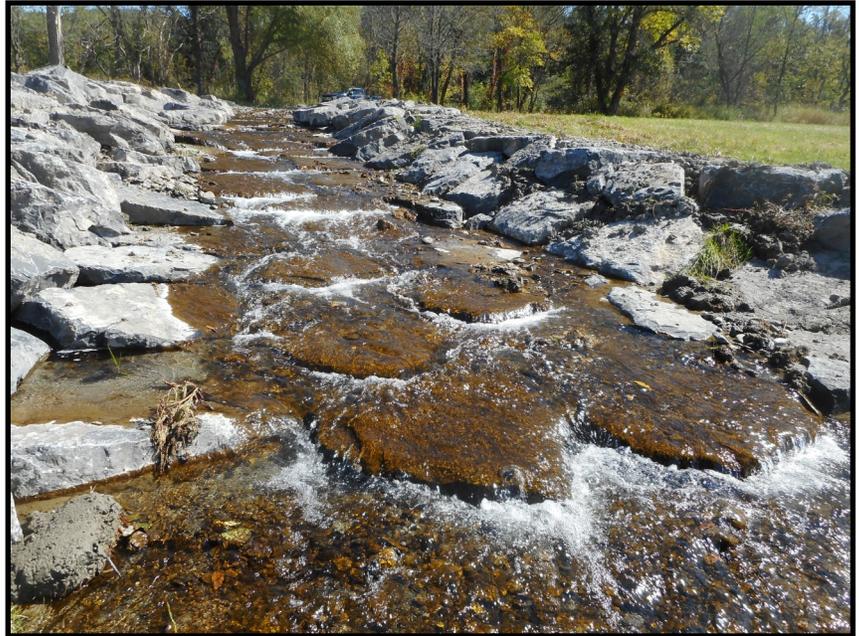
Cayutaville Road

Re-establishment of a low flow channel was necessary on a tributary off of Cayutaville Road. Deposition from the August 2018 storm was causing flooding to a nearby residence.

Stream Stabilization

Catlin Mill Creek

We were able to utilize an engineered rock riffle to stabilize a significant head cut on Catlin Mill Creek that was causing hundreds of tons of sediment to enter Catharine Creek and Seneca Lake.



County Road 1

We were able to stabilize an eroded waterway, upsize an undersized culvert and stabilize a stream with a rock riffle on County Road 1 in the Town of Hector.



Valois Point

Re-establishment of a low flow channel on Valois Point was performed. This would not have been possible without assistance from our municipal highway departments with trucking the material.

This hard hit area from the August 2018 storm continues to feel its effects. An immense amount of sediment in the system in unreachable areas continues to work its way down and deposit in this area causing a high flooding risk. A challenge that will occur for years to come.



Funding

Total Project Funds Implemented in 2019

Each and every year the Schuyler County Soil and Water Conservation District's main purpose and focus is to put conservation on the ground through implementation. This is a long and arduous process that involves planning, through our conservation plan efforts. These plans are then utilized in obtaining competitive grant funds through State and Federal sources. Next comes completing the plan of work to receive the money in-house from those State and Federal sources. Next comes the permitting, survey and design phase. Finally the construction or implementation phase of the project. **This past year we were able to implement \$2,261,400 on 67 projects.**

We work diligently to provide the most cost effective and efficient conservation to our communities and our residents. With just one full time permanent employee the SWCD relies on its extraordinary equipment operators Mike Manwaring, and Jim Barrett to provide the experience and expertise to complete over 50 projects annually in just six months time with the SWCD's equipment. That wouldn't be possible without the many partnerships we have with our municipal highway departments. They assist on almost every project we complete. We also have incredibly talented and experienced contractual folks that aid the District above and beyond each year.

Funding Obtained for Future Implementation in 2020 and Beyond

A key focus area every year, in order to accomplish our primary goal of putting conservation on the ground, is to bring in and obtain those competitive grant funds from Federal and State sources to aid our residents, and natural resources. This funding has a huge multiplier effect in our community. These funds are multiplied by supporting area businesses and most importantly area residents and the jobs they hold. Our projects help to support quarries, trucking companies, construction companies, concrete companies, seed dealers, supply stores, engineers, and more. This has an important positive impact on our community to go along with the benefits of protecting our natural resources, our public and private infrastructure, and strong agricultural industry which provides the foundation for our all important tourist industry.

Each year the Schuyler County Soil and Water Conservation District receives less than 2% of its total budget from County funding. The other 98% of funding is brought in through competitive State and Federal grant dollars. Over 96% of that funding is through the New York State Environmental Protection fund or the EPF. The EPF is funded primarily through real estate transfer tax. Meaning if you haven't purchased or transferred the title of a property in the past year then you haven't had to pay into this very beneficial fund. With the rural nature of Schuyler County this equates to much more funds coming into our community than are leaving our small community for this fund. **We have been able to secure \$3,066,225 in funding in 2019 alone to implement future agricultural and nonagricultural projects that will benefit our water quality, protect our natural resources, as well as our public and private infrastructure.**

Board of Directors

Anthony J. Specchio, Chair
James Howell Vice Chair, Legislator
Rick Reisinger, Treasurer
Carl Blowers Legislator
Gary Gaige, Member

SWCD Staff

Jerry Verrigni, District Manager
Jim Barrett, Equipment Operator
Michael Manwaring, Equipment Operator

Contractual Staff

John Wickham, USC Grazing Specialist
Jackie Wickham, AEM Planner
Elaine Dalrymple, Education Specialist
Karen Tillotson, Asst. Secretary

<p>David L. Sidle Agency 219 S. Catherine Street Montour Falls, NY 14865 607-535-6501</p>	 <p>Cotton-Hanlon Inc. Timberland Management Exclusive Hunting Leases Standing Timber For Sale P.O. Box 65 Cayuta, NY 14824 http://cottonhanlon.com/index.html</p>	<p>Watkins Glen Fire Department</p> 
 <p>Watkins Glen Elks Lodge #1546 300 N. Madison Ave Watkins Glen, NY 607-535-2859</p>	 <p>Moose International Family Center 426 2096 State Rte 14 Montour Falls, NY 607-535-4741</p>	 <p>INTEGRITY ENGINEERING PLLC 2106 College Ave. Elmira Heights, NY 14903 607-426-5684</p>
<p>Seneca Lodge 3600 Walnut Road Watkins Glen, NY 14891 607-535-2014</p>	<p>Seneca Lake Pure Waters Association www.senecalake.org</p>	<p>Reisinger's Apple County 2750 Apple Lane (Off Ellison Road) 607-535-7493</p>

*THANK YOU TO ALL OF OUR 2019
ENVIROTHON DONORS*

This Newsletter is made possible through funding from the Finger Lakes– Lake Ontario Watershed Protection Alliance (FL-LOWPA).

All programs and services of the Schuyler County Soil & Water Conservation District and Natural Resources Conservation Service are offered on a nondiscriminatory basis, without regard to race, color, national origin, religion, sex, age, marital status or handicap.



SCHUYLER COUNTY SWCD
PO BOX 326
MONTOUR FALLS, NY 14865

