

Monroe County Soil & Water Conservation District

2017 Annual Report



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MONROE COUNTY SOIL & WATER CONSERVATION DISTRICT

BOARD OF DIRECTORS 2017

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Vice-Chairman & Practical Farmer Representative

Steve Brew

Legislative Representative

Joshua Bauroth

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Farm Bureau Representative

Maureen Leupold

Member at Large

The Monroe County SWCD was created in 1953 by the Monroe County Board of Supervisors under New York State Soil and Water Conservation District Law.

STAFF 2017

Kelly Emerick

Executive Director

Karen Ervay

Secretary to the Board

Stephanie Castle

Watershed Agricultural Coordinator

Jeremy Paris

Soil & Water Planning Technician

Josh LaFountain

Soil & Water Resource Technician

Molly Swearingen

Soil & Water Resource Technician

Megan Aubertine

Soil & Water Conservation Intern

Marissa Steinheimer

Soil & Water Conservation Intern

MISSION STATEMENT

The Monroe County Soil and Water Conservation District (MCSWCD) is a municipal subdivision that partners with other agencies and organizations to educate and assist land stewards in planning and implementing comprehensive management practices that stabilize soil, improve water quality, manage stormwater, preserve open space and/or manage fish and wildlife habitat. The District promotes the preservation of: wetlands, woodlots, agricultural land, and low-impact development. We provide services to partners, landowners, developers, farmers, engineers, government and non-government agencies.

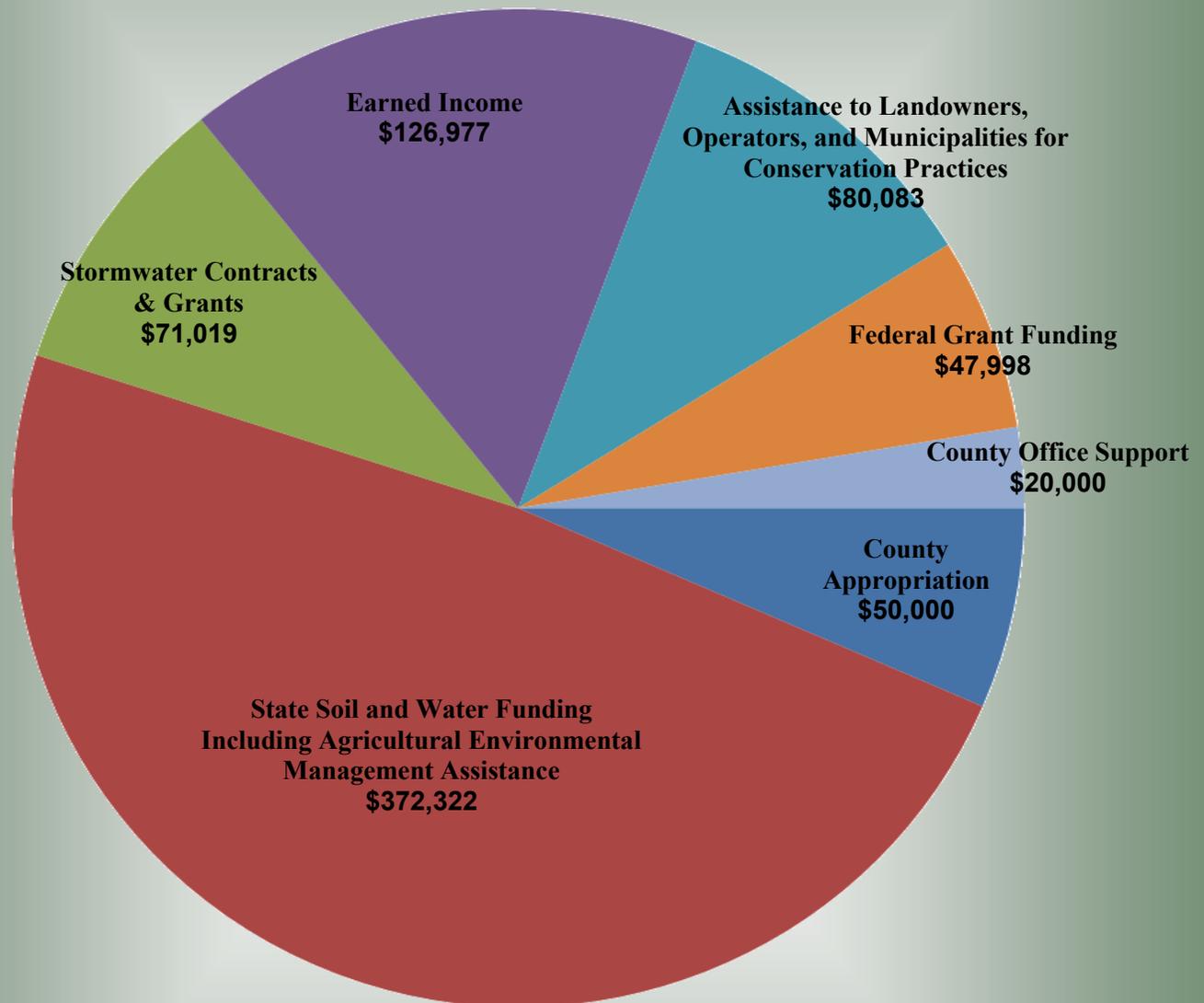
Find us on Facebook at:

www.facebook.com/MonroeCountySWCD



2017 FUNDING

During 2017 the Monroe County Soil and Water Conservation District (MCSWCD) leveraged **\$768,399** in funds for the **\$50,000** investment from the County. This represents a **\$15.37 return** for each dollar in County appropriation funds to help meet the conservation needs of Monroe County.



In 2017, the MCSWCD responded to **258** requests for water quality technical assistance and **121** requests for land use management technical assistance from farmers, landowners, homeowners, municipalities, and Monroe County residents to protect the region's lakes and streams, drinking water, productive farmland, wildlife habitat, public health and safety. The Soil and Water District also provides educational programs to residents of all ages to encourage good stewardship into the future.

With nearly **65 years** of success getting conservation on the ground, your Soil and Water Conservation District continues to provide critical services for the residents of Monroe County!

SUMMARY OF 2017 ACCOMPLISHMENTS

Stormwater technical assistance requests	158	State funds used toward agricultural conservation projects	47,365
Contractors, developers, qualified inspectors, municipal officials, engineers and landscape architects trained	476	Acres of agricultural land planned for soil erosion prevention	1,190
Stormwater-related trainings	13	Pounds of agricultural plastic recycled	3,899
Gallons of stormwater captured in rain barrels	1,706,250	Tons of soil saved from erosion	5,762
Construction site inspections	75	Native trees and shrubs distributed	20,150
Bluebird & bat boxes distributed	47	Number of residents that received native trees and shrubs	307
Soil group worksheets completed	84	Fish distributed	1,264
Acres of land evaluated using soil group worksheets	3,341	State funding leveraged for conservation projects	565,888
Students educated on environmental topics	1,485	Square footage of riparian buffer zones created	30,360
Acres of cover crops planted	1,186	Rain barrels distributed	70

Providing Today, Protecting Tomorrow

Envirothon

The Monroe County Envirothon is an environmental education event that is held by the District each year. It is hosted outdoors in Monroe County's Ellison Park. High school students compete in teams to test their knowledge on 5 topics: soils, aquatics, forestry, wildlife and current issues. The 2017 current issues topic was Agricultural Soil and Water Conservation Stewardship. Monroe County's 2017 Envirothon was the District's largest one in years with **130 students** separated into **26 teams** from **7 schools**.

Churchville-Chili, Team 2, took first place with an overall score of 408. The team went on to the New York State Envirothon competition, coming in 12th place out of 57 teams!



2017 County Envirothon Winner:
Churchville-Chili High School, Team 2

Conservation Field Days



Above: Graduate student from The College at Brockport teaching students about butterflies
Right: Student observing aquatic macroinvertebrates



Conservation Field Days is held each year in Monroe County's Ellison Park. This 3-day, environmental education event provides 5th and 6th grade students the opportunity to learn about a range of environmental topics through hands on activities. Some of the topics from the 2017 event included wetlands, pollinators, green energy, wildlife, aquatic macroinvertebrates, recycling, land-use planning and much more!!

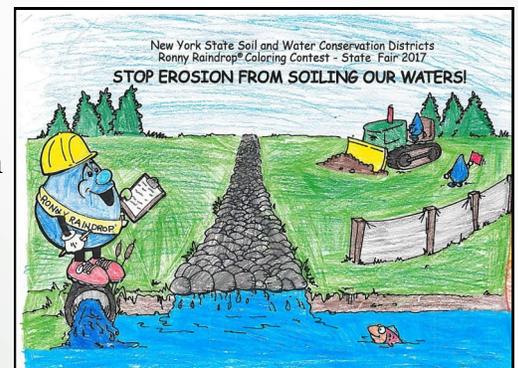
Nearly **1,400 students** from **14 area schools** attended the 2017 Conservation Field Days event.

NY State Fair 2017



Display showing site with sediment & erosion control practices in place

The Soil and Water Conservation Districts of New York set up a booth each year at the New York State Fair to promote and highlight the dynamic programs and services offered to the public. The theme for the booth is collaboratively chosen by the Districts, where in 2017, the theme selected was erosion and sediment control. Handmade displays were present at the booth, demonstrating the difference in what a construction site may look like with erosion and sediment controls in place versus a site without them; emphasizing the importance of keeping soil and sediment out of our waters! A coloring contest is available for kids that visit the booth. In 2017, 9 year old Anna Lago, a Monroe County resident from Fairport, won the contest for her age group.



Coloring Contest Winner

Celebrate Agriculture Dinner

The Monroe County Soil and Water Conservation District partners with the Monroe County Farm Bureau and Cornell Cooperative Extension each year to host the “Farm to Table” Celebrate Agriculture Dinner. The 2017 dinner was held at the Clubhouse at Durand Eastman Park on August 12. **130 people** attended the dinner including farmers, several legislators and District and Extension employees.

Bucket raffles, a 50/50 raffle and a silent auction were held for guests. Auction and bucket raffles prizes included tickets to local sporting events, household decorations, local food gift baskets and more! All of the food at this dinner came from local farmers within Monroe and neighboring counties.

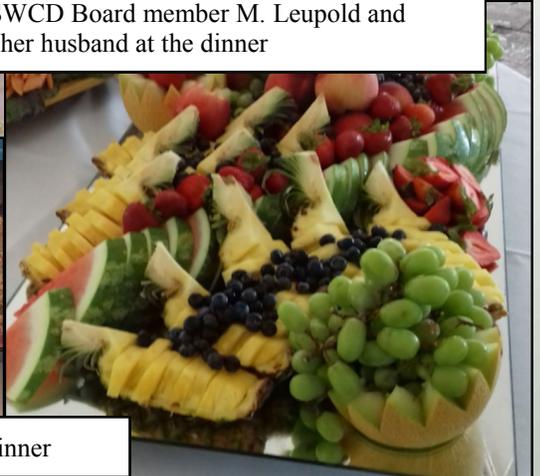
This dinner is held to raise money to support the promotion and education of agriculture in our community, the Farm Bureau Scholarship Fund, and the Cornell Cooperative Extension of Monroe County 4-H program. Over **\$2,000** was raised at the 2017 dinner.



Above: MCSWCD Board member M. Leupold and her husband at the dinner



Food from the dinner



CONSERVATIONIST OF THE YEAR



David Lindsay (middle left) receiving his award with Director Kelly Emerick (middle right), Legislator Steve Brew (left) and Legislator Mike Zale (right)

The District awarded David Lindsay with the 2016 Conservationist of the Year award at the annual Celebrate Agriculture Dinner. Dave has spent nearly 25 years working on highway transportation and bridge projects, stormwater management system design, and various environmental projects. Over the last decade, he has greatly supported the MCSWCD’s Stormwater Management Program where the District has provided technical services to Chili and other communities with their stormwater management needs. Dave has partnered with the Soil and Water Conservation District to complete conservation projects to protect natural resources. With Dave’s leadership, the Town of Chili was able to successfully complete 3 large-scale streambank stabilization projects on Black Creek over the last decade, and he continues to demonstrate commitment to put more conservation on the ground.

\$217,696 in Agricultural Services was provided by the District in 2017.

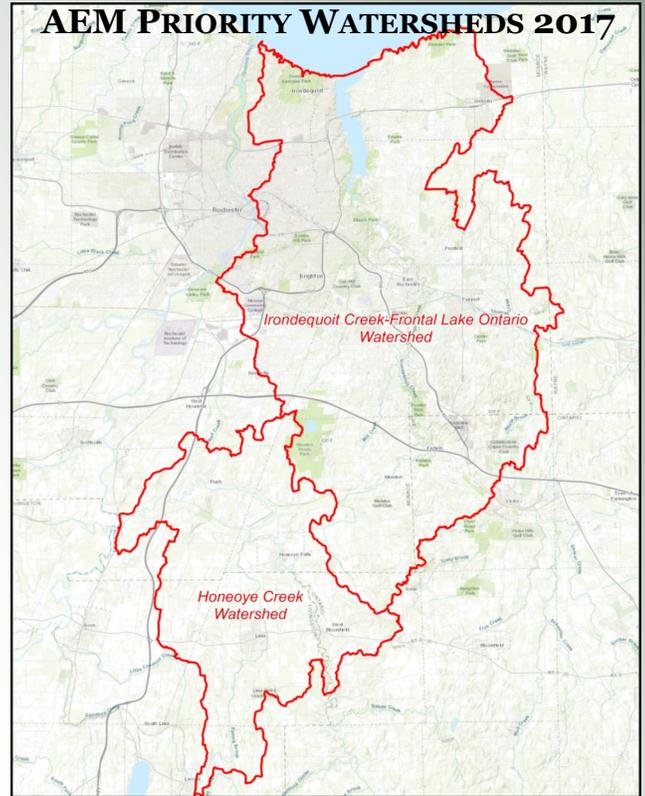
AEM: AGRICULTURAL ENVIRONMENTAL MANAGEMENT



The Monroe County Soil & Water Conservation District has been actively involved in assisting farmers with evaluating, installing, and improving conservation management practices since the District formed in 1953.

In conjunction with evolving state and federal funding opportunities, District technical staff have assisted many farmers with planning and implementation of conservation practices.

The AEM program in Monroe County was established in 1998 in Northrup Creek watershed, a priority watershed of local importance, and continues to expand each year based on determinations of new watershed priorities today.



In 2017, watershed priorities included Honeoye Creek and Irondequoit Creek. There are approximately over **500 participants** in Monroe County's AEM program.

Out of the Monroe County farms that participate in AEM, **46.5%** are cash crop farms. Common cash crops within Monroe County are soybeans, corn, and wheat.

Farms in the AEM program progress through a series of tiers as follows:

2017 AEM Accomplishments

Tier 1 - Inventory current activities, future plans, and potential environmental concerns.	3 survey worksheets completed
Tier 2 - Document current land stewardship; assess and prioritize areas of concern.	2 new farm assessments completed
Tier 3A - Develop conservation plans addressing environmental resource concerns while helping to reach farm goals.	4 farm plans completed
Tier 4 - Implement plans utilizing available financial, educational, and technical assistance.	2 farm best management projects implemented
Tier 5A, 5B - Evaluate to ensure the protection of the environment and farm viability.	2 farm plan information updates completed
	8 farm conservation plan updates completed

Genesee River Watershed Coalition

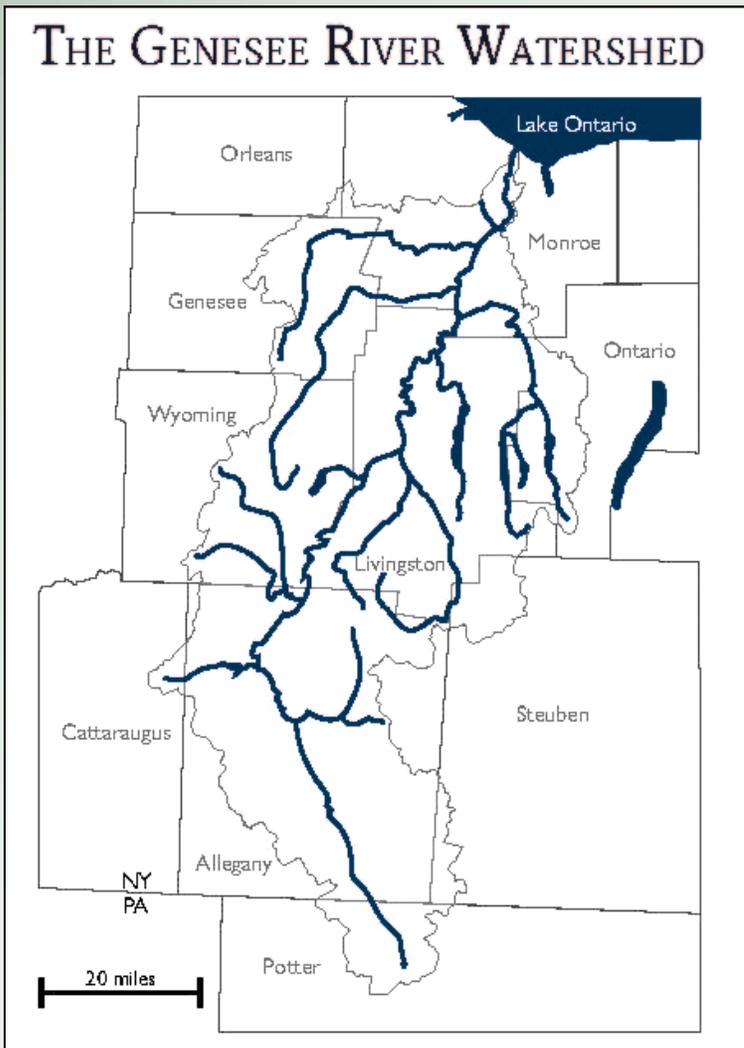
The Genesee River Watershed is nearly 2,500 square miles and covers parts of 10 counties. The watershed has been identified as a high priority area when working to protect and improve Lake Ontario water quality. Sediment and nutrient runoff have degraded the water quality of Lake Ontario causing eutrophication and harmful algal blooms around the mouth of the Genesee River and in near shore areas. Many of the pollutants may originate from agricultural sources within the watershed. To address the water quality concerns relating to agriculture, the Soil and Water Conservation Districts encompassing the Genesee River Watershed established the Genesee River Watershed Coalition. The coalition is composed of **10 counties**; 9 in New York State (Allegany, Cattaraugus, Genesee, Livingston, Monroe, Ontario, Orleans, Steuben and Wyoming) and 1 in Pennsylvania (Potter).

GENESEE RIVER WATERSHED COALITION OF CONSERVATION DISTRICTS



The Coalition's logo was designed by the coordinator, Stephanie Castle

Stephanie Castle, based out of the Monroe County Soil and Water Conservation District, was hired in July 2017 to coordinate the Coalition. Stephanie grew up on a beef farm in central Pennsylvania and now resides in Churchville. She graduated from Franklin and Marshall College in Lancaster, PA, with her BS in Environmental Science and from Boston College with her MS in Geoscience/Geographic Information Systems (GIS). Stephanie worked for 6 years at the Lake Champlain Basin Program where she managed water quality grants and facilitated partnerships at local, state and federal levels throughout the watershed.



The coalition received a \$1,875,000 federal grant through the Regional Conservation Partnership Program (RCPP) with Natural Resource Conservation Service and a federal Great Lakes Restoration Initiative (GLRI) grant for over \$700,000 from Environmental Protection Agency (EPA). The money from these grants will be used to implement agricultural best management practices (BMPs) such as, under the GLRI grant, completing 2,700 acres of cover crops, 4,750 feet of grass waterways, 6,850 feet of water and sediment control basins, 7 acres of riparian buffers (forested and herbaceous), 16,000 feet of stream exclusion fencing and more throughout the Genesee River Watershed to assist in reducing nutrient and sediment runoff into the river. In addition to implementing more BMPs, the Coalition will put together an inventory of all the farm stewardship practices completed throughout the watershed by Soil and Water Conservation Districts since 2010.

Did you know?

The Genesee River begins in the Allegheny Plateau and flows North **157 miles** until it reaches Lake Ontario

Genesee River Watershed Coalition

Through federal funding under the Great Lakes Commission's Great Lakes Sediment and Nutrient Reduction Program, **2 six-row interseeders** were purchased by the Genesee River Watershed Coalition. They will be available for farmers within the Genesee River Watershed to rent during the growing season.

Cover crop interseeding has all the benefits of normal cover cropping (see page 9) while additionally mitigating timing issues after corn is harvested. The use of these interseeders can reduce the amount of erosion and sediment runoff from agricultural fields that has the potential to wash into the Genesee River and ultimately into Lake Ontario.

As an added conservation practice, no-till drill parts were also purchased to be able to convert the machine into a no-till drill. A no-till drill is a valuable tool that aids with planting seeds without drastically disturbing the top soil and saving time as less trips across the field are needed. Using a no till drill can reduce compaction and soil erosion while increasing organic matter and improving the overall structure of the soil.



Above: Interseeded cover crop between rows of corn

Left: A 6 row interseeder, one of the two interseeders purchased by the Genesee River Watershed Coalition



Agricultural Watershed Coordinator, S. Castle (far left), and other Genesee Watershed Coalition members participating in a demonstration of the six-row interseeder

COVER CROPPING

Under Agricultural Non-point Source Pollution Abatement & Control grant programs, the District was able to implement **1,186 acres** of cover crops on **9 farms**, totaling **\$97,460** in project costs. The implementation of these cover crops will save **2,372 tons of soil** from entering the Salmon Creek and Irondequoit watersheds.

Cover cropping is a common conservation practice used by farmers that has a variety of beneficial outcomes. Planting cover crops post-harvest can improve the health of the soil by adding organic matter, nitrogen and other nutrients back into the soil while reducing erosion and holding bare topsoil in place during times of heavy rain. If managed correctly, they can also act as mulch to hold moisture in the soil longer during times of drought. Another benefit to planting cover crops is that they attract pollinators. Pollinators are vital for crop production and without them, we would not have as many fruits and vegetables available to us as we do now.

In addition to improving soil health and attracting pollinators, planting cover crops can also help reduce greenhouse gases in the atmosphere. With climate change impacting agriculture, climate resilient farming practices are on the rise. Cover cropping is considered a climate resilient farming practice as it mitigates the effect of climate change while also sequestering carbon dioxide and other greenhouse gases. In 2017, an estimated **485 tons of carbon dioxide** was sequestered by the cover crops MCSWCD helped implement.



With taproots that can grow several feet deep, the above pictured tillage radishes bore holes into the ground, loosening the soil. The radishes capture, store and then release nutrients back into the soil, so they also can reduce the need for fertilizer in the spring.



Right: Radish growing between harvested row crops

Wheat



MCSWCD completed **84** soil group worksheets in 2017 totaling **3,341 acres** of land evaluated. Soil group worksheets are used to apply for tax exemptions for land used for agricultural purposes.

Agricultural Plastic Recycling

The Monroe County Soil & Water Conservation District assisted **7 Monroe County farms** participating in the USAg Plastic Recycling Program. Nearly **4,000 pounds** of agricultural plastic was recycled in 2017.

This program recycles triple rinsed agricultural plastics from pesticide or fertilizer containers, and crop protection products then uses them in products such as fence posts, agricultural drainage pipes and other Ag Container Recycling Council approved products.

Over the years there has been a rise in public awareness when it comes to recycling plastic. By recycling agricultural plastic, we help conserve resources, save energy, reduce carbon dioxide and keeps more plastic from entering landfills.



Agricultural plastic pesticide containers being transported from a farm for recycling

Cropland to Pasture Conversion

In 2017, through funding from the NYS Agricultural Non-Point Source Pollution Abatement and Control grant program, MCSWCD assisted a farm in the Town of Mendon in converting 4 acres of land from row crops to permanent pasture. Approximately 3,226 feet of exclusion fencing was installed around the area to keep horses from entering the nearby creek. This project will help protect water quality by reducing erosion, sediment, and nutrient runoff into the creek. The total project cost was **\$21,910** and will save **9.2 tons of sediment** a year from entering the Irondequoit Creek Watershed.



Before: Old crop field



After: Exclusion fencing is installed and horse are within the pasture



After: Exclusion fencing is installed and horses are within the pasture

STORMWATER MANAGEMENT

In 2017, the District provided **\$242,345** in Stormwater Services to local landowners and municipalities.

Through funding from the Stormwater Coalition of Monroe County, the District completed **158** stormwater technical assistance requests including:

- Construction Inspections
- Permit Assistance
- Construction & Stormwater Pond Complaints
- Erosion & Sediment Control Assistance
- SWPPP Education & Review
- MS4 Audit Assistance
- Streambank & Shoreline Erosion Assistance
- Post-Construction Stormwater Management Assistance
- Drainage Assistance Relating to Stormwater
- Complaints Regarding Stormwater Issues

STORMWATER TRAINING

The Monroe County Soil and Water Conservation District hosted **13 stormwater related trainings** and workshops in 2017. Through these trainings the District



John Dunkle, P.E. instructing a Western New York Stormwater Class

was able to train **476 people**, such as engineers, municipal officials, landowners and contractors.

These trainings included Stormwater Hydrology, Maintenance and the new MS4 Permit, Stormwater Design for Linear Projects, Stormwater Erosion and Sediment Control and the New Design Manual, and Constructing Wetlands for Stormwater Management.



Training	Sessions	Attendees
NYS-DEC Endorsed 4 Hour Erosion and Sediment Control Training Sessions	7	338
In-Field Municipal Staff Training	1	3
Western NY Stormwater Management Training Series	5	135

IN-FIELD TRAINING FOR MUNICIPAL STAFF

The In-Field Training is held by the Monroe County Soil and Water Conservation District upon request by municipalities. These construction inspection trainings typically are four hours long, consisting of an hour within the classroom and three hours in the field at a construction site. Throughout this training, attendees review stormwater pollution management controls and learn how to properly use and install erosion and sediment control practices, conduct post construction inspections and to accurately complete construction site inspection forms. The District held **1 In-Field Training** in 2017. This course is perfect for new inspectors or for any inspector who may be looking for a refresher.

STORMWATER CONSTRUCTION SITE INSPECTIONS

The District conducted a total of **75 Construction Site Inspections** in 2017. Construction often leaves soil bare and exposed to stormwater runoff, allowing a need for erosion and sediment control practices. By conducting construction site inspections, the District is able to help protect water quality by identifying absent or improperly installed erosion and sediment control practices. Practices that are properly installed can save soil from being washed off construction sites and into nearby waterbodies.



Resource Technician M. Swearingen inspecting a stormwater sewer drain with a sediment screen surrounding it

STORMWATER POND INSPECTIONS



Stormwater pond visited by staff due to algae growth complaint

The District assists municipalities with construction and stormwater pond complaints regarding nuisance vegetation, algae issues, erosion, seepage and wildlife problems and more. In 2017, the District responded to **6 stormwater pond related requests** and designed an educational sign to inform visitors about stormwater ponds and their purpose.

Stormwater ponds are created to function differently than recreational ponds. They are designed with the purpose of capturing stormwater to assist with filtering out pollutants the stormwater may have picked up when flowing over impervious surfaces. These ponds also slow down water and help prevent flooding during heavy rain events. Stormwater ponds are not meant for fishing, swimming or other recreational activities.



Above: A stormwater pond with a fountain to help with aeration and increase aesthetics

Left: An educational sign designed by District staff to place at stormwater ponds

Stormwater Management Pond Facility

Pond with a Purpose

This pond is known as a Stormwater Pond. It's purpose is to collect and treat rain water that runs off lawns, driveways, roofs, and roadways in your neighborhood.

Pond may Contain Pollutants

The water that this pond collects may contain pollutants from motor oils, soaps, fertilizers, pet waste, and other household items.



Visit www.h2ohero.org to find out what you can do to reduce pollutions in your pond!

This pond is not intended for recreational use. PLEASE DO NOT: Feed the waterfowl, fish, swim, or allow your pets to drink from this pond.



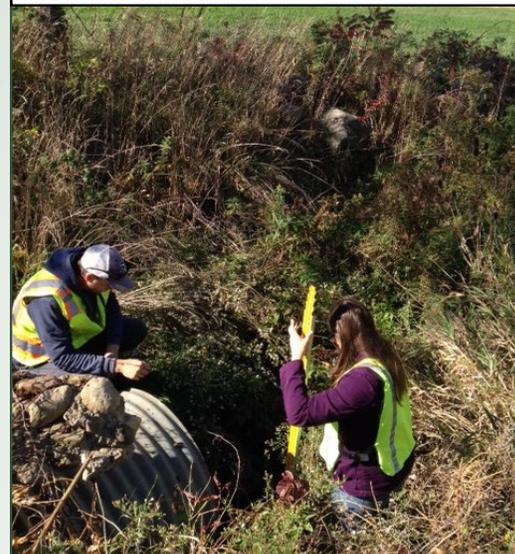
ROAD-STREAM CROSSING

Through funding from New York State Department of Agriculture and Markets, the District was able to begin the North Atlantic Aquatic Connectivity Collaborative (NAACC) Culvert Assessment Program in 2017. Three staff members were trained in the NAACC assessment protocol, where one became a Coordinator.

The District will aid the Monroe County Department of Transportation and 4 municipalities (Chili, Riga, Scottsville and Wheatland) by creating a database of culvert and bridge assessments that municipalities can use when planning upgrades or replacements. This will help reduce the risk of future flooding events and property damage while simultaneously improving fish and wildlife habitat and passage. District staff completed **17 assessments** in 2017. The estimated total cost of this project was **\$14,576**, but will continue into the next year.

The District is currently working within the Black Creek and Oatka Creek Watersheds. However, once these stream crossing assignments for each watershed are completed, the program will be expanded with the goal of assessing all watersheds in Monroe County.

Technician M. Swearingen at NAACC Training



RIPARIAN BUFFER

The District completed Phase I of a riparian buffer project at Union Station Park in the Town of Chili along a tributary to Black Creek in 2017. The project was split into two phases due to the large volume of trees and shrubs being planted. Phase I of the buffer project covered **21,360 square feet** with nearly 300 native trees and shrubs being planted. The project was funded under the NYS Department of Environmental Conservation Environmental Protection Fund for Water Quality Improvement Projects. The estimated cost for Phase I of this project was **\$23,402**. Implementing this project will help protect the water quality of Black Creek by saving sediment and other runoff pollutants from entering the stream.

A riparian buffer is the vegetated area along a stream or waterbody. Buffers protect water quality by trapping sediment runoff and pollutants before they reach the

streams, while also providing habitat and shade.



Before: Tributary had little to no riparian buffer



Above: Plants placed where they will be planted
Left: Technician J. LaFountain and Town of Chili workers planting a White Cedar

Stream Stabilization



The District received funding from the Monroe County Department of Environmental Services which was obtained by the Finger Lakes—Lake Ontario Watershed Protection Alliance (FL-LOWPA), to implement a stream stabilization project in Salmon Creek Park within the Town of Hilton. Prior to the start of this project, the streambank was heavily eroded and there was little to no riparian buffer. The goal of this project was to reduce excess nutrient and sediment inputs to Salmon Creek while increasing safe fishing access to the stream.

A 230 foot stretch of the streambank was stabilized by regrading, reseeding and planting live red osier dogwood stakes along the bank. Large, flat stones were placed in the area most heavily impacted by erosion, providing stabilization while offering fishing access to the stream. A 20 foot riparian buffer was created along a section of Salmon Creek by planting nearly 50 native trees and shrubs consisting of 7 different species.

Project costs totaled **\$35,000** and will save an estimated **3,380 tons of sediment** and **3,186 pounds of phosphorus** from entering Salmon Creek over the lifespan of the project.



Above: Before, heavily eroded streambank
Below: After, new stabilized fishing access



Above: During construction, stones being put into place for fishing access



Above & Left: Technicians J. Paris & J. LaFountain applying a Rolled Erosion Control Product to the Streambank



After, planting is complete



Technician J. Paris & Intern M. Aubertine planting live stakes

The District distributed **70 rain barrels** to **57 Monroe County residents**, capturing **1,706,250 gallons of water** per year!

FUNDS AWARDED FOR FUTURE CONSERVATION PROJECTS

The Monroe County Soil and Water Conservation District was able to leverage over **\$550,000** in 2017 for future conservation projects under the NYS Department of Environmental Conservation Environmental Protection Fund for Water Quality Improvement Projects. These grants will fund two projects. The first project will involve the construction of a nature-based shoreline (NBS) to protect an already existing road that provides access to Irondequoit Bay. A NBS is a living, plant based protected shoreline that reduces wave impact on the shore. The area currently contains little to no wetland vegetation to protect the road or the eroding shoreline. Implementation of this project will help reduce erosion and lower the impact of waves from boating activity and wind. The leveraged amount for this project is **\$151,000**.



Portion of road exposed to Irondequoit Bay

The second project under this grant will take place in the Village of Churchville. It will entail the restoration and stabilization of a severely eroded section of Black Creek, including a 10-20 foot riparian buffer that will be created along the edge of the stream to help protect the streambank from erosive pressure during high water events. The total amount leveraged for this project is **\$409,888** and will reduce sediment loads into Black Creek by approximately **1,799 tons per year**.

INVASIVE SPECIES



Emerald Ash Borer

In 2017, the District was awarded **\$100,000** in federal funds under the United States Forest Service Great Lakes Restoration Initiative grant to mitigate the effects of Emerald Ash Borer (EAB). EAB was first discovered in the United States in 2002 in Michigan and has since spread to New York. This invasive Asian beetle infests and kills Ash tree species including green, white, black and blue ash. Ash tree density in Monroe County is among the highest in New York State.

The District will work with Monroe County Parks Department,

Monroe County Department of Environmental Services, New York State Parks, Recreation, and Historic Preservation Offices and New York State Department of Environmental Conservation to provide supplemental tree planting in multiple parks and municipal areas throughout Monroe County. The project will focus on riparian areas in order to maximize healthy, functioning canopy cover along streams. This will aid in reducing stormwater flow, soil erosion, sediment and nutrient loading and decrease the likelihood of further invasive species establishment.



Emerald Ash Borer exit holes
Picture from Daniel Herms,
The Ohio State University

NATIVE POLLINATOR HABITAT ENHANCEMENT

MCSWCD created **1 acre of native pollinator habitat** through funding under New York State Part B Conservation Project Financial Assistance. The total cost of the project was **\$6,214**. The acre was divided between 3 sites including an apple farm in the Town of Ogden and two municipal parks in the Town of Clarkson and the Town of Henrietta. All sites were seeded with a pollinator specific seed mix created by District staff and Xerces Society. Species within this seed mix included plants such as coneflowers, black-eyed susans, goldenrods and milkweeds. Educational signs were placed at each site to inform the public about the importance of pollinators.

Pollinators consist of birds, bees, butterflies and many other organisms that rely on flowers as a food source. Several agricultural crops depend on these organisms to be able to produce the fruits and vegetable that we eat every day. Increased development and urbanization has led to a decline in habitat, decreasing populations. This project will enhance pollinator habitat and help increase populations while spreading awareness of the importance of pollinators and their habitat.



Technicians J. Paris (above) & M. Swearingen (below) spreading the pollinator seed mix at one of the parks



Goldenrods (included in the seed mix planted) bloom in late summer to early fall and are a great food source for pollinators before winter



The park site prepped for seeding in the Town of Henrietta located next to bee boxes that are kept on the property

TECHNICAL ASSISTANCE AND REQUESTS

As technical service providers, the District receives various requests from landowners outside of the stormwater management and agricultural programs. In 2017, MCSWCD responded to **52 technical assistance requests** regarding concerns such as drainage problems, erosion, plant issues, wildlife and pond concerns including feasibility, excessive algae, aquatic plant management, and fish stocking.

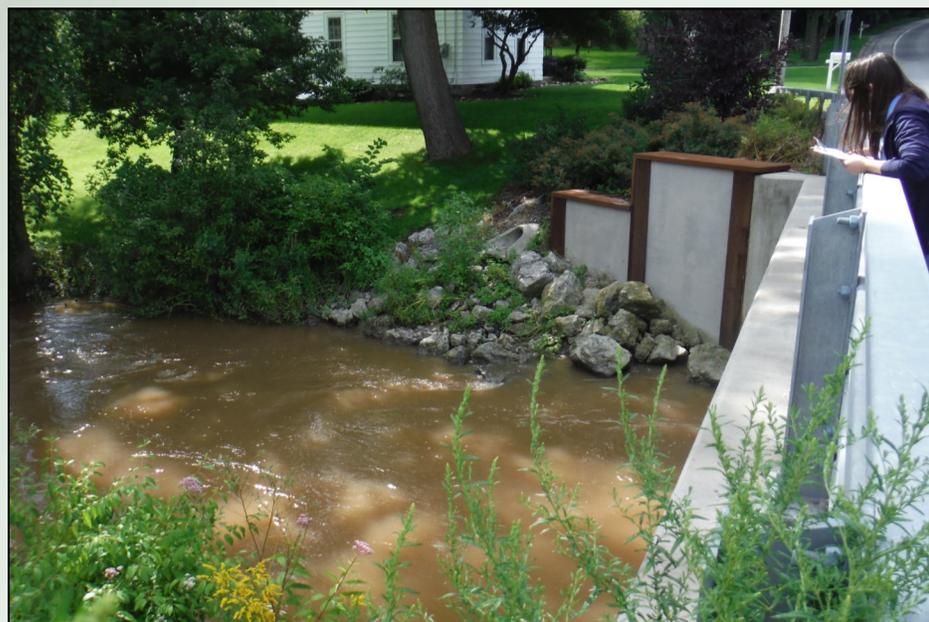
The District often assists landowners with pond feasibility requests. **3 pond feasibility requests** were completed by staff in 2017. When it comes to pond installation, a lot of consideration must go into choosing a location. Upon request, District staff assess site conditions by inspecting local drainage and water course patterns, land features, soil types, drainage area and plant life. Once all aspects are considered, staff may provide advice to the landowner as to where a pond would best fit on their property.



Technician J. Paris surveying a stream for a permit assistance request

Monroe County Soil and Water also provides stream and wetland permit assistance to anyone who may be looking to implement a project or resolve problems on their property. Solving some issues may require a permit from different organizations such as the New York State Department of Environmental Conservation (NYS DEC) and the United States Army Corps of Engineers (USACE). MCSWCD assisted with **5 permit assistance requests** involving wetland and stream impacts in 2017.

District staff also responded to **8 site visits** regarding drainage issues. There are various factors that can cause drainage issues such as heavy rainfall events, poorly drained soils, unmaintained or undersized culverts and debris blocking water flow. By making site visits, staff are able to assess drainage issues, identify the cause and provide advice on possible solutions to the problems.



Above: Technician M. Swearingen assessing high flow levels upstream from a landowner with a drainage complaint

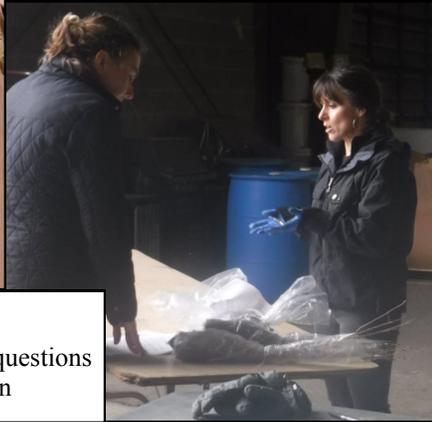
Right: Woody debris found in stream by staff during drainage complaint site visit



2017 CONSERVATION TREE AND SHRUB PROGRAM



The Conservation Tree and Shrub Program is held each year by the District and provides landowners the opportunity to receive plants to reforest their land, establish windbreaks, prevent soil erosion, create habitat for wildlife and more! A majority of the species offered through this program are native to New York State.



Above: Fraser Firs packaged
Right: K. Ervay assisting a customer with questions about their plants during distribution

20,150 seedlings were distributed to over **300 landowners** throughout Monroe County. Some species that were offered in the 2017 Tree and Shrub Program included white cedar, sugar maple, bearberry and red raspberry. Seedlings are prepared by staff members and volunteers through the Cornell Cooperative Extension Master Gardner's program at the Monroe County ecopark facility.

WILDLIFE CONSERVATION



The District provided **25** bluebird houses and **22** bat houses to residents. These wildlife houses are sold during the Conservation Tree and Shrub program and are available year round to provide shelter for bluebirds and bat species.

Bluebirds are the state bird of New York. Bluebirds feed on mostly insects including crickets, grasshoppers, beetles and spiders. They are cavity nesters, creating loosely constructed "cups" made of twigs, weeds and sometimes animal hair. A majority of today's Eastern Bluebirds nest in bluebird houses.

A bluebird house offered by the district



Eastern Bluebird

FISH STOCKING PROGRAM

The District holds the Fish Stocking Program in the spring and fall each year. This biannual event provides landowners the opportunity to purchase fish species including channel catfish, yellow perch, largemouth bass, fathead minnows, and for those who have the proper permitting, Triploid Grass Carp.

In 2017, **1,264 fish fingerlings** were distributed to **16 landowners**. Of the fish sold in 2017, **26 were Triploid Grass Carp**.

Customers may also purchase barley straw for their ponds through this program. The District distributed **6 bales of barley straw** in 2017. Placing barley straw in a pond can inhibit algae growth and increase water clarity.

Introduced to the fish stocking program in 2017 were Artificial Fish Habitat Spheres. These spheres provide a structure for fish to hide under or between to avoid predation.



Technician J. LaFountain helping a customer with their fish order

Monroe County Soil and Water Conservation District

145 Paul Road, Building 5

Rochester, NY 14624

Phone: (585) 753-7380 Fax: (585) 753-7374

www.monroecountyswcd.org



Find us on Facebook at: www.facebook.com/MonroeCountySWCD

Cover Photo: Streambank restoration project in the Village of Hilton. See page 14 for more information



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