

# FLOWPA FUNDAMENTALS

FINGER LAKES - LAKE ONTARIO WATERSHED PROTECTION ALLIANCE  
FROM STREAMS, TO LAKES, TO GREAT LAKES  
PROTECTING OUR WATER RESOURCES BEGINNING AT THE LOCAL LEVEL

## In This Issue:

This edition of the newsletter highlights successful Water Quality Monitoring Programs and Education and Outreach Efforts implemented throughout the Finger Lakes – Lake Ontario Drainage Basin.

SPRING 2025



## MISSION

The mission of the Finger Lakes Lake Ontario Watershed Protection Alliance is to facilitate processes that encourage watershed partnerships and implementation of action plans to protect and enhance water quality based on:

- Local needs assessment
- Holistic approach
- Information exchange and public education
- Measurable goals and milestones

The Finger Lakes-Lake Ontario Watershed Protection Alliance (FLOWPA) is a unique and time-tested organization dedicated to safeguarding New York's freshwater resources within the Finger Lakes and Lake Ontario drainage basin. By providing crucial funding, FLOWPA supports locally-driven water quality initiatives that benefit farmers, businesses, the tourism industry, and local governments across a 25-county region. The organization develops programs tailored to address specific water quality needs, ensuring they align with state priorities and watershed management plans.

FLOWPA members and partners have made significant strides in the protection of New York State's water resources by incorporating innovative strategies to reduce nonpoint source pollution at the grassroots level. This issue of *FLOWPA Fundamentals* highlights water quality projects completed by several FLOWPA members, with valuable support from local landowners, agricultural producers, and municipalities within the Finger Lakes - Lake Ontario drainage basin. These projects were showcased during the FLOWPA Watershed Tours held in the fall of 2024.

Watershed Tours, organized annually by FLOWPA's Program Coordinator, Kristy LaManche, offer a valuable opportunity to demonstrate the impact of FLOWPA funding. These tours showcase to staff from the New York State Department of Environmental Conservation, as well as New York State Senate and Assembly representatives, how effectively the funds are utilized throughout the watershed. The tours provide a platform for State agency officials and elected representatives to engage directly with landowners, agricultural producers, and other key stakeholders, who can speak to the significance of FLOWPA funding in the implementation of vital water quality projects.

# WYOMING AND GENESSEE COUNTY TOUR

A variety of FLOWPA members and stakeholders participated in touring six FLOWPA supported projects throughout Wyoming and Genesee Counties on September 5, 2024. Attendees included; **Kristy LaManche**, FLOWPA Program Coordinator; **Allen Fagan** and **Rebecca Campbell**, Wyoming County SWCD; **Jared Elliott**, **Rebecca Olson** and **Tim Welch**, Genesee County SWCD; Greg Torry, Senator Borrello's office; **John Hornberger**, **Tara Blum**, **Bernette Schilling**, **Todd Caffoe**, DEC Region 8; and **Ryan Elliott** and **Jolie Springborn**, NYS DEC Great Lakes Program Office.

## AGRICULTURAL BEST MANAGEMENT PRACTICES



Spencer Brothers, LLC is a beef operation located in the Tonawanda Creek Watershed in the Town of Attica. The landowner reached out to the District for assistance due to the sediment and nutrient runoff potential from the barnyard area, which handles roof runoff and is a high traffic area for the beef cows. The District technicians surveyed and designed the 2,200 square foot concrete heavy use area to improve runoff conditions in the barnyard during inclement weather and improve manure management. FLOWPA funds were used in conjunction with landowner match to hire a contractor and purchase materials for the project. The project was completed a few years ago and has already been heavily used in the winter months to contain runoff and improve manure storing ability for the landowner. The heavy use area also prevents sediment and nutrient runoff that typically occurs in the barnyard due to heavy animal traffic and unvegetated ground. The total cost of this project was \$15,220.00. FLOWPA paid \$11,000.00 (72% of the total cost) while the remaining amount was paid by the farm.

## CULVERT REPLACEMENT

The Town of Gainesville and the Wyoming County Soil and Water Conservation District (WCSWCD) have a great relationship when it comes to installing erosion control and prevention measures. The District worked with a NYS Certified Professional Engineer to develop a solution for a severe erosion site in the headwaters of the Genesee River basin by replacing a failing culvert under Tenefly Road and stabilizes the subsiding banks that had created almost 30 feet of exposed soil. The culvert was replaced with a 15" corrugated plastic pipe, with a stabilized inlet and outlet. The outlet was specifically designed with larger rock riprap to create a waterfall path and slow down the water's velocity during high flow events. The exposed soil after construction was then seeded with conservation mix and mulched using a steeper slope blend. Ultimately, this project will reduce sedimentation into a headwater tributary of the Genesee River. The total cost of this project was \$50,000.00. FLOWPA paid \$30,000.00 (60% of the total cost). The Town paid the remaining amount and contributed a substantial amount of in-kind services to the project.





## STREAMBANK RESTORATION

The Grey Cabin Streambank Stabilization Project took place along Wiscoy Creek in the Town of Pike. This project protected and restored a heavily eroded bend in the Wiscoy Creek and involved the installation of 480 feet of heavy rip rap. The stream was causing erosion damage to a farm field and contributed to large amounts of sediment into the Wiscoy Creek. The project was installed in collaboration with US Fish and Wildlife Service, the NYS Department of Environmental Conservation, the WNY Chapter of Trout Unlimited, and the Wyoming County SWCD. One unique aspect of this project was the installation of 17 little underwater neighborhood keepers encompassing riotactic salmonoids (LUNKERS) which provide habitat for the native population of Brook trout in the creek. This project will preserve the farm's important production ground, improve aquatic habitat, and reduce sedimentation in the Wiscoy Creek. The total cost of this project was \$88,802.00. FLOWPA paid \$42,402.00 (47% of the total cost) while the remaining amount was paid by the US Fish and Wildlife Service and the NYS Department of Environmental Conservation.



## EROSION CONTROL



Another site visited on the 2024 Wyoming – Genesee FLOWPA Tour was an erosion and sediment control project completed in the Town of Pavilion, by the landowner with technical assistance from the District, to reduce silt and sedimentation. Two grassed waterways (800 feet combined) with surface inlets to stabilize the soil were installed at this site, located in the Middle Oatka Creek Watershed of the Genesee River Basin. FLOWPA provided \$5,738.29 towards materials and equipment. The District's time to design and oversee the project was covered by the AEM program.

## GRASSED WATERWAY

This erosion control project addressed gully erosion on a property owned and operated by Roanoke Acres, a large CAFO dairy farm in the Town of Pavilion. Multiple gullies had formed across the fields, contributing sediment and nutrients to White Creek. Genesee County SWCD completed the design for this project with staff time from the NYS Agricultural Environmental Management (AEM) program.

\$14,837.43 (75% of the total project cost) of FLOWPA funds were used to reimburse the farm for cash expenses to implement the erosion control system. \$4,945.81 (25% of the total project cost) was provided by the farm as cash and in-kind expenses as match towards the project. The project was certified by a private engineer and was designed using the NRCS conservation practice standards.



## CULVERT REPLACEMENT AND EROSION CONTROL

Genesee County Soil and Water Conservation District worked with the Towns of Bethany and Pavilion to implement an erosion control project in the Oatka Creek Watershed to stabilize 300 feet of roadside ditch and increase culvert volume on Transit Road to address significant runoff from the adjacent crop fields. During heavy storm events, the water was flowing around the two culverts, causing significant erosion, flowing over the road, and flooding a neighboring house. The District contracted with the Town of Pavilion on the project and completed the design with staff time from FLOWPA.

The project replaced two undersized culverts: a driveway culvert from a farm laneway and a culvert under Transit Road. The roadside ditch around the culverts was cleaned out and enlarged to provide adequate capacity for the runoff water. Rip rap stone was used to reinforce a few critical areas on either side of the two culverts, including a plunge pool at the outlet of the second culvert that crosses Transit Road. The District then hydroseeded the disturbed soils with a cool season grass mix. FLOWPA funds (\$10,000) were used to reimburse the Town of Pavilion for the engineering review and materials for the project. The Town of Pavilion provided \$13,481.51 in matching funds, mostly in-kind work to complete the project.



## CAYUGA AND ONONDAGA COUNTY TOUR

A variety of FLOWPA members and stakeholders participated in touring five FLOWPA supported projects throughout Cayuga and Onondaga Counties on September 26, 2024. Attendees included; **Kristy LaManche**, FLOWPA Program Coordinator; **Michele Wunderlich**, Cayuga County Department of Planning and Economic Development; **Doug Kierst and Tim Schneider**, Cayuga County SWCD; **Mark Burger and Chris Travis**, Onondaga County SWCD; **Shawn Rush**, Onondaga County Environmental Health; **Kyle Cody**, Onondaga County Environmental Services; **Dereth Glance, Tom Vigneault, Joe Decker, Emily Timkey and Lexi Davis**, NYS Department of Environmental Conservation; **John Lemondes**, NYS Assembly, **Taylor Kilmer**, Assemblyman Lemondes's office.

## EROSION CONTROL



Working with a local engineer and landowner, the Cayuga County SWCD utilized FLOWPA funds from two contract years (totaling \$33,675.00) to implement several components of a stormwater runoff system on a property located adjacent to Owasco Lake. The landowner provided \$6,557.84 in funds. Severe erosion and nutrient runoff was occurring during heavy rain events leading to property damage and the direct flow of sediment and nutrients into Owasco Lake, negatively impacting water quality of the lake. FLOWPA funds were used to install a sediment basin, 20-foot section of rock lined channel with medium stone fill, and a 300-foot section of rock lined channel with light stone fill.



## INVASIVE SPECIES AND SHORELINE STABILIZATION



Cayuga County utilized FLOWPA funds from two contract years (\$35,160.53) to purchase and install a CD3 waterless boat cleaning station and access road near the boat launch at Owasco Lake in Emerson Park. The County provided in-kind labor to install the station and road, and will continue to provide electricity and maintenance of the station as an in-kind contribution. This boat cleaning station protects Owasco Lake and other waterbodies from aquatic invasive species by encouraging boaters to clean, drain, dry their

vessels and gear and then properly dispose of invasive plant and animal material. The boat cleaning station has on-board software that tallies the number of sessions, types of tools used, vacuum capacity, and service needs. FLOWPA funds (\$1,200 in 2024) have been used to pay the yearly software and service fees.

FLOWPA funds from three contract years (\$60,185) were also used to help stabilize the shoreline of Owasco Lake within Emerson Park. The area was undergoing major erosion, especially during the winter months. The sediment and nutrients from the erosion affected the water quality in the north end of the lake threatening the water intakes for the City of Auburn and Town of Owasco. The erosion and sedimentation also impacted the use of this area for swimming. The Cayuga County SWCD utilized FLOWPA funds to reshape and armor 193 linear feet of bank using stackable riprap stone placed on geo-textile fabric. Stone was keyed two feet into the lake bottom to protect the toe from erosion and installed up the bank to the mean highwater mark of the lake. The bank was graded to a manageable slope and then seeded and mulched. Subsequent years of FLOWPA funding were used to expand the stabilization of the north end of Owasco Lake. An additional 340 feet of eroding shoreline were stabilized using a combination of rock riprap and shoremax shoreline protection systems to improve water quality, protect public drinking water supplies, and support recreation.



## AGRICULTURAL BEST MANAGEMENT PRACTICES

Cayuga County SWCD utilized \$11,947.46 of FLOWPA funds and provided \$2,642.88 of in-kind financial support for a stream bank stabilization and farm crossing improvement project along Great Gully Creek. The District stabilized 120 feet of stream bank along the creek utilizing geoweb cells filled with a 1 and 2 blend stone to provide a stabilized crossing for farm equipment.

The project will enhance and improve Great Gully Creek by reducing erosion and sedimentation to the watershed; while also limiting the amount of nutrients entering Cayuga Lake.



## WATER CHESTNUT CONTROL

Another site visited on the 2024 Cayuga-Onondaga FLOWPA Tour was Mercer Park in Baldwinsville to highlight the Onondaga County Soil and Water Conservation District's multi-year effort to address aquatic invasive species in the Seneca River system, specifically water chestnut. Water chestnuts outcompete native aquatic vegetation, creating dense mats of plant material that impeded water flow, navigation, fishing, and swimming. The nutlet of the plant, containing thousands of individual seeds, has sharp spikes that can injure humans and wildlife as well. Over \$200,000 in FLOWPA funds have been utilized by the District over the last 9 years to organize and conduct an extensive water chestnut handpulling effort in the heavily infested waters of the Seneca River including the main navigation channel, marinas, parks, and at private residences (only if the property owner works alongside the crew). Once removed from the water, the plant material is hauled to local farms and tilled into the soil to increase the organic matter content of the soil which benefits the crops being grown in those fields. In 2024, the District's handpulling crew removed over 42,280 pounds of water chestnut plant material increasing their cumulative total to nearly 4 million pounds of water chestnut removed since the start of the program. FLOWPA's investment in this program has also helped secure funding for mechanical harvesting within the Seneca River System resulting in a \$3.35 return for every \$1 of FLOWPA funds.



## STREAMBANK STABILIZATION



Within the Jamesville Reservoir Watershed, there are 16 sites in need of stream bed/bank restoration to address sedimentation and severe erosion contributing to water quality issues. Based upon bank pin measurements, the Onondaga County Soil and Water Conservation District estimates the rate of Butternut Creek streambank erosion to be between 10 and 20 tons of sediment per month! The District, using \$25,000 of FLOWPA funds, installed 200 linear feet of tow protection and stream-co willow live staking in the first of five phases of restoration work along Butternut Creek. Subsequent work at this particular site will include regrading, seeding and mulching the steep streambank. Red-osier dogwood and stream-co willows will be planted to further stabilize this site during flood stage events. As additional funding is secured, the District will work with Onondaga County and landowners to perform restoration work throughout the Reservoir's watershed.

Tailored water quality programs are designed to address specific environmental needs and challenges within a particular watershed. These programs are not one-size-fits-all; instead, they focus on the unique characteristics of a region, ensuring that efforts are targeted, effective, and responsive to the needs of the local ecosystem.





FLOWPA would like to express our sincere gratitude to all participants who have contributed to our efforts in addressing local water quality concerns.

We extend special appreciation to the landowners, producers, and municipalities whose projects were featured in the 2024 Watershed Tours. Your commitment and proactive engagement are instrumental in advancing the goal of improved water quality in our region.

Program Coordinator Kristy LaManche is already in the process of planning the 2025 Watershed Tours, which will highlight a diverse array of FLOWPA-supported projects across different areas within the Finger Lakes – Lake Ontario drainage basin. A comprehensive recap of the 2025 Watershed Tours will be included in a forthcoming edition of the FLOWPA Fundamentals.

We remain deeply grateful for your continued support and dedication to the improvement of water quality in our communities.



## FUNDAMENTALS

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FLOWPA membership includes the following New York State counties wholly or partially in the Lake Ontario Drainage basin:

Allegany ♦ Cayuga ♦ Chemung ♦ Cortland ♦ Genesee ♦ Hamilton ♦ Herkimer ♦ Jefferson  
Lewis ♦ Livingston ♦ Madison ♦ Monroe ♦ Niagara ♦ Oneida ♦ Onondaga ♦ Ontario ♦ Orleans ♦ Oswego  
Schuyler ♦ Seneca ♦ Steuben ♦ Tompkins ♦ Wayne ♦ Wyoming ♦ Yates

FLOWPA

Water Resources Board

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