

June 2023

Cayuga County WQMA YouTube Channel

The Cayuga County WQMA has created a YouTube Channel to showcase presentations on water quality. This channel is located at <https://www.youtube.com/@CayugaCountyWQMA>. The channel currently has two videos available for viewing. One is Grascen Shidemantle's presentation "Community Science Institute Partnering with Communities to Monitor Water Quality in Cayuga County" from the May 2023 WQMA meeting. The other is Kate Black and Greg Hutnik's presentation "Project Development, Grant Management, and Funding Opportunities" from the April 2023 CWIO meeting. New presentations will be added in the future.

Free Tree or Shrub for Earth Day!

By Michele Wunderlich, Cayuga County Department of Planning and Economic Development

The Cayuga County Soil and Water Conservation District (SWCD) and Cayuga County Department of Planning and Economic Development joined with Nucor Steel Auburn, Inc. to provide a Free Tree or Shrub for Earth Day! Through generous funding from Nucor Steel Auburn, Inc. they were able to provide coupons for either one Colorado Blue Spruce transplant or one Red Osier Dogwood seedling to be picked up at the Annual Conservation District Tree & Shrub Sale in May.

Coupons were given out to participants of the following events:

- City of Auburn's Earth Day cleanup
- Sterling Nature Center's two Earth Day cleanups
- Canal Cleanup in Port Byron
- Canal Cleanup at Montezuma Heritage Park
- Cayuga Climate Action's cleanup at the Howland Farm Museum
- I Love my Park Day cleanup held by Friends of Fillmore Glen
- Emerson Park cleanup by Baxter employees
- "Protecting the Health of Owasco Lake" by OWLA's Ann Robson at Auburn Westminster Presbyterian Church Earth Day Celebration
- Walt Aikman's on Growing Auburn's Future Forest talk at Auburn Public Theater



*Red osier dogwood planted as part of the Emerson Park Rain Garden Expansion Project.
Photo by Kim Mills.*

Leftovers were also provided to the Emerson Park Rain Garden Expansion Project, Y-Camp, Montezuma Heritage Park, Boy Scouts and the City of Auburn.

2023 Tire Round-Up Event

By Evan Tuthill, Planner, Cayuga County Department of Planning and Economic Development

On June 10th, the Cayuga County SWCD hosted a tire collection event in collaboration with the Cayuga County Department of Planning and Economic Development and the Cornell Cooperative Extension of Cayuga County. The event gave community members the opportunity to remove unwanted tires, of up to 36 inches in diameter, from their properties at low costs.

This year's event marked the 20th Anniversary of the first ever Cayuga County Tire Round-Up, held in 2003. Since then, the event has collected over 100,000 tires from Cayuga County residents. This year, we added over 5,000 tires to that total, with the help of all of those who participated in the event. The tires are to be delivered to Nucor Steel Auburn Inc., in Auburn, to be recycled and used as a carbon source for their steel products.



Tires that are left to deteriorate in the natural environment can negatively impact water quality and disrupt ecosystems, which is why it is essential that they are disposed of using the proper methods. If you were not able to participate in this year's event, or still have tires sitting around at home, we encourage you to participate in next year's event which is anticipated to take place in early June. Until then, you can refer to the Cayuga County Department of Planning website (<https://www.cayugacounty.us/704/Tire-Recycling-Options>) which offers several resources for the proper disposal of tires.

Cayuga Lake Watershed Network to Celebrate 25 Years of Watershed Education, Engagement, and Advocacy & Spring Community Conference Report

By Keith Batman, Cayuga Lake Watershed Network Board of Directors

You are invited! In August of this year, the Cayuga Lake Watershed Network (CLWN) will celebrate 25 years of active service in protection of and advocacy for Cayuga Lake and its watershed. Our Anniversary Celebration will include both a look back and a look forward at the ways the Network has advocated for the health of the Lake with community education and engagement programs, advocacy, and testing. It is a great opportunity to learn more about the Network, enjoy good food, drink, and views of Cayuga Lake. More information is forthcoming as plans are being finalized. Follow us @cayugalakewatershed on Facebook and Instagram or subscribe to our email updates at www.cayugalake.org for the latest information and keep us in mind as you make your August plans!

On May 18th, the Network presented its spring community program hosted by Wells College with approximately 75 in attendance from around the lake. The program featured three presentations. Dr. Dave Matthews of the Upstate Freshwater Institute spoke of long-term water quality trends, temperature and stratification patterns, tributary monitoring, and perspectives on assessment and other issues of monitoring and quality. Dr. Matthews emphasized the critical importance of reducing phosphorus loading, which is the only proven strategy to address eutrophication, and the value of monitoring, including that being carried out by the Network.

Grace Haynes of the Community Science Institute offered a primer on HABs - their nature, causes, and effects - and presented data on the trends over the past 5 years. As she explained, volunteers (HAB Harriers) provide the critical component of the most thorough HAB monitoring program in NYS. Ms. Haynes offered a very detailed and content-rich look at HABS – too detailed and rich to summarize here. Of interest, however, is the fact that HABs decreased in 2022 for the first time since the program has compiled data. It is also of note and interest that both the majority of all HABs, as well as the majority (80%) of HABs high in microcystin toxin, occurred in the northern half of the Lake (north of Sheldrake). She spent the last part of her presentation explaining public access to Cayuga Lake HABs data through the CSI website and plans to launch an improved interactive database for current HABs reports and historic records this year.

The final presentation was by Karl Rindfleisch of the Cayuga County Water and Sewer Authority. He discussed the Authority's plan to install public sewage along Honoco Road and other lakefront properties in the Cayuga County towns of Ledyard and Genoa. The project, in cooperation with the Village of Aurora, will replace septic systems for roughly 440+ lake front properties. The Cayuga Lake Protection Plan, as they have named the project, will protect 9 miles of shoreline from the impact of substandard sewage disposal practices, protecting the lake, while updating the Village of Aurora's wastewater treatment plant. Mr. Rindfleisch provided a thorough look at the history of property development along the impacted stretch of lakeshore, the detail of the work to be done and the plan for completion, which at this point is targeted for 2025 or 2026.



The slides for each of these presentations can be found on the Network's website: <http://www.cayugalake.org>.

For more information, contact Steward/Executive Director, Liz Kreitinger at steward@cayugalake.org or 315-367-4805.

Congratulations Tom Casella: Recipient of the 2023 James C. White Memorial Prize for Service to Cayuga Lake and Beyond

By Liz Kreitinger, Steward/Executive Director, Cayuga Lake Watershed Network

The Cayuga Lake Watershed Network proudly presented Tom Casella with the James C. White Memorial Prize at our 2023 Spring Community Conference. Many people know how deeply Tom deserves this recognition.

Tom has worked for the past ten-plus years doing water sampling at several creeks on the northwest shore as one of the Community Science Institute's long-running sampling teams; also for the nine sites in the Network's stormwater study being conducted in cooperation with the Upstate Freshwater Institute and SUNY ESF; and in presenting facts, figures, and policy suggestions to Seneca County's Board of Supervisors, Soil and Water Conservation District, Department of Health, and the Finger Lakes Institute.

Tom has also worked for many years in sampling on Cayuga Lake for the annual DEC-led aquatic plant survey study, and for conducting the arduous annual water sampling carried out each summer for the DEC/NYS Federation of Lake Association's Citizens Statewide Lake Assessment Program (CSLAP). Tom pioneered the use of drones to delineate Harmful Algal Blooms along the Seneca County shoreline and has been a HABs sampler - a HABs Harrier - every year since that program began.

That's right - Tom participates as a volunteer in ALL the sampling programs presented during the Spring 2023 Community Conference.

Furthermore, Tom is a hydrilla hero! For at least a decade, he worked with the Network to place hydrilla information boxes around the northern third of the lake each spring, made sure they were well-supplied with hydrilla information packets, and helped store them each winter. Also, Tom does not confine his community service solely to Cayuga Lake! Tom lives on the Cayuga Lake shore in the Town of Fayette



and is emeritus faculty at the Cayuga Community College in Auburn. He is a well-respected participant in the lake and water quality discussions and planning around Owasco Lake and has helped share information back and forth between communities on both lakes for years.

"Tom is a true 'Laker'. He is outgoing, friendly, and a great team member. He always has ideas and suggestions for lake improvement which he communicates effectively to others. But it's not all work and no play - he loves to fish and swim in the lake. Thank you, Tom!"

-Bill Ebert, Cayuga Lake Watershed Network Board Member, sampling teammate & friend

Thank you to Village of Aurora Mayor Jim Orman and to Cayuga County Legislator Aileen McNabb-Coleman representing State Senator Rachel May's Office for assisting in presenting this award to Tom.

iMapInvasives App Training and Invasive Species Walk
By Michele Wunderlich, Cayuga County Department of Planning and Economic Development

Due to issues with the iMapInvasives app and the smoke from the Canadian wildfires, the iMapInvasives training that was scheduled as part of New York State Invasive Species Awareness week was cancelled. However, Michele Wunderlich was able to provide an impromptu iMapInvasives training earlier in the week to Ann Robson, OWLA president and Ally Berry, Owasco Lake Watershed Inspector. They learned how to use the iMapInvasives app and were given a brief invasive species identification training in the field.



Michele Wunderlich shows Ann Robson how to use iMapInvasives.
Photo by Ally Berry

OWLA 35th Anniversary
By Aaron McKeon & Ann Robson, President of OWLA and Founding Board Member

In the spring of 1988, Syracuse’s *Post-Standard* newspaper ran a small announcement with the headline “Group Meets to Design Owasco Lake Plan”. No mention was made of who was involved or what motivated this group – then called the Owasco Lake Watershed Association – to get together. But it did provide enough contact information to allow interested community members to learn more. This probably played a small part in generating the crowd of around 175 people who showed up for the first general meeting of the group that was to become the Owasco Watershed Lake Association (OWLA) that July.

This year OWLA is celebrating its 35th anniversary. The group was started by Cayuga County Planner Bob Brower and Cornell Cooperative Extension Agent Ann Robson. Paul Lattimore served as the first president of the board. There was no template to go by at the time – the idea was simply to “give residents a voice” when it came to what was happening on Owasco Lake. Today, OWLA has over 500 individual, family, and organizational members, representing thousands of watershed residents.



The OWLA Board – June 2023

The original impetus for the group’s formation was a concern over nutrient loading at Moravia’s sewage treatment plant due to the influx from the Cayuga Correctional Facility, a minimum-security prison in Moravia that was

in its planning stages in the late 1980s. Since its inception, one of OWLA's overarching goals has been to serve as the voice of Owasco Lake and its watershed and to actively participate in ongoing strategies, processes, and activities that are designed to improve water quality for both drinking and full recreational use of Owasco Lake and its watershed.

Over the years, OWLA has been a leader in working to preserve the Owasco Watershed. OWLA has helped recruit volunteers for the DEC's Citizens Statewide Lake Assessment Program (CSLAP), a critical source of data on New York's lakes. The organization has also been a vital link in surveillance for Harmful Algal Blooms (HABs), with spotters keeping a lookout for algae blooms all around Owasco Lake. OWLA was also the driving force to be awarded numerous grant proposals that have funded roadside ditch remediation efforts in the watershed.

More recently, OWLA has been promoting the use and installation of rain gardens to absorb stormwater naturally into aquifers. The group is currently designing a rain garden extension at Emerson Park and a native species garden at Camp Y-Owasco. OWLA has also been a leader in efforts to stop the spread of Hemlock Woolly Adelgid (HWA) in the watershed.

From its inception to today, OWLA has been an organization that gives watershed residents a seat at the table and works collaboratively with other organizations for the overall improvement of the lake's water quality. As Ann Robson says of the organization, it "is a hands on, boots dirty, take action not-for-profit group working to protect and restore Owasco Lake".

Sterling Wolcott IWAP

By Aaron McKeon and Emily Fell

The Sterling-Wolcott Integrated Watershed Action Plan (IWAP) was initiated in 2020 in support of NY's Great Lakes Action Agenda (GLAA), to demonstrate ecosystem based management at the watershed scale.

The Sterling Creek and Wolcott Creek watersheds were selected after discussions with stakeholders from the GLAA's South East Lake Ontario Sub Basin working group, which includes members from the Finger Lakes and Central New York areas. The results of a public survey conducted in 2018 and 2019 also indicated that Sterling and Wolcott Creeks were priorities. Because the two watersheds are adjacent to one another and experience similar issues with both coastal management and inland water quality, it made sense to combine them into a single project.



Members of the Sterling-Wolcott stakeholder committee at Sterling Nature Center

The Sterling-Wolcott IWAP is one of only two IWAP projects being developed in New York (the other is for the Cattaraugus Creek Watershed in Western New York). The IWAP approach utilizes the National Oceanic and Atmospheric Administration's (NOAA) Integrated Ecosystem Assessment (IEA) planning framework. The goal of this approach to watershed planning is to look at more than just water quality

metrics. This more comprehensive approach takes human activity, such as recreation, into account, as well as other ecosystem benefits, such as forest health and wildlife habitat.

The Ecosystem and Risk Assessment approach gives stakeholders the opportunity to define indicators by which the watershed's status will be assessed and to explore the direct and indirect drivers of change in the watershed.

In the case of the Sterling-Wolcott Creeks IWAP, the indicators were related to ecosystem goals, including:

- coastal conditions,
- wetlands,
- floodplains/riparian areas/streams,
- forests and uplands,
- water quality,
- sustainable working lands, and
- heritage/sense of place.

Indicators included waterbody impairments, shoreline conditions, and park visitation rates; associated drivers of change included changes in precipitation levels and temperatures.

The Sterling-Wolcott IWAP is planned to be completed this summer, and a virtual public meeting to present on current fundings was held on June 15th. This meeting was attended by 30 watershed stakeholders; the meeting presentation can be accessed at: <https://www.dec.ny.gov/lands/124314.html>.

Ideas for projects are still being accepted and can be submitted via the project's Story Map website: <https://storymaps.arcgis.com/stories/7a4c9700cda1482e90adb6e795c3fed9>.

Please reach out to greatlakes@dec.ny.gov with questions or comments.

Student Conservation at Owasco Lake Watershed Preserve

By: Adam Effler, Executive Director of the Owasco Lake Watershed Management Council

(Repurposed from the Auburn Citizen, June 2, 2023)

In January of 2023, a 161-acre parcel in the Town of Sempronius was transferred from The Nature Conservancy (TNC) to the Owasco Lake Watershed Management Council (OLWMC). The parcel was acquired by the Conservancy in 2021 through a Water Quality Improvement Project grant from the New York State Department of Environmental Conservation to help protect drinking water supplies and reduce contributors to harmful algal blooms. This parcel is an important natural resource and source for public drinking water, and its transfer to the OLWMC was part of the Conservancy's effort to empower local community organizations in managing water resources.

The protection of the 161-acre property, which the OLWMC has named the Fillmore Nature Preserve, is important for protecting water quality in Owasco Lake, which provides drinking water to more than 70%

of Cayuga County. A study by TNC ranked the property within the top 10 parcels in the Owasco Lake watershed with the greatest impact on water quality. The land includes diverse forests and approximately 40 acres of freshwater wetlands, which is located near the birthplace of President Millard Fillmore and Fillmore Glen State Park.

On May 22, 2023, Moravia High School spearheaded Moravia Gives Back Day. The objective of Moravia Gives Back Day is to provide a means for students to take care of their community, and to take care of themselves. Activity facilitators use that concept because teachers and students spend the morning completing community service activities and the afternoon participating in wellness activities.

Student conservation work at the Fillmore Nature Preserve was one of the activities included as part of Moravia High School giving back. Students picked up litter along the roadway adjacent to the preserve, pulled invasive species, and identified species to inform a conservation database. Using a Fillmore Nature Preserve survey map from Cayuga County Igemate, the group used boundaries to create a map in Google Earth that was uploaded to iNaturalist®, a program that tracks species identified during field surveys. Effectively, Moravia High school students were the first to assess biodiversity at the preserve. Now, every time someone uses iNaturalist® to identify a species found there, the uploaded information will contribute to the initiated project. Their only issue was that cellular service was limited so they weren't able to upload the species photos as they were taken. The students planned to upload their photos when they returned to school.

According to Shannon Taylor, Guidance Counselor at Moravia High, facilitators and students at the school had discussed the Moravia Gives Back Day concept since before the pandemic, and when COVID started, they had to put the idea on the back burner. Ms. Taylor explained, “We were finally able to make it happen beginning last year, so this year was our second year. We plan to continue to make this an annual tradition at Moravia.” Other areas where Moravia High School spent time volunteering included Casowasco, Fillmore Glen, Ethel Fuller Park, Hope Food Pantry, Millstream Court, Northwoods Nursing Home, Ettinger Field, Millard Fillmore Elementary School, Moravia Middle School/High School, The Cat Program, Dry Creek Cemetery, Indian Mound Cemetery, their local VFW, Powers Library, Four Town Ambulance, and local fire departments (Moravia, Locke, West Niles, New Hope, and Sempronius). Ms. Taylor offered gratitude to the OLWMC for allowing students to add Fillmore Nature Preserve to their list of morning projects this year. Taylor remarked, “a wonderful time was had by the students and staff. We would love to continue to go there each year!” The Fillmore Nature Preserve is available for respectful and safe use by the public.



Moravia High School Students pose at the Fillmore Nature Preserve during Moravia Gives Back Day. Photo Credit: Jaclyn Schnurr

Rain Gardens and the Draft Stormwater Design Manual

By: Ryan Staychock, Cornell Cooperative Extension of Cayuga County

I have been researching rain gardens. In developing an “introduction to rain garden” educational program I found myself referencing the New York State Stormwater Design Manual Draft (Draft Manual), dated May 2022. The Draft Manual is a great resource about different methods or projects that can be implemented to help manage stormwater in New York State. Even though my program was geared toward residential homeowners, and not large multi-phase construction projects, I find the concepts and solutions can be scaled-down to apply toward smaller scale projects.

Right now the Draft Manual (2022) is not the current manual. It will not be the current manual until it is finalized and the relevant SPDES General Permits have been modified to reference it. Construction projects/permits will have a transition period to accommodate projects that have already been designed and are going through the permitting process.

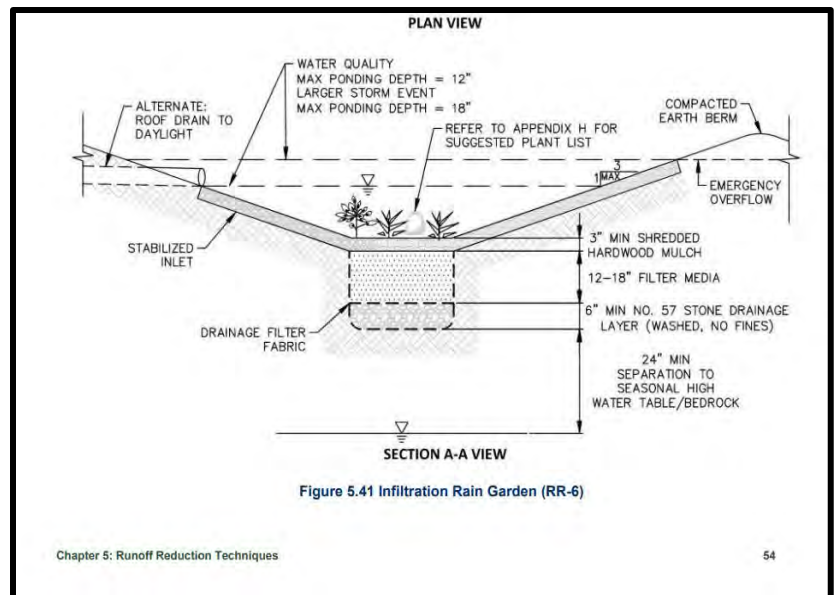
The current version of the New York State Stormwater Design Manual (Design Manual), dated January 2015, is referenced in the NYS DEC's SPDES General Permit for Stormwater Discharges from Construction Activity – commonly referred to as the GP-0-20-001. This document provides the standards and specifications for stormwater management practices (SMPs). Construction projects subject to GP-0-20-001 must use the Design Manual when post-construction stormwater controls are needed, to develop a Stormwater Pollution Prevention Plan (SWPPP). (Construction projects can also use SMPs that are equivalent to those in the Design Manual.) You can access both the draft dated May 2022, and the current version dated 2015 at this website-

<https://www.dec.ny.gov/chemical/29072.html>.

Of particular interest in the Draft Manual was “Section 3.2 Runoff Reduction Techniques for Stormwater Management.” The section includes simple, easy to read tables that summarize “Green Infrastructure Planning - General Categories and Specific Practices.” Three groups are outlined in the tables:

1. preservation of natural resources,
2. reduction of impervious cover, and
3. runoff reduction techniques.

The manual’s tables clarify the different practices that can be used to manage stormwater. The tables are easy to read and can provide a quick “go to” list for planning board members to reference when reviewing and approving site plans in their communities.



Design drawing of a rain garden from the 2022 New York State Stormwater Design Manual Draft

The Draft Manual is clear that runoff reduction techniques are highly effective when used to address stormwater runoff from smaller, more frequent storms, and are not generally sufficient to achieve volume and peak rate control for larger storms. So they are not the panacea, but they provide alternatives when used in combination with other strategies, and some of the practices are attractive and becoming mainstream. Rain gardens for example. I am hearing more and more people that want a rain garden, maybe because they are great structures for beautiful flowers, and can act as ideal pollinator habitat. Whatever the reason, people all around our region are hungry to learn about rain gardens.

According to the Draft Manual:

A rain garden is intended to manage and treat small volumes of stormwater runoff from impervious surfaces. Treatment is achieved using a conditioned planting soil bed and planting materials to filter runoff stored within a shallow depression. Rain gardens are designed as a passive filtration system without an underdrain system connected to the storm drain system. A stone drainage layer is used for dispersed infiltration. The system consists of an inflow component, a shallow ponding area over a planted soil bed, mulch layer, stone drainage layer, plantings, and an overflow mechanism to convey larger rain events to the storm drain system or receiving waters.

The Draft Manual includes important summaries for different aspects of the techniques, such as design criteria and feasibility for each of the many different techniques. Many include drawings found in engineering plans.

You may find reviewing the New York State Stormwater Management Design Manual 2022 Draft is a helpful resource when reviewing site plans or other projects important in your watershed. Planning Board members could require rain gardens built to the standards outlined in the manuals and could require that drawings are included in site plan review so that construction and inspections are easier to implement. To be clear, the 2015 Design Manual has many of the same topics and chapters as the 2022 Draft, but I chose to reference the newer, more colorful 2022 Draft Manual – maybe you too will like it. After you take a look, feel free to share with me your thoughts by emailing ryan.staychock@cornell.edu. Happy reading or referencing!

Cayuga County WQMA

For more information about the Cayuga County Water Quality Management Agency, check out our website at www.cayugacountywater.org.

The Cayuga County WQMA is also on social media. For up-to-date information on water quality issues and events, please either friend us on Facebook at:

<https://facebook.com/CayugaCoWQMA> or follow us on Twitter at <https://twitter.com/CayugaCoWQMA>. The Cayuga County WQMA YouTube channel is <https://www.youtube.com/@CayugaCountyWQMA>.

The Cayuga County WQMA is looking for story ideas for its webpage and its newsletter. If you have something you would like to share, please email us at wqma@cayugacounty.us.