



Ecological Restoration & Economic Activation Go Hand-in-Hand in the County's Major Waterways

At its February meeting, the Chautauqua County Legislature awarded two collaborative project contracts to the Chautauqua Watershed Conservancy with a combined value of \$200,000!



Our first project will be carried out in collaboration with the County Department of Public Facilities and the County Parks Commission to evaluate the Marden E. Cobb Waterway Trail and produce a master plan for its restoration and activation. This waterway trail was once a vibrant asset in the county's recreational infrastructure and covers approximately 43 miles of Cassadaga Creek and Conewango Creek, two of the county's major waterways. Both waterway corridors also rank very highly in our recently completed county-wide analysis of conservation priority areas, the Collaborative Regional Conservation Implementation Strategy (CRCIS).

Over the past decade, the invasive forest pest emerald ash borer has killed nearly all of our ash trees, effectively wiping out nearly 25% of the trees that grow in our floodplains and along our riverbanks. Dead standing ash trees have been shedding large branches into the waterways over the past several years, and now fallen logs are inhibiting stream flow in many locations throughout the Marden E. Cobb Waterway system. Log jams (such as the one pictured below) are negatively impacting water quality by causing excessive erosion, and they create potentially dangerous conditions for recreational users, making canoeing, kayaking, or fishing nearly impossible in many areas. In the upcoming months, our staff will evaluate the full length of the Marden E. Cobb Waterway Trail and the associated Chadakoin River corridor in its entirety to produce

a comprehensive strategic plan for the ecological restoration and economic activation of these major waterways. In addition, this contract also includes funding for 10 crew days to facilitate initial hazardous debris/log jam removal in the most critical locations.

Our second contract is in collaboration with the County's Department of Economic Development and Chautauqua County's Soil and Water Conservation District and dovetails nicely with the first project in that it establishes a reserve fund to quickly address emergency erosion and other pollution control needs in any of the county's waterways. This would include new tree falls, compromised banks, eroding slopes, etc.

Although these are generally small in scale, they can become a source of major sediment loss and cause structural bank damage and sedimentation if not addressed quickly and adequately. This newly established reserve fund will greatly improve the efficiency and significantly reduce the costs of emergency repairs to our streambanks and lakeshores because funds are now available to address new threats quickly, before the problems become bigger and more costly to fix.



We are very excited to take a lead role in developing the road map to protecting and restoring our county's most valuable aquatic resources, while also exploring opportunities for sustainable and ecologically sensible recreational activities that will provide greater public enjoyment of these beautiful "blue ways" and generate the financial resources needed to support their long-term conservation. In addition, the improvements we will be able to make this year will have a very visible impact on the health and beauty of our rivers, creeks, and lakes.



CWC is a 501(c)(3) nonprofit organization with a mission to preserve and enhance the water quality, scenic beauty and ecological health of the lakes, streams, wetlands and watersheds of the Chautaugua, NY region.

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Message From The Executive Director

June has arrived, warmer days are upon us, and I continue to get settled into my new role with the organization. Thankfully through this transition, I have been supported by an incredible team and clear mission driven objectives — one of the biggest of which is our strategic conservation mapping. Using computer analysis to look at ecological and water quality criteria across Chautauqua County, we've created a map that will help us identify and prioritize our most important landscapes for future conservation.



Executive Director Whitney Gleason

The importance of implementing strategic land conservation across Chautauqua County is especially salient as we continue to fight against excessive weed growth and harmful algae blooms in our lakes. While millions of dollars go toward fighting the weeds in Chautauqua Lake, land conservation throughout the watershed all too often gets ignored. We know, however, that this preventative care is vital if we are ever going to curb the weed growth and slow the blooms.

When the watershed is covered by wetlands and native trees and plants, the water moving down it gets slowed down and has a chance to be absorbed into the ground. This recharges our groundwater, which feeds our streams, and eventually makes its way to the lake. When the watershed is covered by pavement, roofs, or even mowed grass, the water keeps right on moving over the surface and goes directly into our streams or lakes without ever getting filtered or cleaned. Land use and development directly affect water quality, plant growth, and nutrient levels in our waterbodies.

The impacts of watershed development (building things) on water quality have been studied for many years. The results show time and again that, when we build and develop land, water quality suffers. We all have to decide how much we care about our waterways and our ability to drink from them, play in them, boat on them, and enjoy their beauty. Scientists have found that when the amount of area in a watershed that is forested or covered in wetlands drops below 70%, you start to see a significant impact on water quality.

As further research continues to support this observation, we have made it our goal as well. Using our strategic land conservation mapping, we hope to work together with people throughout our community to protect 70% of our watersheds within Chautauqua County. If we work together to find the best places to protect or reforest and are strategic about where and how we develop, together we can reach that magic 70% figure.

I am so thankful for your support as we work toward this ambitious goal!



Save resources by asking to get your 'Shed Sheet newsletter electronically!

Simply email us at info@chautauquawatershed.org!

It Just Takes Two!

Lakefront homes in Chautauqua County are known for their stunning views, laid-back vibes, and higher property values, and lucky homeowners get to enjoy unlimited access to water activities like swimming, fishing, and boating. These lakefront communities also come with a responsibility to be stewards of those lakes to help protect water quality.

If you own property along a lake shoreline, what will you do if you find out your lake has been placed on the impaired waters list? Or if it was deemed unsafe to swim or fish in? Or if it was not clean enough to use as a drinking water source anymore? These are all real possibilities that exist for us in our local lakes and waterways with the increased plant growth and algal blooms we have been experiencing. But it's not all gloom and doom...we can help prevent this from happening by heightening our awareness and understanding our connections to lakes and the ecosystems that lives in and around them.

And all it takes are two things...

1) Maintain a properly working septic system.

A great place to start is to clean and empty your system every 3-5 years. Many existing private septic systems are not meeting standards and/or are approaching the end of their useful life. They're a significant source of phosphorus loading within Chautauqua Lake via direct or tributary waterways discharging into the lake. In 2002, the lake phosphorus level



exceeded the NYSDEC guidance value of 0.020 mg/L, which is in place to protect recreational uses of lakes. In 2004, Chautauqua Lake was officially designated as an impaired waterbody by NYSDEC per Section 303(d) of the Federal Clean Water Act.

When a septic system is improperly managed, nitrogen and phosphorus can be released into local water bodies or ground water. Common causes of septic system failure include aging infrastructure, inappropriate design, overloading with too much wastewater in too short a period of time, and poor maintenance.

2) Leave a vegetative buffer along the shoreline.

The easiest way lakefront homeowners can create a buffer is to stop mowing to the water's edge. Native trees, shrubs, and perennials create a vegetative edge or buffer along lake and stream edges. These native plantings filter and clean water and help keep our waterways and drinking water safe and healthy. They trap and soak in dirt, litter, and excess nutrients. Native plants and their root systems prevent flooding by slowing excess water down before it enters our waterways and storm drains. They also provide our local pollinators, birds, and other wildlife with food and places to live. And a buffered shoreline creates privacy, reduces noise, wind, and weather, and prevents geese from pooping on your lawn.

"It takes two to create a pattern, but only one to change it." – Esther Perel

Let's all be that one!





2023 Aquatic Invasive Species Program

This summer, we will once again be doing aquatic invasive species (AIS) citizen science trainings and on-water surveys in Chautauqua Lake and its outlet! Sandra Emke (pictured at left) is joining us for the summer as our Seasonal AIS Coordinator and will be leading this year's efforts to monitor sites where aquatic invasives, particularly water chestnut and starry stonewort, were previously detected and scope out potential new sites as well. Dates and locations for this year's surveys will be announced soon and posted on our website and social media. If you're interested in participating, email Sandra at ais@chautauquawatershed.org.

Lake Aging Natural Process Decay Land Use DECADES DECAD

Graphic: P.J. Chmiel

Nutrients, Algae & Chautauqua Lake

What do we know about the sources of nutrients fueling algae blooms and plant growth in Chautauqua Lake?

The deeper glacial till soils of our region contain an abundance of phosphorus, which makes the sediments and waters in our lakes naturally more fertile and able to support more algae and aquatic plant growth. Human activities (especially since European settlers arrived) have cleared forests, implemented intensive animal and crop agriculture, and developed roads, parking lots, buildings, and lawns which have accelerated the deposition of nutrient-laden soils, animal wastes, crop fertilizers, and human sewage into the lake. Nutrients, sediments, metals, synthetic organic chemicals, and other pollutants are also delivered to our watersheds and lakes by wind and precipitation.

The shallower southern basin of Chautauqua Lake has an average depth of about 11 feet, while the northern basin has an average depth of about 33 feet. The northern basin has much more water volume than the southern basin. Wind, wave, and boat action easily re-suspend sediments, causing turbid conditions much more frequently in the southern basin. It also makes it easier for water to mix and not stratify due to water temperatures

in the southern basin. Nutrients in the lake's water generally become more concentrated in the shallower basin and toward Celoron. More developed suburban and urban land uses in general deliver more pollutants to the lake than the more heavily forested rural areas, and since the lake is quite shallow, lake plant and algae conditions are consistently more problematic in Lakewood east to Celoron. Once the nutrient phosphorus gets into the lake, a significant portion of the annual load reaching the lake stays in the lake. Lake plants and algae containing phosphorus die and decay. Some of that phosphorus is released to the water column, and some accumulates in the sediments.

Phosphorus is most often the nutrient element limiting algae and plant growth in Chautauqua Lake, with nitrogen sometimes limiting as well. These nutrients come primarily from runoff from the watershed and secondarily from precipitation and wind deposition of soil and leaf materials. Phosphorus can be in a dissolved form very readily available for absorption and use by algae and plants, in organic form as part of plant and animal materials, or tightly bound to soil particles. Researchers from the Jefferson Project, SUNY-Fredonia, and Bowling Green State University are using multiple sampling and monitoring approaches over several years to better understand the watershed nutrient loading and internal nutrient loading to the lake, and the lake stratification, weather, and wind conditions as they relate to what triggers problematic harmful algae blooms. Preliminary data indicate that heavy rainfall storm events with heavy phosphorus pulses to the lake, hot and calm weather, and strong summer lake water temperature stratification, which set up oxygendeficient conditions in deep waters and which promote the release of phosphorus from sediments followed by strong wind water mixing events, can all be factors in making phosphorus abundant and available for harmful algae blooms.



A satellite image of Chautauqua Lake taken in August 2022 showing a significant algae bloom in the southern half of the lake. (image courtesy Peter Beeson)

In addition, the deep northern basin may react differently to these factors than the shallow southern basin. Warmer waters from climate change may enhance lake stratification and accelerate the release of phosphorus from sediments.

We know that excessive nutrient and sediment loading from poorly managed agricultural practices, wastewater treatment systems, and urban land uses all load the lake with nutrients that fuel plant and algae growth and that phosphorus loading to the lake is cumulative. The more we substantially reduce the amount of nutrients and sediments reaching the lake today, the better the conditions will be in the lake tomorrow!

Additional Cassadaga Creek Habitat Acquired

Chautauqua Watershed Conservancy recently purchased 22 acres of Cassadaga Creek floodplain and wetlands adjacent to the Chautauqua County-owned watercraft launch on County Route 66 near Red Bird Corners in the Town of Ellery.

This site is in a critical location along the Chautauqua County's scenic Marden E. Cobb waterway trail on this creek, and its protection directly benefits the ecology and environmental health of the watershed and provides a unique opportunity for all audiences to connect outdoor recreation with nature enjoyment.

Flooding of the creek at this site has several benefits for local flora and fauna. When water is high (in winter), it provides a strategic stopover habitat for ducks, geese, and other waterfowl. As the water level recedes, the wet meadow habitat is home to migrating shorebirds who, around here, have very little floodplain habitat to choose from as they make foraging stops on their insanely long migration route (South America to high Arctic). Although no comprehensive bird count has been done on the site, it is known by local birders as a fantastic birding area. NYS Natural Heritage has the site flagged for a nearby Bald Eagle nest, and the creek hosts rare mussels. Due to the high water usually lasting well into spring, most invasive plants that generally grow in these rich riparian habitats do not grow well here. By essentially drowning out the early emerging vegetation, the conditions at the site instead favor later-growing, beneficial native species such as milkweeds and goldenrods, both of which are abundant at the site. This site is located just one-half mile downstream from our 150-acre Cassadaga Creek Wetland Preserve. This is our third preserve, for a total of 213 acres conserved, along Cassadaga Creek!



We give special thanks to Michael and Stephanie Koscher for making a lead contribution toward the conservation of this property. We're looking to raise an additional \$24,000 to help cover the costs of this purchase, develop a site management plan, and invest enough funding in long-term stewardship and defense funds to ensure that this site can be responsibly monitored, managed, defended, and conserved in perpetuity. Naming opportunities are available for this preserve. Call our office at 716-664-2166 or visit our website at chautauquawatershed.org if you'd like to contribute toward this important project!



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We're Applying for Accreditation!

A public comment period is now open!

We're excited to announce that we are applying for national accreditation through the Land Trust Accreditation Commission, an independent program of the Land Trust Alliance. The land trust accreditation program recognizes land conservation organizations that meet national quality standards for protecting important natural places forever.

Per our executive director, Whitney Gleason, "Gaining accreditation affirms to our funders, partners, and the public that we are working to the highest standards and practices in land conservation. It ensures that we have the proper policies and systems in place for acquiring new conservation lands as well as stewarding those already under our care or the benefit of our waterways, wildlife, and community."

The application process includes an extensive review of the practices, policies, and programs of each applicant by the Commission to ensure applicants have demonstrated fiscal accountability, strong organizational leadership, sound transactions, and lasting stewardship practices for the lands they conserve.



A public comment period is now open, and the Commission invites public input on our pending application through signed, written comments. Comments must relate to how our organization complies with national quality standards. These standards address the ethical and technical operation of a land trust. For the full list of standards, visit http://www.landtrustaccreditation.org/help-and-resources/indicator-practices.

To submit a comment or to learn more about the accreditation program, you can visit www.landtrustaccreditation.org, or email your comment to info@landtrustaccreditation.org. Comments may also be mailed to the Land Trust Accreditation Commission, Attention: Public

Comments, 36 Phila Street, Suite 2, Saratoga Springs, NY, 12866. Comments on Chautauqua Watershed Conservancy's application will be most useful by Friday, July 21st.

Bequest for Dobbins Woods



Joanne and Cecil Dobbins (photo courtesy June Dobbins)

With much gratitude, the Chautauqua Watershed Conservancy has received a bequest from the estate of Joanne G. Dobbins. Joanne passed away in 2022 at the age of 93 and left \$5,000 to our organization to be used for our Dobbins Woods Preserve in Ashville. Joanne was married for 65 years to Cecil L. Dobbins who passed away in 2020 and who was the nephew of Harry Dobbins, a forester for whom the Dobbins Woods Preserve is named due to his role in replanting, acquiring, and preserving land for New York State Forests.

Joanne was a Licensed Practical Nurse and a lifelong hiker, gardener, birdwatcher, and advocate for nature and the environment. For 20 years, she assisted Cecil with his "second career" of operating Alpine Adventure Trails Tours from their home in Akron, OH, which led hiking tours to Switzerland. In addition to Swiss hiking, they were active world travelers, and their travels were often in conjunction with their many memberships in hiking trails organizations including the Cleveland Hiking Club, Appalachian Trail Conservancy, Keystone Trails Association, Buckeye Trails Association, North Country Trails, and nature advocacy groups such as the Audubon Society and Sierra Club.

In her later years, Joanne continued her advocacy for the environment by educating her caregivers about recycling techniques. She also taught them about birds through discussion and identification of birds that visited her feeders.

Joanne's thoughtful and generous bequest will be used to build a bridge on a newly constructed trail at the Dobbins Woods Preserve, which will increase access there, for additional boardwalks to help protect its fragile wetlands, and for the future maintenance of the preserve.

Thank You Preserve Stewards!

In April, the Chautauqua Watershed Conservancy hosted a meet-n-greet with potential volunteers and potential and current preserve stewards at the Beer Snob in downtown Jamestown.

Our preserve stewards are an integral part of our organization. They volunteer to spend time at our preserves to help keep them an ecological asset to our area for both current and for future generations to enjoy!

What does a preserve steward do, you ask? Well, as a preserve steward with Chautauqua Watershed Conservancy, you are responsible for a designated preserve where you periodically walk the full boundary of the preserve, as well as the interior, to conduct a physical inspection of any changes made or damage done (natural or man-made) to that preserve. You then document the visit and report what you have found to our land specialist. You'll also potentially oversee



trail adopters, and best of all, get to spend time outside helping protect the integrity of our nature preserves as an important and effective land conservation tool.

Interested in becoming a steward? Contact our land specialist, Bethany O'Hagan, at bethany@chautauquawatershed.org or 716-664-2166 x1007.

With special thanks to the Beer Snob for hosting us!









CHAUTAUQUA
WATERSHED
CONSERVANCY
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ADDRESS SERVICE REQUESTED

	<u>UPCOMING EVENTS</u>
June 8th	Give Big CHQ
June 26th	Annual Charity Pro-Am Golf Tournament
July 6th & 8th	Native Plant Event (with Westfield Nursery)
July 15th	Annual Chautauqua Lake Sailing Rallye
July 20th	Recognition Reception for John Jablonski III
August TBD	Annual Meeting
August 5th	Walk & Talk at CLNP (with WNY PRISM)
August 14th	Lake Walk (with CHQ Bird, Tree, & Garden)
August 26th	Native Plant Sale (with Chautauqua Marina)
Sept. 30th	Annual Paddles Across Cassadaga Lakes (with Cassadaga Lakes Assn.)
Visit www.chautauquawatershed.org for more details	
on these and other upcoming events!	