



June 2022

Protect Your Lake: Change out your road flares for LED flares.

By Ally Berry, Owasco Lake Watershed Inspection and Protection Division and Michele Wunderlich, Cayuga County Department of Planning and Economic Development



Photo (credit: Jillian Aluisio) Ally Berry and Jillian Aluisio show off LED flares.

Road flares are a piece of safety equipment many people carry in their vehicle in case it breaks down. They are also often used in Ring of Fire celebrations by lakefront owners when they light flares to create a glowing ring around the lake. The traditional road flares are chemical, or incendiary (burning) flares. These are considered “flammable solids,” as they release dangerous potassium perchlorate and strontium nitrate when burned. These hazardous chemicals can cause adverse health effects, such as injury to eyes, skin, and respiratory system. Furthermore, the blinding light and smoke produced from these toxic flares create additional safety issues. These traditional flares are hot enough to melt tires, skin, and clothing.

The Finger Lakes are sensitive drinking water sources and essential economic drivers that are currently threatened by pollutants that drive the increasing frequency of Harmful Algal Blooms (HABs) among other water quality concerns. The size and duration of the use of traditional flares suggests a minimal impact to water quality, but when used in large numbers during Ring of Fire celebrations, at rates greater than common use scenarios, residual ash has a high possibility of contaminating nearby soil and water. It is in the community’s best interest to transition from the use of road flares to the use of LED flares to protect themselves and their drinking water sources while participating in Ring of Fire events. LED flares are non-combustible, low-cost, waterproof, reusable, and do not contain hazardous materials that can burn the skin, eyes, and lungs. LED flares can be carried in your vehicle instead of traditional road flares. Furthermore, the lack of hazardous materials produced by LED flares lends not only to ambient safety, but also to reducing the contamination of the water and soil of the Finger Lakes. This alternative will allow for traditions such as the Ring of Fire to continue, while protecting water quality and the safety of participants.

Wegmans began selling LED flares for the summer starting May 22, 2022 at their Auburn, Geneva, Geneseo, Jamestown, Corning, Hornell, Canandaigua, Newark, and Webster locations. Wegmans has agreed to donate \$2.00 for each two pack and \$6.00 for each six pack LED flares sold at the Auburn store from May 22, 2022 to September 24, 2022 to be shared by the Owasco Lake Watershed Management Council, Skaneateles Lake Association and Otisco Lake Association.

Camp Y-Owasco Installs a Nutrient-Treating Septic System

By: Eileen O'Connor, Cayuga County Health Department and Olivia Green, The Nature Conservancy

The Cayuga County Health Department and The Nature Conservancy have partnered to bring the first phosphorous reduction septic system to the Owasco Lake shoreline. The system was installed in early June at the Auburn YMCA-WEIU's Camp Y-Owasco and designed by a team at the Cayuga County Soil and Water Conservation District with consultation from Coastal Wastewater Solutions, a consultant to The Nature Conservancy, and the Cayuga County Health Department.

Unlike conventional septic systems which may reduce about 6% of phosphorous before effluent flows to the leachfield, the new system is expected to remove 90% or more of the nutrients coming from the primary bathhouse at the Y Camp before reaching the brand new leachfield. The system is comprised of a 1,000 gallon/day advanced treatment system which will treat for nitrogen, followed by a passive upflow phosphorous filter, and finally a new leachfield. The Nature Conservancy will monitor the system for its nutrient-treating effectiveness for two summers. Interpretative signage will be installed at the site so that campers (and others!) can learn more about how these systems help keep Owasco Lake clean.

The next phase of the project aims to install similar systems at residential sites along the lakeshore, utilizing the NYS Septic System Replacement Program (SSRP) which provides a 50% cost share of up to \$10,000 for the replacement of a septic system along Owasco, Cayuga, and Skaneateles Lakes in Cayuga County.

To learn more about the SSRP funds or about participating in the residential phase of the project, please contact the Cayuga County Health Department cchealth@cayugacounty.us or 315-253-1405.



Photo (credit: Olivia Green): The nitrogen-treating FujiClean CEN 10 system awaiting to be installed at the Auburn YMCA's Camp Y-Owasco along the Owasco Lake Shoreline. A passive phosphorous filter follows this system in the "treatment train", followed by a new leachfield.

Watershed Inspection: Local Division Helps Protect Owasco Lake

By: Ally Berry and Jillian Aluisio, Owasco Lake Watershed Inspection and Protection Division



Photo (credit: Ally Berry): Ally Berry and Jillian Aluisio.

As watershed residents, our appreciation for Owasco Lake has continued to unite us throughout time and has allowed us to reliably see beyond our ideological and political differences. Over 45,000 people rely on the lake for a public source of drinking water. Owasco Lake is a recreational asset, an economic driver, and an important natural resource for the well-being of watershed residents. These critical values that pertain to human health and well-being have led to collective actions towards the protection of Owasco Lake. Many watershed residents are aware that faithful stewardship is required to continue to protect lake water quality. The Owasco Lake Watershed Inspection and Protection Division (OLWIPD), which serves to help protect the lake from watershed-sourced pollution, has recognized this awareness firsthand during interactions with the public.

The OLWIPD makes regular and thorough inspections of Owasco Lake, its watercourses, and its watershed to ascertain compliance with the Rules and Regulations of the Owasco Lake Watershed and provides educational outreach to the watershed community to foster lake stewardship. The Watershed Rules and Regulations, set forth in 1984, can be found on the OLWIPD website, <http://owascoinspection.org>. This local mandate, according to New York State Public Health Law, permits Watershed Inspectors to access and inspect any area within the watershed to guide corrective actions and land use activities where necessary. The Division's two Watershed Inspectors have a lot of ground to cover throughout the 208 square mile watershed and along 25 miles of shoreline. The OLWIPD commonly receives questions from the public inquiring about the condition of the lake and how they, as individuals, can become better stewards. These conversations demonstrate that both the OLWIPD and watershed residents share the same goal: to ensure that the quality of our water is held to the highest standard. The OLWIPD, while acting as an enforcement body, additionally strives to provide the community with the knowledge and tools needed to adopt land use practices that target limiting the mobility of sediment and nutrients, pollutants that have adverse impacts on water quality. The OLWIPD frequently partners with the New York State Department of Environmental Conservation, as well as the Departments of Health and Soil and Water Conservation Districts for Cayuga, Tompkins, and Onondaga Counties. Overall, our collective responses and actions ensure our drinking water remains protected, now and for future generations. Voluntary efforts such as the deployment of sediment and erosion control during construction, the implementation of Best Management Practices on farms such as cover cropping and reduced tillage, properly stabilizing a forest trail, and upgrading outdated or failing septic systems are measures which can be taken to protect and improve water quality.

The impression we leave on our landscape as individuals is greater than we might appreciate. As the community continues to join forces and community members become more influential and dedicated stewards, our collective actions shape the future of Owasco Lake. Watershed Inspectors provide a friendly outlet for discussion, planning and support to address current and future operations that may

impact water quality. We're here to help; if you have any questions or concerns, or would like to speak with a watershed inspector, please use the following contact information:

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Cayuga County WQMA June Meeting
Michele Wunderlich, Cayuga County Department of Planning and Economic Development

The Cayuga County WQMA took their June meeting on the road, holding it at Emerson Park. After the meeting, attendees toured the park and the numerous water quality projects there.



Rain garden installed through the collaborative effort of the Owasco Watershed Lake Association, Cayuga County Parks and Trails, Owasco Lake Watershed Management Council and Friends of Emerson Park.



Seth Jensen describes the permeable pavement next to the pump station.



Area of the sluiceway that has been cleaned out to allow better flow from Owasco Lake into the Owasco River.



Boat cleaning station that is being installed with Finger Lakes Lake Ontario Watershed Protection Alliance Funding (FOLLOWPA).



Wall replaced by Cayuga County SWCD after collapsing at Emerson Park.

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 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.



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