Water Quality Management Agency

September 2021



Owasco Lake, Photo by Rick Nelson

Ten Things You Can Do to Protect Your Lake Rick Nelson, Owasco Watershed Lake Association

Please use and share these guidelines for protecting our lake and our watershed:

- 1. Trash Disposal: You Burn it, You Breathe It. Open burning is potentially one of the largest sources of airborne toxic emissions in the United States. Burning trash in a bum barrel, incinerator or open fire releases toxic substances into the air. Please recycle, reuse or dispose of trash in an environmentally friendly manner.
- 2. Yard Debris: Keep all leaves, grass clippings and yard debris out of roads, ditches, streams, and the lake. These items become mulch to the unwanted weeds growing in our lake. Alternatives include recycling grass by mulching or composting.
- **3.** Lawn and Garden Fertilizers: If you absolutely must use a fertilizer, do not use one that contains phosphorus or overfertilize. If you have a commercial lawn service, make sure it is environmentally friendly.
- 4. **Pesticides and Household Chemicals:** Use pesticides only if absolutely necessary, only after identifying the best way to control the specific pest. Always apply pesticides carefully and under the appropriate weather conditions.
- 5. Hazardous Materials: Never pour hazardous chemicals, paint, varnish, and other similar products into a storm drain, the ground, the lake or any water body that feeds into the lake.
- 6. Pets and Wildlife: Never feed waterfowl or allow others to do so; this can make them sick and encourages them to remain in our area past their normal season. Do not wash pets in the lake.

- 7. Septic Systems: Do not exceed the capacity of your septic system, and always maintain the system appropriately.
- 8. **Medicines and other Chemicals:** Do not flush medicines or other hazardous chemicals down the sink or toilet. Dispose of these items at collection areas.
- **9.** Buffers: Plant bushes, trees, and grass (which act as buffers) near streams and the lake to prevent soil erosion and keep unwanted nutrients from entering the lake.
- **10. Soaps and Detergents:** Use low or no phosphate soaps, detergents and cleaning products. Phosphates promote weed growth in lakes and streams.

Remember: "Never put anything into the lake that you wouldn't want in your child's next glass of water."

Nutrient Monitoring in Tributaries to Owasco Lake

Michele Wunderlich, Cayuga County Department of Planning and Economic Development

The Owasco Watershed Lake Association (OWLA), Owasco Lake Watershed Inspection and Protection Division (OLWIPD) of the Owasco Lake Watershed Management Council (OLWMC) and the Cayuga County Department of Planning and Economic Development are working together on a project to collect certified water quality data from Owasco Lake tributaries this fall. This data will be used to support future Soil & Water Assessment Tool (SWAT) modeling as part of the Owasco Lake Watershed Nine Element Plan implementation. Funding for the watershed sampling program was provided to OWLA by Nucor Steel and the Columbian, Metcalf, and French Foundations. The OLWMC provided training and support to the OWLA volunteers who will be collecting the samples.



Ally Berry from the OLWIPD trains Dana Hall and Ken Kudla from OWLA



Dillion Shults and Michele Wunderlich (not in photo) provide training to OWLA volunteers



Ken Kudla taking a sample while Dana Hall assists.

Cayuga County Electronics Collection Event Jenna DeRario, Cayuga County Planning Department

On September 25, 2021, Cayuga County held an Electronics "Plus" Recycling event. Electronics, Freon appliances, and documents for shredding were all accepted at the event. In total, 508 cars recycled electronics or Freon appliances and 135 cars participated in the document shredding. The collected items filled over three tractor trailers! Thank you to everyone who attended; your commitment to recycling helps keep our community clean. Special thanks to our dedicated volunteers, contractors, and sponsors who provided critical support to facilitate the event.

The next county recycling event will be the annual Household Hazardous Waste event on Saturday, October 16th. Please register at Cornell Cooperative Extension's website at https://pub.cce.cornell.edu/event_registration/main/events.cfm.







Agricultural Leaders Provide Farm Tours to Highlight Watershed Protection Ally Berry, Owasco Lake Watershed Inspector

On July 20th, 2021, Partners for Healthy Watersheds hosted three tours of large dairy farms known as Contained Animal Feeding Operations (CAFOs) within the Cayuga and Owasco Lake Watersheds. Those in attendance included elected officials, the Cayuga County Soil and Water Conservation District, New York State Department of Agriculture and Markets, Owasco Lake Watershed Management Council staff, Cornell Pro-Dairy, the American Dairy Association North East, Northeast Dairy Producers Association, the New York Farm Bureau, and interested members of the community. Farmers outlined agricultural practices that are implemented to protect water quality, improve farm efficiency, and maintain compliance with New York State CAFO regulations within Cayuga County.

Partners for Healthy Watersheds was established by organizations that represent the dairy farmers of New York who advocate for environmentally sustainable, and economically feasible nutrient management solutions to protect water quality. Their purpose is to develop a community that focuses on agricultural solutions that are based in science and strategy directed towards resource conservation to benefit future generations. This innovative group hosted the farm tours event, which was provided online, as well as inperson to educate attendees about best management practices.



Greg Rejman of Sunnyside Farms

The first tour was provided by Greg Rejman of Sunnyside Farms, which included discussions surrounding crop and field management. Rejman stressed the importance of a science and system-based approach of nutrient management planning and runoff prevention. To achieve this approach, Rejman described the value and his use of precision based nutrient application, crop rotation, reduced tillage, soil sampling, cover crops, and strip cropping. Additionally, Rejman emphasized his use of buffers and sod waterways, which are designed to manage water in highflow conditions to prevent soil loss and runoff from his fields through interception. "These practices must be used together to give us the best use of our most precious natural resources that have been, and will be used by generations of farmers. This combination of best management practices gives farmers a more robust and environmentally sustainable future," Greg said in an interview. Furthermore, Greg Rejman noted that the tiling of his fields assists with water management by allowing potentially nutrient-rich water to filter downwards through several feet of soil, allowing for consistent nutrient absorption and capture. These practices are vastly important to managing the intense rainfall Cayuga County has experienced this summer, and allows for Sunnyside Farms to

conserve nutrient rich topsoil. Jason Cuddeback of the Cayuga County Soil and Water Conservation District provided detailed information during this tour, and articulated that local farmers are highly knowledgeable in conservation, which is an asset to farmers, local communities, and local watersheds. Cuddeback noted that numerous farmers work with the Cayuga County Soil and Water Conservation District to elevate nutrient management practices through active collaboration, a union that is considered essential to the benefit of farm planning and resource conservation for future generations.

The second tour was implemented by Jason Burroughs of Aurora Ridge Dairy, which addressed manure management. According to Certified Nutrient Management Plans, large dairy farms are required to closely monitor manure applications, and abide by state regulations to preserve water quality and reduce the potential for runoff. Certified plans require farmers to proactively observe meteorological conditions, oversee field conditions, and maintain detailed records of nutrient applications. Burroughs emphasized the importance of water as a resource to both farmers and communities. Reflection on the following point is highly valuable: high-quality dairy products cannot be produced without high-quality water resources. Best management practices maintain productive fields, protect soil health, and preserve the watershed. For 30 years, Burroughs has been involved with Cornell University's mass nutrient balance planning, has implemented cover cropping for over 20 years, and has been working to reduce tillage across his acres. These procedures reveal Burroughs' dedication to preserving both soil health and local water quality.

The third and final tour was performed by Kelly O'Hara of Oakwood Dairy, which focused on the technology and efficiency of large dairy farms. This included discussions involving the use of Global Positioning Systems (GPS), that are used to specify spatial management operations of farm equipment with remarkable accuracy and precision. The implementation of this costly technology facilitates applications of manure and fertilizers that maximize efficiency and eliminate the likelihood of overapplication. Furthermore, innovative farming equipment reduces fuel costs, allows for proactive monitoring of field conditions, preserves soil structure, and reduces the potential for runoff to water resources. O'Hara described manure incorporation, whereby manure is injected a few inches below surface soils at a particular rate. Subsurface injection prevents runoff, manages odors, increases water holding capacity, and reduces traffic between fields. This sustainable and cost-effective approach has been used at Oakwood Dairy long before the inception of New York State CAFO regulations, outlining Oakwood Dairy's commitment to enhancing resource conservation and watershed protection. O'Hara largely attributed this achievement to environmentally-conscious farmers that have been implementing these procedures for several decades. He described the value of understanding soil composition, and

stressed that compacted soils negatively impact crops, which are critical to providing high-quality feed to cows. The technology utilized at Oakwood Dairy to maximize farm efficiency have concurrent positive impacts on soil structure and water holding capacity that prevent runoff from impacting water resources.

Sunnyside Farms, Aurora Ridge Dairy, and Oakwood Dairy have voluntarily prioritized best management practices, not only to improve soil health and water resources for farm operations, but also to benefit consumers, communities, and the health of the Cayuga and Owasco Lake Watersheds. This is only the "tip of the iceberg" for many of these producers, and only briefly highlights the loyalty of these large dairy farms to preserving water quality. The progressive involvement of Partners for Healthy Watersheds is inspiring, and serves as a leading example of the achievement producers can accomplish through voluntary action to protect watershed health.

Cayuga County WQMA

For more information about the Cayuga County Water Quality Management Agency, check out our website at <u>www.cayugacountywater.org</u>. 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 <u>https://facebook.com/CayugaCoWQMA</u> or follow us on Twitter at <u>https://twitter.com/CayugaCoWQMA</u>.

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 <u>wqma@cayugacounty.us</u>.



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