



## Owasco Lake Watershed Management Council (OLWMC)

December 17, 2019, 10:00am – Director’s Summary

- As a reminder from last month, and consistent with the OLWMC’s goal to increase participation and advocacy for watershed water quality protection efforts from the agriculture community, the Watershed Inspection Committee that oversees the interpretation of watershed rules and regulations violations and related enforcement activities, now has representation by a local farmer, Greg Rejman. Greg is a leader for the Partnership for a Healthy Watershed, a farmer-based advocacy group that strives for improved farm planning and best management practices that support efficiencies for local farmers and the reduction of farm sourced water pollution.
- The 9 Element (9E) Plan is expected to be completed by August 2020. The 9E plan is considered a quantitative framework to help guide project effectiveness based on predictions for associated nutrient loading (i.e., reductions). Importantly, the completion of the Federal and State recognized 9E process is expected to be a pathway for future project funding.
- Deputy Watershed Inspector, Kaitlyn Shanahan, and I prepared a requested newsletter for the Water Quality Management Agency (WQMA) that was published in the agency’s December issue and highlights the work of the OLWIPD.
- The Owasco Lake Watershed Inspection and Protection Division’s (OLWIPD’s) new water quality monitoring sonde, funded by the Emerson Foundation, will be delivered in the very near term. We are developing SOPs and associated training for calibrations, monitoring, and logging data. The sonde will be equipped to measure levels of turbidity, dissolved oxygen, pH, and conductivity in lake tributaries and near shore. Exceedances above NYS standards for some of these parameters can assist the OLWIPD with gaining state level regulatory support. There are state water quality standards that must be met, and the OLWIPD continues to help state regulators identify problem areas where standards are exceeded.
- On November, 26<sup>th</sup>, the OLWIPD, Olivia Green of The Nature Conservancy (TNC), and I conducted a shoreline survey and litter pickup along nearly the entire circumference of

Owasco Lake. Prominent findings will be discussed during the OLWMC's December Inspection Summary. Such a survey will be improved in the future with the use of the water quality sonde and the ability to gather more objective and quantitative data.

- We are looking to partner with the Owasco Watershed Lake Association (OWLA) on proposed 2020 watershed pollutant source monitoring projects. OWLA has submitted proposals for new foundation funding for this important work, and OWLA's collaboration with the OLWIPD, using the Division's WQ sonde, will offer important monitoring data for identifying watershed pollutant sources in 2020.
- The Federal government has only recently completed the OLWMC's registration needs for grant.gov (not to be confused with grants gateway the Council is already registered with). Therefore, we were not meet an anticipated proposal deadline for an EPA Pollutant Source abatement grant for controlling HABs. Nevertheless, the completion of our registration now positions the OLWMC for future grant opportunities through Federal Government. Further, partnering consultants continue to remain eager to help develop narrative content for future rounds of funding, and I am eager to continue to position the OLWMC so we are prepared.
- Acknowledging the dependency between the occurrences of HABs for receiving water bodies and watersheds with relatively low forested land areas, indicated by the research of by Dr. David Matthews of the Upstate Freshwater Institute, I am now targeting a National Fish and Wildlife Foundation (NFWF) grant for forestry initiatives in the Town of Owasco, partnering with Urban Forester Dr. Walt Aikman. The grant is called the Urban Waters Restoration Grant Program. Dr. Aikman has made great headway gaining credentials for the Town that will make it increasingly eligible for new funding sources within the urban forestry category. I encourage our other watershed municipality representatives to work through the 'Tree City USA' credential to prepare them for future funding initiatives where that credential is important.
- I'm developing a partnership with Senator Schumer's Office, through representative Joe Nehme. City of Auburn Councilor Jimmy Giannettino identified the potential relationship at an OLWMC presentation given to representatives at the City of Auburn last month. Senator Schumer made a public announcement requesting for Army Corps of Engineering assistance with the HABs problem. I am offering my assistance to the Senator's office to elicit assistance from the Army Corps, and I will request the Senator advocate for more HABs mitigation related funding opportunities.
- The U.S. House of Representatives very recently passed the Coastal and Great Lakes Community Enhancement Act, bipartisan legislation which includes two key provisions to address harmful algal blooms and water levels along Lake Ontario.
- Cayuga County, the City of Auburn, and I were approached by a post-doc, Brandon Wong, from University of Michigan who is funded for a two-year pilot program with 50 real-time (and communicating) level sensors for estimating flow; he would like to work with our

group. We are working with partners identify gaps in watershed flow data used for nutrient loading estimates to improve those estimates with new monitoring data we hope to provide through collaboration with Mr. Wong.

- As I reported earlier this year, the NYSDEC modified their consumption guidelines for Owasco Lake - and recommended “do not eat” for Owasco Lake Walleye (and Smallmouth Bass). An article in Ecotoxicology (©Springer Science), by Razavi et. al was recently published and indicating Walleye (*Sander vitreus*) tested from Owasco Lake exceeded New York State Department of Health consumption guidelines (1000 ng/g ww). Findings from this study suggest Hg dynamics in the Finger Lakes require consideration of fish age, growth rates, and food web structure to accurately predict fish Hg concentrations among lakes.
- The New York State Department of Environmental Conservation (NYSDEC) offered a response letter to a concerned citizen on the Governor’s behalf, dated November 1<sup>st</sup>. The letter detailed the assistance the State has provided, as follows:

*“Thank you for your letter to Governor Cuomo. The Governor asked our office to respond to your concerns regarding water quality in Owasco Lake. Through Governor Cuomo’s recent Harmful Algal Bloom (HAB) initiative, there has been an intense focus on the Finger Lakes region, including Owasco Lake. I would like to provide you with background information about DEC’s programs and efforts within the Owasco Lake watershed to assure you that DEC and our federal, state and local partners are working diligently to protect Owasco Lake’s water quality. Action in the Owasco Lake Watershed over the past 3 years, local partners with technical assistance from DEC and NYS Department of State funding are developing a 9 Element Watershed Management Plan for Owasco Lake. Refer to the DEC website for additional information on 9E plans - <http://www.dec.ny.gov/chemical/103264.html>. The 9E plan for Owasco Lake will help appropriately identify and quantify sources of pollutants, determine the water quality goal(s) or target(s) and the pollutant reductions needed to meet the goal, and describe the actions (best management practices) needed to achieve the reductions that will improve water quality. Importantly, 9E Plans are developed by people who live and work within the watershed with support from local and state agencies. Concurrently, the Governor’s new Harmful Algal Blooms (HABs) initiative directs over \$65 million to aggressively combat harmful algal blooms threatening drinking water quality and the recreational use of lakes essential to upstate tourism. The State’s Water Quality Rapid Response Team convened four regional HAB summits across the state, bringing together scientific experts, government officials, the agricultural community, non-for-profits and local stakeholders to develop tailored HABs Action Plans. These action plans identify contributing factors fueling algal blooms, pollution reduction strategies, and new monitoring and treatment technologies. The action plans developed for each waterbody will be used to guide the development and implementation of priority projects, including new monitoring and treatment technologies.*

*The action plans were completed in May of 2018, the Owasco HABs Action Plan can be found on the DEC website <https://www.dec.ny.gov/chemical/113733.html>. Moreover, the Governor’s initiative includes significant research and projects to test advanced real-time monitoring technologies, innovative treatments, developing significant partnerships and expanding*

*collaborative efforts as we continue to combat this emerging threat of HABs. The DEC is partnering with the United States Geological Survey (USGS) to implement an advance HABs monitoring pilot project on three Finger Lakes, including Owasco Lake, to gain a better understanding of environmental factors associated with HABs development and occurrences. The advanced monitoring buoy on Owasco Lake has been installed and the live – real time data can be viewed at <https://ny.water.usgs.gov/maps/habs/>. The findings from these programs will improve bloom reporting and mitigation throughout the state. The Governor’s HABs initiative will provide the additional research needed to better understand what is causing blooms and determine the most appropriate strategies to mitigate and protect the public from the impacts of these blooms for all NYS waterbodies. As stated previously in the Anthony Prestigiaco email to you regarding the NYS funding and staff resource commitments to the Owasco Lake Watershed - the recent and existing resource allocations to Owasco Lake and the watershed, both through the Governor’s recent initiative and existing funding mechanisms have been substantial. Some of the recent \$6.4+ million in NYS funding that has been directed toward projects and programs specifically in the Owasco Lake Watershed include:*

- \$600,000 to Study and Implement Safeguards to Owasco Lake Watershed, which includes about \$100,000 for enhanced water quality studies and more than \$400,000 for pollution mitigation measures.*
- \$86,000 from the NYS Environmental Protection Fund (EPF) to support the expansion of the Citizens Statewide Lake Assessment Program (CSLAP) into the 11 Finger Lakes, to facilitate standardized long-term water quality data collection across the Finger Lakes region through a collaboration between DEC, the NY Federation of Lake Associations, OWLA, Upstate Freshwater Institute, and SUNY ESF.*
- Creation of Finger Lakes Water Hub in 2017, which includes four new DEC water resources staff (two Research Scientists, a Watershed Coordinator, and Supervising Scientist).*
- \$20,000 from NYS EPF to collaborate with SUNY ESF to provide student intern opportunities in conjunction with the new Finger Lakes Water Hub in Syracuse.*
- \$200,000 for Dutch Hollow Brook Watershed BMP Implementation project.*
- \$150,000 (\$75k each to City of Auburn and Town of Owasco) to evaluate treatment alternatives and recommend preferred short and long term approach to ensure safe drinking water to communities.*
- \$2,000,000 to implement upgrades to drinking water systems in Auburn and Owasco.*
- \$712,500 for Owasco Flats Wetland Restoration and Riparian Buffers Initiative provides Cayuga County a Green Innovation Grant (NYS EFC) for the construction and restoration of wetlands, floodplains and riparian buffers in Moravia NY.*
- \$88,360 per year allocated through FLOWPA to Cayuga, Onondaga, and Cortland Counties (all Finger Lakes and Lake Ontario Counties) to implement projects focused on watershed protection.*
- \$75,000 to City of Auburn Owasco Flats Land Acquisition for Source Water Protection Project, will acquire an approximately 152-acre parcel immediately*

*adjacent to Owasco Lake and Inlet.*

- *\$380,000 for Cayuga County Stream Corridor Enhancement and Restoration, the Cayuga County Soil & Water Conservation District (SWCD) will protect, stabilize and revegetate 4,000 feet of highly erodible streambank throughout Cayuga County.*
- *\$280,000 to Cayuga Co. SWCD Owasco Lake Streambank and Riparian Buffer Restoration Project will construct toe wood streambank protection structures along streambanks in the Town of Locke and Town of Moravia.*
- *\$300,000 to Cayuga Co. SWCD Cayuga County Erosion Control - construct retention basins, rock lined waterways, and road / culvert crossings that will handle the intense storms that have affected the villages and towns of Cayuga County, providing relief and stabilization to areas "in need."*
- *\$1,124,069 to the Nature Conservancy, Owasco Lake Source Water Protection will purchase up to six parcels in the Owasco Lake watershed for protection and potential restoration of riparian buffers and wetlands.*
- *\$467,770 for the Cayuga Co. SWCD Owasco Lake Watershed Streambank and Shoreline Repair Project will re-stabilize a combined length of approximately 3,000 feet of severely eroded Owasco Lake shoreline and streambank segments throughout the watershed.*

*Please note, this partial funding list does not include the substantial NYS Department of Agriculture and Markets (DAM) funding to the Cayuga County Soil & Water Conservation District for implementation of the Agricultural Environmental Management (AEM) program and the implementation of numerous Agricultural BMPs on local farms. The HABs Action Plan, Advanced Monitoring & Research, the 9 Element Plan and Best Management Practice Implementation will be critical parts of the solution in Owasco Lake. The Finger Lakes HABs occurrences are scientifically complicated and we need to ensure that we gain the necessary understanding of the various complex environmental processes occurring in the Lake and watershed. DEC is committed to ensuring this effort for the protection of Owasco Lake. The DEC greatly appreciates your continued interest in these environmental issues and in Owasco Lake water quality. We will continue moving forward to address the water quality concerns in Owasco Lake. We look forward to working with you and all the area stakeholders to protect these waters."*

- **2.3 Million Dollars were awarded this year to Cayuga County SWCD through Non-point source Abatement Control Program for implementing 5,000 acres of cover crops and nutrient leachate recovery. Specifically, future projects in that County include:**

*1. \$238,780 was awarded to the Cayuga County Soil and Water Conservation District to work with one farm in the Cayuga Lake Watershed. This project will:*

- *Implement total silage leachate collection to protect surface and groundwater resources*
- *Demonstrate the success of Agricultural Environmental Management (AEM) planning and best management practice implementation to other area farms*
- *Reduce nutrient loading into the Cayuga Lake Watershed*

2. \$1,745,580 was awarded to the Cayuga County Soil and Water Conservation District to work with one farm in the Owasco and Cayuga Lake Watersheds. This project will:

- Improve nutrient management on the farm through installation of a Nutrient Recovery System
- Allow the farm to achieve Certified Nutrient Management Plan goals by significantly reducing nutrient loads of spread manure
- Increase farm nutrient management flexibility in challenging weather

3. \$371,087 was awarded to the Cayuga County Soil and Water Conservation District to work with eight farms in the Owasco and Cayuga Lake Watersheds. This project will:

- Implement over 5,000 acres of cover crops on farms in the watersheds
- Effectively manage cropland runoff
- Support residue and tillage management plans on farms

- Cayuga and Tompkins Counties' Soil and Water Conservation Districts plan to present to the OLWMC in February on 2019 project outcomes and project outlooks for 2020.
- The January 21<sup>st</sup> OLWMC Board of Director's public meeting will feature presentations on new septic system technologies and a detailed annual Owasco Lake 2019 monitoring report by Dr. John Halfman of Hobart William Smith College.
- The OLWMC continues to look forward to buy-in from the remaining towns within the watershed that have yet to join to help direct project initiatives. They include the Towns of Sempronius, Groton, Venice, Genoa, and Sennett, and I continue to encourage the Board of Directors to reach out to representatives from these towns to elicit their buy-in.