Cayuga County Water Quality Management Agency



2022 Year End Report

Approved by the Cayuga County Water Quality Management Agency on February 2, 2023

The Cayuga County Water Quality Management Agency's Mission

The Cayuga County Water Quality Management Agency (WQMA) was created by County Legislative Resolution #445-90 to serve the Cayuga County Legislature in meeting its responsibilities in the management and protection of the County's water resources.

The WQMA advises the Cayuga County Legislature on matters related to water resource management and planning. The WQMA is charged with identifying problems, proposing priorities, and promoting the coordination of activities in the management and protection of the County's water resources. More specifically, the Agency is charged with:

- 1. Creating and maintaining a comprehensive planning and implementation program for water quality management in Cayuga County.
- 2. Coordinating the responsibilities of agencies and watershed associations with interest in water quality management in Cayuga County.
- 3. Providing greater public input into the process of water quality management and related programs.
- 4. Providing an effective public education program to develop public understanding and support for water quality management in Cayuga County.



This Year End Report is dedicated to Rick Nelson.

2022 Cayuga County Water Quality Management Agency Membership

Chair: Seth Jensen

Vice-Chair: Doug Dello Stritto

Cayuga County Legislature's Environmental Advisors:

Director of Cayuga County Planning and Economic Development

Director of Cayuga County Environmental Health

Director of Cayuga County Parks and Trails

Director of Cayuga County Soil and Water Conservation District

Cayuga County Cooperative Extension Executive Director

Cayuga County Solid Waste Management Program Administrator

Stephen Lynch

Eileen O'Connor

Doug Dello Stritto

Doug Kierst

Dan Welch

Vacant

Non-County, Local Officials

Town of Owasco Edward Wagner
City of Auburn Seth Jensen
Cayuga County Association of Town Supervisors Vacant

Cayuga County Association of Villages

Jeff Emerson/Vacant

Representatives from Waterbody Associations in Cayuga County

Cayuga Lake Intermunicipal Organization

Central New York Waterways, Inc.

Duck Lake Association

Lake Como Association

Little Sodus Bay Betterment Association

Vacant

Carl Wiezalis

Dale Powell

Pat Mooney

Gary Clark

Owasco Watershed Lake Association Rick Nelson/Ann Robson

Skaneateles Lake Association Inc.

Lauren Ryan

Partners

Atlantic States Legal Foundation
Cayuga County Water and Sewer Authority
Central New York Regional Planning and Development Board
Finger Lakes Institute at Hobart and William Smith Colleges
Finger Lakes Partnership for Invasive Species Management
NYSDEC Finger Lakes Water Hub
NYSDEC Great Lakes Program
Owasco Lake Watershed Management Council
Partners for Healthy Watersheds
The Nature Conservancy

Staff Support

Michele Wunderlich, Cayuga County Planning and Economic Development, Associate Planner, mwunderlich@cayugacounty.us, 315-253-1107, http://cayugacountywater.org

<u>CAYUGA COUNTY WATER QUALITY MANAGEMENT AGENCY 2022 YEAR END</u> REPORT

COMMUNICATION AND OUTREACH WORKING GROUP

PRIORITY: Celebrate the positive water quality activities occurring in Cayuga County.

ACTION: The celebration of positive initiatives will be the focus of communication pieces (see next priority) generated by the committee - WQMA Communication and Outreach Working Group

PRIORITY: Provide timely information regarding water news, agency activities, and pollution prevention.

ACTION: Prepare and send out quarterly newsletters, (March, June, Sept, and Dec) the purpose of which will be to highlight positive water quality initiatives, work of member and partner agencies, and upcoming or current classes (i.e. Erosion and Sediment Control Training) or programs (such as hydroseeding availability, or Hazardous Waste Disposal opportunities). Audience will include County Legislators, municipal elected officials, municipal clerks, and planning boards as well as WQMA partners and members- WQMA Communication and Outreach Working Group

- All newsletters sent to the WQMA email list, Cayuga County Legislators, Town and Village clerks, Mayors and Supervisors, City of Auburn Mayor and clerk, and ~260 town and village planning board members.
- First WQMA newsletter was sent out March 30, 2022 and articles included:
 - "First Public Meeting Held for Sterling and Wolcott Creeks Watershed Integrated Watershed Action Plan."
 - o "Photos of the Seneca River and Cross Lake."
 - o "Water Quality Protection Educational Media Prepared by the OLWIPD."
 - o "Conservation Agriculture and Protecting the Owasco Lake Watershed."
- Second WOMA newsletter was sent out June 22, 2022 and articles included:
 - "Protect Your Lake: Change out your road flares for LED flares."
 - "Camp Y-Owasco Installs a Nutrient-Treating Septic System."
 - "Watershed Inspection: Local Division Helps Protect Owasco Lake."
 - o "Cayuga County WOMA June Meeting."
- Third WQMA newsletter was sent out September 26, 2022 and articles included:
 - "Cayuga County 4-H Focuses on Water Quality."
 - "Owasco Lake Watershed Nine Element Plan for Phosphorus Reduction."
 - "Skaneateles Lake Watershed Nine Element Plan."
 - "Spotlight: Upcoming Improvements to the Village of Moravia's Wastewater Treatment Plant."
 - o "The Lake Friendly Living Coalition of the Finger Lakes."
 - "Asian Clam Survey of Owasco Lake."

- o "Cayuga County WQMA."
- Fourth WQMA newsletter was sent out December 22, 2022 and articles included:
 - "Christmas Tree Recycling Cayuga County Trade-A-Tree Program."
 - o "Tree Planting in Owasco."
 - "Skaneateles Lake Eurasian Watermilfoil Control Program 2022 Annual Report."
 - o "Town of Owasco Wetland Remediation Project."
 - o "Protecting Owasco Lake Year-Round Requires Collaboration."

ACTION: Prepare blogs at least monthly focusing on educating the public regarding a wide variety of water quality news and topics. These blogs will be posted on the website and links published on Facebook and Twitter- WQMA Communication and Outreach Working Group

- Blogs published on WQMA website:
 - o "Cayuga County WQMA Year End Report," February 28, 2022.
 - o "Cayuga County WQMA 2022 Work Plan," March 22, 2022.
 - "Cayuga County WQMA March 2022 Newsletter and New Resources Available," April 29, 2022.
 - "Cayuga County WQMA September Newsletter is now available," September 26, 2022.
 - "Christmas Tree Recycling Cayuga County Trade-A-Tree Program," December 22, 2022.

ACTION: Provide assistance to other working groups to fulfill their actions – WQMA Working Groups

- "Camp Y-Owasco Installs a Nutrient-Treating Septic System" article in June WQMA newsletter upon request of the Nutrient and Sediment Management Working Group.
- "Resources Available from Cornell Cooperative Extension of Cayuga County" sent as a water news article upon request of the Nutrient and Sediment Management Working Group.

ACTION: Promote and distribute the WQMA residential guidelines to the public.

• Shared with the CWIO Education, Public Participation and Outreach Committee.

ACTION: Provide a newsletter article or blog on fireworks, flares and campfire ash prior to the July 4th Holiday.

• "Protect Your Lake: Change out your road flares for LED flares" published in the June 22, 2022, WQMA newsletter.

ACTION: Provide newsletter articles, blogs or information on climate change and flooding.

• No action taken.

PRIORITY: Update website resources with current and scientific information and promote the WQMA as the source of factual water quality information in Cayuga County

ACTION: Distribute WQMA promotional items at meetings and public events-WQMA

• Educational items were provided at in-person WQMA meetings.

ACTION: Review and update the WQMA website - WQMA Communication and Outreach Working Group

• The Cayuga County Planning Department routinely reviews and updates the WQMA website.

ACTION: Work to improve the resource section of the WQMA website to include more research reports and water resource protection information – WQMA Communication and Outreach Working Group

- Added Darby Kiley's presentation "Regulatory tools to protect stream buffers_01-06-2022" from the January 2022 WQMA meeting.
- Added WQMA newsletters from September 2020 to present.
- Added Owasco Lake Watershed Resources for Homeowners
 - Owasco Lake New Homeowner Packet
 - Owasco Lake Rain Garden Brochure
 - Owasco Lake Stormwater Brochure
 - o Owasco Lake Green Infrastructure Brochure
- Added "Resources Available from Cornell Cooperative Extension of Cayuga County."

ACTION: Gather informational documents on the WQMA website that can be used as Welcome Packages for new homeowners regarding how to minimize their nutrient impact.

- Added Owasco Lake Watershed Resources for Homeowners to the Resources page:
 - Owasco Lake New Homeowner Packet
 - Owasco Lake Rain Garden Brochure
 - Owasco Lake Stormwater Brochure
 - o Owasco Lake Green Infrastructure Brochure

INVASIVE SPECIES WORKING GROUP

The priority species that the Cayuga County WQMA Invasive Species Working Group concentrated on were those invasive species that have the potential to negatively impact Cayuga County and its watersheds.

PRIORITY: Survey invasive species in Cayuga County

ACTION: The Working Group will work with partners to survey for priority species within Cayuga County.

- Worked with the Finger Lakes Institute/Finger Lakes Partnership for Regional Invasive Species Management (PRISM) on surveying for priority species such as hydrilla and other invasive species.
- Promoted the surveying for hemlock woolly adelgid by the Owasco Watershed Lake Association and the Skaneateles Lake Association.
- Promoted the Finger Lakes Institute/PRISM hemlock woolly adelgid survey (HWAS) for 2022 and 2023.

ACTION: The Working Group will work with partners to survey areas suspected of having a new invasive species population.

• Provided information to members and partners on how to survey for and report spotted lanternfly.

ACTION: The Working Group will conduct Asian clam diving inventory surveys in Owasco Lake to try to determine where the adult population is surviving and then discuss the possible effectiveness of control methods. Cayuga and Skaneateles Lakes may also be surveyed this summer.

• Conducted a survey of Asian clams on August 8, 2022 off of the Emerson Park beaches in Owasco Lake.

ACTION: The Working Group will solicit reports of partners doing surveillance and monitoring.

- Third WQMA newsletter sent out September 26, 2022, included an article "Asian Clam Survey of Owasco Lake."
- Fourth WQMA newsletter sent out December 22, 2022, included an article "Skaneateles Lake Eurasian Watermilfoil Control Program 2022 Annual Report."

PRIORITY: Education, training and public participation

ACTION: The Working Group will share educational information on priority species of concern to the public on the WQMA website, newsletter, and social media accounts and through other media such as radio and newspapers.

• Provided educational information on invasive species to the WQMA Facebook and Twitter accounts.

ACTION: The Working Group will work with partners to prepare and publish two or more articles per year on invasive species.

- o Third WQMA newsletter sent out September 26, 2022, included an article "Asian Clam Survey of Owasco Lake."
- Fourth WQMA newsletter sent out December 22, 2022, included an article "Skaneateles Lake Eurasian Watermilfoil Control Program 2022 Annual Report."

ACTION: The Working Group provide and support training programs and/or information on priority species including, but not limited to, meetings such as WQMA meetings, Owasco Lake Watershed Management Council meetings, Bob Brower Scientific Symposium in "Plain English", Conservation Field Days, and other public venues.

- The WQMA co-sponsored and promoted the "Bob Brower Scientific Symposium in 'Plain English'" that included the presentation "Hemlock Management in the Owasco Lake Watershed: Short and Long Term Solutions."
- Promoted the two-part invasive species training held by Rochester Institute of Technology Environmental Science students on April 28th and April 30th. This included training in iMapInvasives.
- Promoted the training "Identifying and Reporting Spotted Lanternfly & Tree-of-heaven with iMapInvasives" held on May 25th by the iMapInvasives Project Team.
- Promoted the Cayuga Lake Watershed events for New York State Invasive Species Awareness Week! held in June.

ACTION: The Working Group will provide a training or control event as part of New York State Invasive Species Week.

• Michele Wunderlich presented a webinar "Invasive Species Identification" on June 7, 2022 as part of New York State Invasive Species Awareness week.

ACTION: The Working Group will promote activities sponsored by the WQMA and its members and partners, including, but not limited, to the Bob Brower Scientific Symposium in "Plain English", invasive species workshops and watershed steward events on the WQMA website and social media accounts.

- The WQMA promoted activities by email, on Facebook and on Twitter.
- The WQMA co-sponsored and promoted the "Bob Brower Scientific Symposium in 'Plain English'" that included the presentation "Hemlock Management in the Owasco Lake Watershed: Short and Long Term Solutions."

PRIORITY: Invasive species prevention, control and management

ACTION: The Working Group will support existing invasive species prevention, control and management programs including the County's aquatic harvesting program, Finger Lakes Institute/PRISM's volunteer programs, Hydrilla in Cayuga Lake program, Eurasian

Watermilfoil program in Skaneateles Lake, Montezuma Alliance for the Restoration of Species and Habitat program, Hemlock Woolly Adelgid programs through OWLA, Finger Lakes Institute/PRISM and others, boat steward programs and will assist as able in other control programs.

- Cayuga County utilized Finger Lakes Lake Ontario Watershed Protection Alliance (FLLOWPA) funds to purchase and install a CD3 boat cleaning station at Emerson Park. Installation was completed in 2022 and the station was opened for use.
- Cayuga County utilized FLLOWPA funding to purchase invasive species signs to install at boat launches in the Lake Ontario Watershed.
- Updated the Cayuga County hydrilla webpage with new information and the sampling results from the public drinking water and herbicide treatment areas in Cayuga Lake in Aurora.
- Promoted the Finger Lakes Institute/PRISM macrophyte survey program and trail survey program.
- Promoted the hemlock woolly adelgid survey program of the Finger Lake Institute/PRISM.
- Promoted the water chestnut pulls in the Finger Lakes Region organized by the Finger Lakes Institute/PRISM.
- Participated in the Finger Lakes Institute/PRISM Steering Committee.
- Requested landowners in the Owasco Lake Watershed contact the Owasco Watershed Lake Association to allow them to survey their property for hemlock woolly adelgid.
- Worked with the Finger Lake Institute/PRISM in identifying an unusual algae found in Owasco Lake over the summer. They identified it as a filamentous green algae, dominated by Spirogyra.
- Planning Department worked with some homeowners along Nine Mile Creek, the Finger Lakes Institute/PRISM and the New York State Department of Environmental Conservation to discuss possible future removal of water chestnut in this area.

ACTION: The Working Group will work with partners such as the Finger Lakes Institute/PRISM and others on increasing invasive species education to boaters and recreationists.

• FLLOWPA funds were utilized to partially fund the printing of clean boating maps for Cayuga Lake. Maps were delivered to the Inns of Aurora, Union Springs Village Hall, Cayuga Village Hall and the Cayuga County Tourism Office in 2022.

NUTRIENT AND SEDIMENT WORKING GROUP

PRIORITY: Septic Systems

ACTION: Find homeowners interested in participating in a pilot evaluation of phosphorus removal technologies that are not yet on the market—Health Department, The Nature Conservancy

• Cayuga County Health Department and The Nature Conservancy identified available nutrient-reducing septic technologies and drafted a report detailing each technology, including cost and operations and maintenance requirements, for homeowners and design professionals.

ACTION: Implement, test and monitor donated nitrogen and phosphorus removal technologies at residential properties and/or non-profit properties – Health Department, The Nature Conservancy, Cayuga County Soil and Water Conservation District

- Installed a nitrogen and phosphorous reduction septic system in early June at the Auburn YMCA-WEIU's Camp Y-Owasco that was 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.
- Communications Working Group published "Camp Y-Owasco Installs a Nutrient-Treating Septic System" article in June WQMA newsletter upon request of the Nutrient and Sediment Management Working Group.
- The new septic system at Camp Y-Owasco was monitored weekly by a team from The Nature Conservancy, Cayuga County SWCD, and the Owasco Lake Watershed Management Council.

PRIORITY: Stormwater

ACTION: Promote the use of green infrastructure such as permeable pavement, rain gardens and rain barrels—City of Auburn, Cayuga County Department of Planning and Economic Development, OLWMC, Cayuga County Soil and Water Conservation District

- City of Auburn is looking at installing signage on green permeable pavement at pier.
- Cayuga County Parks and Trails made some small drainage modifications to the rain garden demonstration project at Emerson Park to make sure they have the proper area for sheet flow, it discharges properly and to expand the area for additional stormwater treatment.

ACTION: Speak at a monthly meeting of the Association of Towns and Association of Villages on the WQMA Municipal Ditch Maintenance guidelines and erosion and sediment control practices during municipal projects— Cayuga County Soil and Water Conservation District, Cornell Cooperative Extension of Cayuga County

• No action taken.

ACTION: Inventory condition of culverts discharging into municipal ditches or streams – Owasco Lake Watershed Management Council, Cayuga County Soil and Water Conservation District

• Cayuga County Soil and Water Conservation District continues efforts to implement the North Atlantic Aquatic Connectivity Collaborative (NAACC) compliant database. They have inventoried the culverts in the Owasco Lake Watershed and the Skaneateles Lake Watershed. They have grant funds to do this in portions of Lake Ontario/Little Sodus Bay Watershed and the remainder of the Cayuga Lake Watershed.

ACTION: Finalize development of a map of outfalls within the City of Auburn- City of Auburn.

• Almost complete. Can show map at a future WQMA meeting.

ACTION: Provide a presentation to the Cayuga County WQMA on the Cayuga County Soil and Water Conservation District's and City of Auburn's work on culvert inventories and mapping of outfalls- City of Auburn, Cayuga County Soil and Water Conservation District

• Plan for a future WQMA meeting.

ACTION: Prepare communication pieces on sedimentation and erosion control issues, subsurface tile drainage and resources available to assist property owners in addressing them. Provide them to the WQMA Communications and Outreach Working Group for distribution— WQMA Nutrient and Sediment Working Group

- Brochures were created by the Owasco Lake Watershed Inspection and Protection Division and placed in the Resources section of the WQMA website:
 - Owasco Lake New Homeowner Packet
 - Owasco Lake Rain Garden Brochure
 - Owasco Lake Stormwater Brochure
 - o Owasco Lake Green Infrastructure Brochure

ACTION: Educate municipal planning board members regarding the importance of including sedimentation and erosion control considerations in site plan review – Cayuga County Planning Department, Cayuga County Soil and Water Conservation District, Cornell Cooperative Extension of Cayuga County, Central New York Regional Planning and Development Board

- The City of Auburn is looking at adopting stormwater regulations within its boundaries.
- As part of the Local Waterfront Revitalization Program process for the Village of Cayuga, County Department of Planning and Economic Development Planning discussed the importance of including sedimentation and erosion control considerations in Site Plan Review, and ultimately the committee proposed adding the requirement of requiring a Stormwater Pollution Prevention Plan (SWPPP) to the review process.

• The Cayuga County Department of Planning and Economic Development held the Cayuga County Planning Board Training: "Building Resiliency and Resource Protection into Your Zoning Code." Planners discussed that slope considerations and that being able to read a stormwater plan are important to prevent sedimentation and for erosion control. Included a hands-on exercise involving reviewing an actual site plan and identifying components of the stormwater control system.

PRIORITY: Pet Waste

ACTION: Create and provide communication pieces on the importance of properly disposing of pet waste to the WQMA Communication Working Group for distribution-Cornell Cooperative Extension of Cayuga County, Lake Associations

• No action taken.

PRIORITY: Golf Courses

ACTION: Work with managers and owners of golf courses to obtain certification from Audubon International by implementing Standard Environmental Management Practices – Lake Associations, Owasco Lake Watershed Management Council

• The Owasco Lake Watershed Inspection and Protection Division tried to get one golf course with no luck. Dutch Hollow Brook golf course was interested but it is too expensive. They will reach out to the Audubon to help lead a golf course through the process.

PRIORITY: Lawn Care

ACTION: Update and provide information regarding the ban on phosphorus in lawn fertilizer and appropriate ways to manage lawn waste to the WQMA Communications and Outreach Working Group for distribution—Cornell Cooperative Extension of Cayuga County, Owasco Watershed Lake Association, Lake Associations

• No action taken.

ACTION: Provide information on where property owners can get their soil tested before they apply phosphorus to the WQMA Communications and Outreach Working Group for distribution—Cornell Cooperative Extension of Cayuga County

• "Resources Available from Cornell Cooperative Extension of Cayuga County" sent as a water news article upon request of the Nutrient and Sediment Management Working Group sent on August 8, 2022. This was also placed in the Resources section of the WQMA website.

PRIORITY: Agriculture

ACTION: Recognize agricultural operations that have implemented best management practices (BMPs) – Cayuga County Soil and Water Conservation District, Partners for Healthy Watersheds, Owasco Lake Watershed Management Council, Cornell Cooperative Extension of Cayuga County

• 'Our Owasco' (behavior change program to increase adoption of soil health practices) team in collaboration with Cayuga County Soil and Water Conservation District and Tompkins County Soil and Water Conservation District have published seven communications pieces on public platforms highlighting local farmers who have implemented BMPs.

ACTION: Review the Manure Management Guidelines, update if needed, and then promote them through the WQMA Communications and Outreach Working Group – Partners for Healthy Watersheds, Cayuga County Soil and Water Conservation District, Cornell Cooperative Extension of Cayuga County

• No action taken.

ACTION: Provide necessary letters and resolutions of support for funding agricultural best management practices and encourage their implementation – Cayuga County Soil and Water Conservation District, Partners for Healthy Watersheds, Cornell Cooperative Extension of Cayuga County, Owasco Lake Watershed Management Council

• Resolutions were not needed for many of the applications

ACTION: Create or provide education on subsurface tile drainage and provide to the WQMA Communications and Outreach Working Group for distribution- Cayuga County Soil and Water Conservation District, Cornell Cooperative Extension of Cayuga County, Partners for Healthy Watershed

• No action taken.

ACTION: Cayuga County Soil and Water Conservation District will provide an annual report on conservation programs at a WQMA meeting—Cayuga County Soil and Water Conservation District

• Annual report was completed and distributed.

PRIORITY: All Areas

ACTION: Promote land acquisition and conservation easements for preservation purposes – Owasco Lake Watershed Management Council, The Nature Conservancy

- The Owasco Lake Watershed Management Council became property owners—and local land stewards—following the transfer of the Fillmore Nature Preserve from The Nature Conservancy.
- Public and non-profit owners of property in the Owasco Flats were convened to discuss shared goals and the value of coordinating land management.

ACTION: Provide necessary letters and resolutions of support for funding best management practices and other programs that reduce nutrient and sediment to County waterbodies-WQMA Nutrient and Sediment Working Group

• No action taken.

MISCELLANEOUS:

• The Owasco Lake Watershed Management Council and Cayuga County Soil and Water Conservation District collaborated to leverage the Great Lakes Commission's Conservation Kick grant to install a WASCOB on a farm in Fleming.