Cayuga County Water Quality Management Agency



2018 Year End Report

Approved by the Cayuga County Water Quality Management Agency on February 7, 2019

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.

2018 Cayuga County Water Quality Management Agency Membership

Chair: Stephen Lynch

Vice-Chair: Eileen O'Connor

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 Solid Waste Management Program Administrator

Cayuga County Cooperative Extension Executive Director

Stephen Lynch

Eileen O'Connor

Gary Duckett

Doug Kierst

Bruce Natale

Doug Ververs

Non-County, Local Officials

Town of OwascoEdward WagnerCity of AuburnSeth JensenCayuga County Association of Town SupervisorsDon OltzCayuga County Association of VillagesHarry Hinman

Representatives from Waterbody Associations in Cayuga County

Cayuga Lake Watershed Network
Central New York Waterways, Inc.
Duck Lake Association
Lake Como Association
Dale Powell
Barbara Harvey
Owasco Watershed Lake Association
Rick Nelson
Skaneateles Lake Association Inc.
Kathleen Gorr

Partners

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

Finger Lakes Water Hub

Great Lakes Action Agenda Southeast Lake Ontario Work Group

Institute for the Application of Geospatial Technology at Cayuga Community College, Inc.

Owasco Lake Watershed Management Council

Partners for Healthy Watersheds

Staff Support

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

Monthly Meetings

The Cayuga County WQMA meets on a regular basis, on the 1st Thursday of the month throughout the year at 10 am. All meetings are scheduled for the Natural Resource Center at 7413 County House Road, Auburn unless otherwise noted.

Website: http://cayugacountywater.org

CAYUGA COUNTY WATER QUALITY MANAGEMENT AGENCY 2018 WORK PLAN

COMMUNICATION AND OUTREACH WORKING GROUP

<u>Cayuga County Manure Management Working Group – 14-Point Action Agenda Items</u> to Address:

ACTION ITEM #8: Publish quarterly or annual reports and press releases summarizing the NYSDEC records relating to complaints regarding manure activities, sharing the results of analysis of NYSDEC complaints conducted by the County Planning Department.

- Specific Tasks and Timeline:
 - Publish quarterly or annual reports and press releases of results of Action Item #7. Work will be done after receiving the information from the Cayuga County Department of Planning and Economic Development.
- Resources Required:
 - Action Item #7: The Cayuga County Department of Planning and Economic Development will need to analyze NYSDEC records of complaints and investigations of manure activities over time to determine if enforcement activities are: 1) focused strongly enough on repeat, uncooperative offenders, 2) adequately preventing direct, unrestricted access to streams by livestock, and 3) conducted in a manner that is uniform and consistent across all watersheds.
 - Not completed. Data is currently being compiled. Logistics to obtain this information on a consistent basis is still being worked out with NYSDEC.

ACTION ITEM #13: Expand the WQMA Website by adding material on how to recognize good and bad manure handling practices and effectively communicate the local standards prepared under Action Item #3 and the NYSDEC analysis from Action Item #8 in a manner that makes this information understandable to the widest possible audience.

- Specific Tasks and Timeline:
 - Expand the WQMA website after the communications and branding plan is completed.
- Resources Required:
 - Website and branding plan is completed.
 - Need Action Item #8 completed.

Other Priorities

PRIORITY: WQMA Website and Branding

ACTION: Complete, launch, evaluate and adjust the new WQMA website.

- Website launched on July 12, 2018.
- Blogs are being added to the website.
- Positive responses to the website have been received.

ACTION: Conduct an outreach program including publication of the new e-newsletter to build awareness of the WQMA to local residents.

- First newsletter sent out on July 20, 2018.
- Facebook and Twitter are being used to build awareness.
- Magnets with the new website have been distributed at events.

INVASIVE SPECIES WORKING GROUP

The priority species that the Cayuga County WQMA Invasive Species Working Group will concentrate on in 2018 are those non-native species that have the potential to negatively impact the watersheds of Cayuga County.

1. PRIORITY: Inventory and field reconnaissance of invasive species in Cayuga County:

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

- At the January WQMA meeting, Hilary Mosher with the Finger Lakes Partnership for Invasive Species Management (FL-PRISM) reported that the FL-PRISM will be collecting data on high priority invasives such as starry stonewort, water chestnut and hydrilla.
- Assisted the FL-PRISM with trying to find access to Cayuga Lake for their hydrilla survey.
- Call from citizen about a new infestation of water chestnut in Parkers Pond. Plan on conducting an inventory in 2019 to determine extent of infestation and the possibility of conducting a hand pull. Will plan on starting the permitting process very early in 2019.

ACTION: The Working Group will conduct field reconnaissance of areas suspected of having a new invasive species population.

- Assisted with the identification of an unknown plant found along Owasco Lake which turned out to be a non-invasive sedge.
- Assisted with the identification of an unknown plant found in Owasco Lake which turned out to be pickerel weed.

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 Lake may also be surveyed this summer.

- Asian clam survey of Owasco Lake on August 7, 2018.
- Presentation of survey results to Cayuga County WQMA on September 6, 2018.

ACTION: The Working Group will assist in water chestnut surveys of County waterbodies including the Seneca/Cross Lake area and Cayuga Lake.

- FL-PRISM surveyed for water chestnut in Cross Lake on August 14, 2018.
- Water chestnut became an issue in Cross Lake in August and September. Mats of water chestnut were floating down the river and landing on the east shore. This started happening at the same time as there was major flooding in Seneca Lake. Provided information on possible source of water chestnut.

2. PRIORITY: Information dissemination

ACTION: The Working Group will gather and disseminate information to the WQMA and the public on priority species determined by the Finger Lakes Partnership for Invasive Species Management (FL-PRISM) and this working group.

- WQMA Website: Article posted April 18, 2018 entitled "Hemlock Woolly Adelgid Killing Trees in Cayuga County."
- WQMA Website: Article posted August 24, 2018 entitled "Learn About Hydrilla."

ACTION: The Working Group will promote the FL-PRISM Website.

• WQMA Website connects to the FL-PRISM Website for information on invasive species.

3. PRIORITY: Education, training and public participation

ACTION: The Working Group will work to provide training programs and/or information on priority species at WQMA meetings, Owasco Lake Watershed Management Council meetings, Conservation Field Days, and other public venues.

- Coordinated a Hemlock Woolly Adelgid workshop given by the NYS Hemlock Initiative on March 19, 2018 in Moravia. Assisted homeowner who requested information.
- Michele Wunderlich provided invasive species education at Owasco Lake Day.
- Michele Wunderlich, Ed Wagner and Andrew Snell participated at Conservation Field Days by teaching the children about invasive species.
- Michele Wunderlich provided a training on priority invasive species to the Owasco Watershed Lake Association on October 3, 2018.
- Michele Wunderlich presented on invasive species and harmful algal blooms at Moravia Middle School as part of a problem based learning unit.

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

• Michele Wunderlich held an iMapInvasives training on July 12, 2018 as part of Invasive Species Week. Ten people participated.

ACTION: The Working Group will work with the FL-PRISM to maximize resources and will provide educational materials and training programs on the priority species of concern to the WQMA members, Owasco Lake Watershed Inspectors, lake associations, nurseries, marinas and boat launches, fishing bait sellers and users, aquarium sellers and users, sport and outdoor shops, and other citizen groups.

- Asked members to volunteer in the FL-PRISM and Finger Lakes Institute's 2018 Macrophyte Volunteer Survey Program.
- Advertised the "Aquatic Invasive Species Workshop" held during Invasive Species Week sponsored by the FL-PRISM and Finger Lakes Institute.
- WQMA Website: Article posted September 26, 2018 entitled "Invasive Species Field Guide and Fact Sheets now available" promoted the FL-PRISM and Finger Lake Institute's guide and fact sheets.
- Advertised the Finger Lakes Research Conference.
- Advertised FL-PRISM meetings.

ACTION: The Working Group will prepare and publish four or more Eco Talk articles per year on invasive species. Topics may include responsible aquaria and water gardening, starry stonewort survey, hydrilla and hemlock wooly adelgid.

- Eco Talk: The threat of the hemlock woolly adelgid, Judy Wright, January 26, 2018.
- Eco Talk: The threat of the spotted lanternfly, Judy Wright, February 16, 2018.
- Eco Talk: Defending your home against the stink bug, Judy Wright, July 26, 2018.
- Eco Talk: How to recognize noxious weeds, Judy Wright, August 2, 2018.

ACTION: The Working Group will invite other stakeholders and partners to activities sponsored by the WQMA and its members and partners including March to Lake Day, Owasco Lake Day, invasive species workshops and watershed steward events.

- Invited members to participate in March to Lake Day and Owasco Lake Day.
- Invited members to participate in the Invasive Species Mapping Challenge held in July 2018.

4. 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, the Finger Lakes Institute's Water Chestnut Control Program, the Finger Lake's Institute's Starry Stonewort Collaborative, Hydrilla in Cayuga Lake program, and will assist as able in other control programs.

- Michael Greer of the United States Army Corps of Engineers gave a presentation at the March WQMA meeting on the 2017 treatment of hydrilla in Cayuga Lake and the planned 2018 treatment.
- Worked with Sterling Nature Center and the FL-PRISM to try to hold water chestnut handpulls of Sterling Creek. Received a Notice of Incomplete Application from the NYSDEC and the need to get written permission from all landowners along the creek. Unable to do it in time for Invasive Species week, so cancelled the event.
- Participated in the NYS Hydrilla Task Force conference calls.
- Updated County's hydrilla website.
- WQMA passed a resolution on November 1, 2018 supporting the efforts of the City of Auburn to lower Owasco Lake to a winter elevation of 709 a.m.s.l. to reduce the Asian clam population.
- Michele Wunderlich became a collaborator to the new Finger Lake Institute's Starry Stonewort Collaborative Project.

NUTRIENT WORKING GROUP

<u>Cayuga County Manure Management Working Group – 14-Point Action Agenda Items</u> to Address:

ACTION ITEM #1: Once the Cayuga Lake TMDL information is released, contact researchers involved with the project to obtain information on their recent literature search and other studies.

Resources Required:

- Request that Finger Lake Water Hub researchers/scientist look into the following issues:
 - 1. Appropriate sampling protocols to determine nutrient impact of substandard septic systems
 - 2. Methodology to determine the nutrient impact of waterfowl
 - 3. Compliance of commercial lawn care companies with phosphorus free fertilizer law
 - 4. Nutrient impact of drain tile discharges
 - o No Action

Other Priorities

PRIORITY: Septic Systems (includes holding tanks)

ACTION: Evaluate existing soil information and soil maps for septic systems located less than 100 ft. from the 100 year flood level on properties fronting Owasco Lake – Planning Department, Health Department.

• A records review of septic systems located around the lake was undertaken and septic systems located less than 100 ft to the lake have been mapped. A presentation regarding the information and potential impact provided to the Cayuga County Board of Health. More work regarding soil information is ongoing.

PRIORITY: Stormwater

ACTION: Encourage storm drain stenciling – Nutrient Working Group, Lake Associations

• No action.

ACTION: Encourage lakefront and stream corridor protection by property owners through education – CCE

• A draft of lakefront property owner's guidelines to protect water quality has been created and is being finalized.

ACTION: Promote and encourage the installation of permeable pavement where possible –Planning, Parks, OWLA and CCE

• Permeable pavement considered for Emerson Park but was too costly.

ACTION: Create guidelines for lake and stream front property management including landscaping to minimize nutrient loading – Nutrient Working Group

• A draft of lakefront property owner's guidelines to protect water quality has been created and is being finalized.

ACTION: Promote Municipal Ditch Maintenance guidelines- Nutrient Working Group

• The Municipal Ditch Maintenance guidelines have been sent to all municipalities within Cayuga County.

PRIORITY: Pet Waste

ACTION: Encourage pet owners to properly dispose of pet waste through education—CCE

• Eco Talk: Why you should pick up and properly dispose of dog waste, Judy Wright, April 13, 2018.

ACTION: Encourage municipalities to install pet waste receptacles in public parks and trails and ensure proper disposal – Planning

• No action.

PRIORITY: Golf Courses

ACTION: Educate managers and owners of golf courses about the importance of implementing nutrient management plans - Nutrient Working Group

No action.

PRIORITY: Lawn Care

ACTION: Publish and distribute information regarding the ban on phosphorus in lawn fertilizer and appropriate ways to manage lawn waste – CCE, OWLA, Lakefront Property Homeowners Associations.

• Information regarding the ban on phosphorus was sent to WQMA members for distribution to their homeowners associations.

- Eco Talk: Utilizing phosphorus for good, Judy Wright, March 29, 2018.
- Eco Talk: Tips for starting to compost, Judy Wright, May 24, 2018.
- Eco Talk: How your lawn care can help the lake, Judy Wright, June 21, 2018.
- Eco Talk: Why a few dandelions in your yard is OK, Judy Wright, August 31, 2018.
- WQMA Website: Article posted September 12, 2018 entitled "Dispose of Leaves Properly to Protect Water Quality."

PRIORITY: Burning

ACTION: Provide education on proper disposal of ash and the impact of fireworks – CCE, OWLA, Lakefront Property Homeowners Associations.

• No action.

PRIORITY: Agriculture

ACTION: Encourage farmers to establish or update their nutrient management plans and to allow SWCD to review them - SWCD

- Cayuga County SWCD has two Certified Crop Advisor's on staff, one of which is also a Certified AEM Planner, to assist agricultural operations with conservation planning.
- Cayuga County SWCD Staff continue to work with local agricultural producers to evaluate their individual operational concerns, in addition to nutrient management planning, through the Agricultural Environmental Management (AEM) Program. Conservation plans have been developed and/or updated on several farms to address concerns and opportunities tailored to each individuals' farm goals.

ACTION: Promote Manure Management Guidelines – Nutrient Management Group

• No action.

PRIORITY: All Areas

ACTION: Encourage DEC to funnel fines collected from violators in Cayuga County to the Environmental Protection Fund to be used for environmental projects – WQMA

• No action.

ACTION: Deliver "Welcome packages" to new homeowners about how to minimize their nutrient impact – Lakefront Property Homeowners Associations.

• Lakefront property owner's guidelines are in draft form. Once completed the document will be provided to Lakefront Property Homeowners Associations for distribution.

ACTION: Identify critical areas of high nutrient loading and encourage the use of Conservation Easements through cooperative agreements with the Finger Lakes Land Trust and The Nature Conservancy - Planning, CCE

• Finger Lakes Land Trust and the Nature Conservancy have met with various WQMA members to discuss priority areas.

SEDIMENT WORKING GROUP

<u>Cayuga County Manure Management Working Group – 14-Point Action Agenda Items</u> to Address:

ACTION ITEM #5: Craft and implement a program promoting: Local Standards for Sediment Control/Best Practices prepared by the Sediment Working Group (in a manner similar to Action Item #3 prepared by Nutrient Working Group).

- Specific Tasks and Timeline:
 - Identify potential areas of high resource concerns.
 - Evaluate the current list of Best Management Practices that are available and create a list of BMP standards and specifications to promote.
 - Cayuga County SWCD hosted 7 NYSDEC Endorsed 4 Hour Erosion and Sediment Control Workshops for Construction Site Contractors, Operators, Code Enforcement Officers and Planning Board/Zoning Board of Appeals Members.
 - Cayuga County SWCD encourages contractors and others associated with soil disturbance activities to install practices from the NYSDEC Standards and Specifications for Erosion and Sediment Control (Blue Book).
 - WQMA representatives continue to promote the document: "Guidelines for Municipal Maintenance of Roadside Ditches".
 - Seek funding that will assist with the implementation of sediment load reducing BMPs.
 - Cayuga County SWCD was awarded \$380,000 through the Water Quality Improvement Project Program to protect, stabilize and revegetate 4,000 feet of highly erodible streambank throughout Cayuga County. The project will improve water quality by reducing sediment and nutrients entering waterbodies from streambank erosion, including phosphorous that may lead to harmful algal blooms.

- Cayuga County SWCD received funding to assist with the offset of the costs associated with the implementation of cover crops through the Agricultural Nonpoint Source Abatement and Control Grant Program.
- Cayuga County SWCD was awarded funding through the NYS
 Department of Agriculture and Markets to promote soil health and
 protect water quality through the Eastern Finger Lakes Cover Crop
 Initiative.
- Implement sediment reducing BMPs throughout Cayuga County.
 - Cayuga County SWCD completed 350 feet of shoreline stabilization along Lake Ontario.
 - Cayuga County SWCD completed 600 feet of streambank stabilization along the Dutch Hollow Brook in the Owasco Lake Watershed.
 - Cayuga County SWCD completed 10 acres of Critical Area Seeding throughout Cayuga County.
 - Cayuga County SWCD worked with local Agricultural Producers to implement over 4,000 acres of cover crops.

ACTION ITEM #12: Seek sponsorship for and convene well-publicized annual conferences and other forums that focus on water quality and sustainable agriculture. Submit material highlighting issues relating to water quality and sustainable agriculture to agencies that publish newsletters containing information on such topics. This Action Item will also require the participation and coordination from the Communications & Outreach Working Group.

- Specific Tasks and Timeline:
 - Hold specific events that highlight and promote the proper utilization of Best Management Practices that protect water quality and enhance sustainable agriculture.
 - Partners for Healthy Watersheds held a farm tour and field demonstration titled "Manure Matters: From Cow to Crop" at Fessenden Farm in King Ferry.
 - Partners for Healthy Watersheds held an educational event titled "Farming in the Watershed: Tile Drainage and Farm Field Practices" at Cayuga Community College in Auburn.
 - Cayuga County SWCD Staff offered a Post Flood Emergency Stream Intervention Training for Municipal Officials, Equipment Operators and Contractors.
 - Seek funding opportunities to help offset the costs to conduct educational public opportunities including conferences, forums, and demonstration and training events.