

Cayuga County Water Quality Management Agency



2015 Year End Report
Approved 2/4/2016

CAYUGA COUNTY WQMA 2015 YEAR END REPORT

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.

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2015 Cayuga County Water Quality Management Agency Membership

Chair: Eileen O'Connor

Vice-Chair: Doug Kierst

Cayuga County Legislature's Environmental Advisors:

Director of Cayuga County Planning and Economic Development

Director of Cayuga County Environmental Health

Superintendent of Cayuga County Buildings and Grounds Department

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 Owasco

City of Auburn

Cayuga County Association of Town Supervisors

Cayuga County Association of Villages

Edward Wagner

Vicky Murphy

Vacant

Harry Hinman

Representatives from Waterbody Associations in Cayuga County

Cayuga Lake Watershed Network

Duck Lake Association

Lake Como Association

Owasco Watershed Lake Association (OWLA)

Skaneateles Lake Association Inc.

Jim Young

Dale Powell

Barb Harvey

Robert Brower

Kathleen Gorr

Partners

Cayuga County Water and Sewer Authority

Center for Environmental Initiatives

Central New York Regional Planning and Development Board

Finger Lakes Institute at Hobart and William Smith Colleges

Finger Lakes Partnership for Invasive Species Management

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

Owasco Lake Watershed Management Council

Region 7 Fish and Wildlife Management Board

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: www.cayugacounty.us/wqma.

BACTERIA WORKING GROUP

1. PRIORITY: Septic Systems

ACTION: Visit properties in Tompkins County in search of problem septic systems – Watershed Inspection Program

- Owasco Lake Watershed Inspection Program is working with Tompkins County Health Department and Tompkins County SWCD on strategy to assess Owasco Inlet tributaries in Tompkins County. Tributary assessments will include identifying septic discharges/outfalls/ faulty systems within close proximity to protected tributaries. Ithaca College may be interested in collaborating with Community Health students

ACTION: Review websites advertising short term rentals around Owasco Lake and visit those properties more frequently during the summer – Watershed Inspection Program

- Owasco Lake Watershed Inspection Program discovered a number of short term rentals around Lake (~20). Rental properties were located in the south to mid-lake (east and west shore) areas, however the majority of units are located on the north end of the lake with municipal sewer available. Inspections from the shore and upland were conducted throughout the summer months to inspect for failing systems. Inspections were conducted from shore and upland. Porta-johns were common when large numbers of cars were seen on weekends at larger units. No failing septic systems were identified.

ACTION: Deliver “Welcome packages” to new homeowners about proper septic system maintenance – Watershed Inspection Program

- Owasco Lake Watershed Inspection Program creating a “resident friendly” format of the rules and regulations packet for distribution to new/existing residents in early 2016.
- The Health Department provided septic system informational files to homeowners who installed new septic systems.

ACTION: Continue distribution of updated NYS Health Department brochure on septic systems- CCE, Health Department and Watershed Inspection Program

- Septic System maintenance info included in the residential “Welcome Packets” being distributed by the Owasco Lake Watershed Inspection Program.
- Over 60 copies of the updated brochure were distributed this year at the Cooperative Extension headquarter’s brochure racks.

ACTION: Support the project to extend public sewers to Koenig Point in Owasco – WQMA

- Owasco Lake Watershed Inspection Program submitted a letter to editor regarding Owasco District #3 (Citizen).

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ACTION: Visit properties in densely populated areas (i.e. mobile home parks, clusters of camps nearshore, etc.) on a more frequent basis to monitor for septic system failure – Watershed Inspection Program

- Owasco Lake Watershed Inspection Program conducted weekly seasonal inspections during 2015 in Cascade, Koenigs Point, Indian Cove, and Cayuga Estates. No failing septic systems were identified.

ACTION: When meeting with Health Department staff in Onondaga and Tompkins Counties, encourage these counties to consider adopting a septic system inspection program similar to Cayuga County – Watershed Inspection Program

- Owasco Lake Watershed Inspection Program has been working with Tompkins County and Groton. Plan to reach out to Onondaga County Health in 2016.

2. PRIORITY: Waterfowl

ACTION: Support the continuation of the USDA program to remove resident geese from Emerson Park – WQMA

- No action taken.

ACTION: Research the effectiveness of light reflecting prisms at the park to discourage waterfowl. – Parks

- Michele Lincoln researched this on the internet and did not find anything that appeared to be of use for Emerson Park. The Watershed Specialist, Drew Snell, assisted with this effort and they are still considering options for 2016, including light deflectors/lasers and prisms. Costs of deterrents may prohibit options.

ACTION: Encourage elected officials to allow nuisance permits for seagulls – Parks

- No action taken.

ACTION: Continue discouraging the feeding of waterfowl - Parks, Duck Lake Association

- Ongoing effort at Emerson Park.

ACTION: Work with Dave Figura of the Post Standard and the editor of the Citizen to write articles encouraging hunting since there is a longer hunting season – Parks

- Parks supports hunting off the lake shore of Emerson Park.
- Dave Figura of the Post Standard wrote the article “Auburn's Emerson Park allows waterfowl hunting to reduce geese numbers” that was published on December 6, 2015.

ACTION: Continue harassment of waterfowl at the beaches – Parks

- Ongoing effort at Emerson Park.

3. PRIORITY: Stormwater

ACTION: Install medallions on storm drains–Watershed Inspection Program

- Owasco Lake Watershed Inspection Program placed new medallions throughout Owasco and Moravia. Additional medallions were ordered.

ACTION: Promote the use of rain barrels and rain gardens – CCE

- Over 25 copies of an “Introduction to Rain Gardens” brochure jointly developed by CCE Cayuga County and CCE Onondaga County were distributed by Master Gardener volunteers in the office and at community events.
- CNY RPDB distributed a quarterly electronic newsletter, "Gardens & Gutters." Each edition promoted stormwater management including the use and maintenance of rain barrels and rain gardens. The subscriber list includes many Cayuga County individuals. The newsletter is also posted on the CNY Stormwater website and made available to lake associations and municipalities for their use.

ACTION: Provide maps to municipalities showing areas of high risk when ditching in the spring and fall – Planning

- Planning conferred with Owasco Lake Watershed Specialist Drew Snell who prepared maps showing these areas within the Owasco Lake Watershed.
- Planning will also be working with Town and Village elected and appointed officials from municipalities within the Owasco Lake Watershed beginning in January (when new elected officials take office) on expansion and adoption of regulations and/or best practices for sediment and erosion control – including ditching practices.

ACTION: Educate homeowners regarding the impact of landscaping on stormwater - CCE, Watershed Inspection Program

- Owasco Lake Watershed Inspection Program presented a multitude of ideas and suggestions, to general public at Lake Day, involving residential stormwater management. List of ideas and suggestions will be included in homeowner informational packets.
- CNY RPDB distributed a quarterly electronic newsletter, "Gardens & Gutters." Each edition promoted stormwater management including the use and maintenance of rain barrels and rain gardens. The subscriber list includes many Cayuga County individuals. The newsletter is also posted on the CNY Stormwater website and made available to lake associations and municipalities for their use.
- CNY RPDB published a 4-page supplement to the Post Standard which included the Cayuga County edition on 4/21/15. The supplement included focus on residential stormwater management issues, best management practices and educational opportunities.
- Over 125 individuals visited the CCE - Master Gardener volunteers in person this season. Every visitor had an opportunity to gather brochures and publications including several NYS-DEC brochures (Water Quality & Home Pesticide Use, Pesticide Application & Water Quality, and Home Pest Management & Children).

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ACTION: Create and maintain an inventory and condition of ditches – Watershed Inspection Program

- Owasco Lake Watershed Inspection Program staff conducted and continues to inventory, assess, and monitor unstable and unvegetated ditches. Nearly 5 miles of disturbed ditch length have been identified in 2015. Locations of newly vegetated ditches are provided to SWCD.

ACTION: Install sediment traps as a pilot project - Watershed Inspection Program

- Owasco Lake Watershed Inspection Program worked to get sediment traps installed:
 - First trap – installed with Town of Owasco on Town Hall Road
 - Second trap – pending installation on Martin Road – Town of Owasco

ACTION: Reach out to highway superintendents regarding proper ditch maintenance – SWCD, Watershed Inspection Program

- SWCD staff attended three Highway Superintendent meetings.
- SWCD staff participated in numerous field visits with Highway Department Superintendents to review erosion and offer advice.
- Owasco Lake Watershed Inspection Program staff attended three highway supervisors meetings and provided ongoing Inspection Program information and updates, particularly with ditching and educational opportunities.
- Owasco Lake Watershed Inspection Program staff organized a one-day workshop to demonstrate new products and practices associated with ditching and slope stabilization for highway staff.

ACTION: Investigate which County properties might be good locations for permeable pavements based upon soils – SWCD

- SWCD does not have any jurisdiction over decisions that are made with regards to County property. The County had not contacted the SWCD to seek assistance pertaining to on-site soil evaluations for suitability of permeable pavement.

ACTION: Encourage the installation of permeable pavement where possible – Planning, Parks

- Parks identified areas where the permeable pavement could be used. Two in particular are the Boat Launch Parking Lot and the Ag Museum Parking Lot.
- Planning incorporated these actions into the Emerson Park Master Plan – encouraging this and other environmentally sustainable practices where appropriate.
- CNY RPDB published a 4-page supplement to the Post Standard which included the Cayuga County edition on 4/21/15. The supplement included focus on residential stormwater management issues, best management practices and educational opportunities.
- CNY RPDB conducted a 5-course Stormwater Management Training Series for design professionals which included siting, design & maintenance of porous/permeable pavement.

4. PRIORITY: Pet Waste

ACTION: Provide education regarding proper handling of pet waste –CCE, Watershed Inspection Program, Duck Lake Association

- Owasco Lake Watershed Inspection Program will disseminate information on pet waste handling to homeowners in their homeowner information packets.
- CNY RPDB developed a pet waste bill stuffer and brochure, "Too Cute to Pollute." Both were made available to municipalities through the WQMA.
- The Post Standard supplement and Gardens & Gutters newsletters prepared by CNYRPDB also directly addressed pet waste management.
- CCE - Master Gardener volunteers & CCE staff answered 60-70 categorical questions per year on pet impacts. In addition to stressing proper pet waste disposal, CCE refers citizens to "The Homeowners's Lawn Care & Water Quality Almanac", a Cornell University publication available locally for \$10.00. Other common resources for "lawn pet spots" include the brochure "Repetitive Overseeding Can Help," an IPM publication, and "Turfgrass Problems" - NRAES – Publication #125 pps 22-23.

5. PRIORITY: Agriculture

ACTION: Encourage DEC to increase penalties for water quality violations - WQMA

- WQMA sent a letter to NYSDEC on March 5, 2015 recommending that penalties be increased for violations caused by negligence or deliberate malfeasance.

ACTION: Encourage DEC to increase the frequency of inspections of CAFOs – WQMA

- No action taken.

ACTION: Create sampling program plan around CAFOs during runoff, snowmelt and rain events -Watershed Inspection Program, Health, Planning, SWCD

- Owasco Lake Watershed Inspection Program staff worked with OWLA and County Planning to sample tributaries around the watershed during precipitation events throughout 2015.
- SWCD did not receive any funding for sampling, therefore, a program was not implemented through SWCD. This action would pertain more to the other Departments/Agencies listed on the action plan.

ACTION: Encourage cooperation with DEC when determining CAFO penalties -WQMA

- No action taken.

ACTION: Encourage DEC to include environmental projects as part of any penalties issued – WQMA

- No action taken.

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ACTION: Encourage farmers within the Owasco Watershed to allow SWCD to review their nutrient management plans. - SWCD, Watershed Inspection Program

- Through a combination of meetings and farm visits, the SWCD discussed Nutrient Management plans with ten farms in the Owasco Lake Watershed. SWCD provided review/comments on three plans.
- Owasco Lake Watershed Inspection Program worked closely with SWCD to review and spot check nutrient management plans and inspect best management practices implementation according to plans.

ACTION: Increase inspections of agricultural lands during the winter and spring - Watershed Inspection Program

- Owasco Lake Watershed Inspection Program regularly monitored spring runoff and manure applications on snow during the late winter/early spring of 2015. In addition to windshield surveys, staff observed and canvassed the entire watershed from helicopter. Little snow covered/saturated ground application was observed during early 2015.

ACTION: Provide roadshow to help inform manure applicators – SWCD

- SWCD organized a manure applicator training that was held at the CCE of Cayuga County office.
- In the February 2015 edition of the CCE Cayuga Ag Alert newsletter over 620 Cayuga County farm enterprises were alerted of a “New Manure Application Cost Study 2012,” released from Cornell Pro-Dairy program specifically involving liquid manure. The online link for direct on farm printing was provided as well.

ACTION: Educate planners on numbered streams, bedrock, susceptible soils, and other available resources at the Cayuga County Planning Department – SWCD

- SWCD staff routinely mentions the additional planning tools available to planners through the Cayuga County Planning Department at trainings and workshops that we participate in. They were mentioned at Soil Health Seminar, manure applicator training, NYS DEC Endorsed 4 hour erosion and sediment control workshop and information provided by staffing the Empire Farm Days booth.

ACTION: Encourage the use of model leases which specifies spreading conditions that are allowed – CCE

- No action taken.

ACTION: Create a relationship network between farmers who have excess manure and crop farmers/gardeners who may need fertilizer – CCE

- CCE Field Crop & Dairy educators work in conjunction with many county farms. They often discuss situations based upon Nutrient Management Plans and provide input upon soil testing which provides accurate indications of specific soil amendment needs. Each year over 300 duplicate county soil test results are received from the Cornell Soils Lab.

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ACTION: Provide education regarding the risk of spreading of manure on frozen ground, or during rainy season – SWCD, CCE

- SWCD organized a manure applicator training that was held at the CCE of Cayuga County office. CCE advertised this event to over 620 farm enterprises via the CCE Ag Alert newsletter.
- SWCD & CCE staff participated on the Cayuga County Manure Management Working Group.

ACTION: Seek grants to cover costs of the installation of BMPs along watercourses – SWCD

- SWCD applied for eight grants to implement BMPs on Agricultural operations.
- SWCD was notified that they received four grants. Three of them were located in the Cayuga Lake Watershed and included BMPs consisting of Silage Leachate Control and Treatment System, Water and Sediment Control Basins (WASCOBs), Diversion, Underground Outlet, Heavy Use Area Protection, Prescribed Grazing System and Manure Management. The final one was for the Owasco Lake Watershed and included the implementation of WASCOBs, Subsurface Drainage, Underground Outlet and Critical Area Seeding.

ACTION: Investigate the feasibility of providing tax breaks or incentives to farmers who maintain buffers – Planning, SWCD

- Planning has included requirements for active adoption of Tier 1-3 AEM Plans by farmers applying for the next round of State Funding under the Farmland Protection Implementation Grant program (aka – “Purchase of Development Rights”). The County “Pre-Application” provides higher scoring and preferable consideration for farm applications that take steps to buffer and protect natural resources – especially water quality.
- SWCD does not have any taxing authority or means to pay incentives to farms for buffer installation. This decision would have to come from Cayuga County or local municipalities.

ACTION: Encourage the use of Conservation Easements, Finger Lakes Land Trust, and American Farmland Trust – Planning, CCE

- Planning has worked with FLLT on their efforts to secure conservation easements in Owasco Flats in particular and supports FLLT efforts in other conservation areas as well.
- CCE staff held an orientation/direct meeting with Finger Lakes Land Trust staff member, Zack O’Dell, at the CCE Cayuga office.
- Planning is working closely with the New York Agricultural Land Trust (“NYALT”) to expand conservation of farmland within the County (and requiring best ag-practices as noted above).

ACTION: Encourage/require water quality improvement practices to protect streams on properties that receive County or State funding – Planning

- Planning does this through our planning and project development work whenever the Department has the authority and opportunity to do so, whether or not the properties receive funding from the County or State.

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- Planning staff, along with staff from SWCD, County Highway, and County Division of Environmental Health, are members of the County 239 L&M Committee which considers intermunicipal impacts associated with certain development proposals within Town and Villages. This committee places a particular emphasis on water quality impacts during these reviews.

ACTION: Identify farms where cows have access to streams – Watershed Inspection Program and SWCD

- SWCD identified two instances in which cows had access to a stream. The landowners were notified about the concern and possible corrective measures were presented.
- Owasco Lake Watershed Inspection Program followed up with animal access concerns throughout the watershed during 2015. Verified one farm with regular animal access to Owasco Inlet waters - a letter was sent to this landowner requesting compliance and offering assistance. Since then animals have not been observed accessing the Inlet at this location. A second site has been verified with animal access. The Owasco Lake Watershed Inspection Program is actively working on remedy to address this site, including water sampling. The Owasco Lake Watershed Inspection Program is continuously monitoring tributaries for animal access and working with SWCD to approach landowners with alternative watering suggestions.

ACTION: Seek funding opportunities for fencing and alternative water source to keep cows out of streams – SWCD

- SWCD applied for one grant that would implement measures to restrict animal access to streams. Unfortunately, the grant did not rank high enough to get funding.

ACTION: Encourage cover crops, especially in areas with steep slopes and highly erodible soils – SWCD

- The SWCD provided guidance and oversight on the implementation of 1,000 acres of cover crops in 2015.

ACTION: Provide education on the positive benefits of cover crops - SWCD

- SWCD held a Soil Health Seminar in which the use of cover crops was discussed and encouraged.
- Information was also shared by SWCD staff at an educational booth at Empire Farm Days.

ACTION: Seek grants to encourage the use of cover crops – SWCD and OWLA

- SWCD solicited farms for interest in implementing cover crops. Unfortunately, there were no participants that were interested and eligible to participate on the grant. Many landowners already install cover crops utilizing their own funding, or have recently been a recipient of funding and are no longer eligible to apply. SWCD staff will continue to look for grants where/when applicable.

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ACTION: Encourage Manure Injection – SWCD

- SWCD staff promotes the use of injection methods, where applicable, as a manure management practice. Information is shared with landowners and planners through site visits, phone calls, workshops, meetings and training opportunities.

ACTION: Reach out to the non-CAFO farmers to improve their practices – SWCD and CCE

- SWCD staff works with all sizes and types of agricultural operations throughout the County to provide technical assistance pertaining to the implementation of Best Management Practices. Outreach and assistance is shared with landowners through site visits, phone calls, workshops, meetings and training opportunities and also through the Agricultural Environmental Management (AEM) Program.
- CCE Cayuga Ag staff share updates on field days, crop demonstrations, weed science meetings, and tillage practice demonstrations to over 620 farm enterprises via the CCE Ag Alert newsletter which was directly mailed eight times in 2015.

INVASIVE SPECIES WORKING GROUP

1. PRIORITY: Create a list of target invasive species

ACTION: The Working Group will review the FL-PRISM's list of priority species of concern and use that as starting point to create a list of target species of the WQMA based on: their proximity to or presence in Cayuga County and important areas for conservation; how directly their attributes correlate with invasiveness; the vulnerability of existing populations and ecological communities to their invasion; and the severity of the biological and economic consequences that could result from their spread.

- Michele Wunderlich participated in the Aquatic Working Group of the FL- PRISM (Finger Lakes Partnership for Invasive Species Management) lead by Hilary Mosher as they developed their five year strategic plan. This group developed a list of priority species of concern and priority areas. Priority aquatic species are hydrilla, water chestnut, starry stonewort, Asian clam, bloody red shrimp, round goby and HABs. The Working Group is using this as their target list of species at this time.
- CNY RPDB is a member of the FL-PRISM Steering Committee and directs attention to Cayuga County's priority aquatic invasive species issues and concerns during policy making and grant ranking activities.

2. PRIORITY: Information dissemination

ACTION: The Working Group will gather and disseminate information to the WQMA and the public on the target species determined in #1 and any new invasives to the County.

- Michele Wunderlich distributed information to the WQMA when a new infestation of water chestnut was found in Seneca County in Cayuga Lake. When SWCD found a new infestation of water chestnut in Little Sodus Bay, Michele Wunderlich created and sent a flyer to the Village of Fair Haven for distribution. SWCD hand pulled this infestation.

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- Michele Wunderlich sent the WQMA information from the FL-PRISM on the target species throughout the year.
- CCE Cayuga distributed over 250 copies of the NYSDEC, Stop Aquatic Hitchhikers brochures in community events, classroom presentations and public access bulletin racks.

ACTION: The Working Group will update and maintain the Cayuga County WQMA website and promote the FL-PRISM website.

- Michele Wunderlich updated and maintained the Cayuga County WQMA website, which included adding links to documents from projects conducted by the WQMA on invasive species and the FL-PRISM.
- Michele Wunderlich updated the Weeds Watch Out! website: (<http://www.cayugacounty.us/Departments/Water-Quality-Management-Agency/Weeds-Watch-Out>).

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

ACTION: The Working Group will survey for existing target species infestations.

- SWCD survey as they conduct their weed harvesting in the Lakes and Little Sodus Bay. They found an infestation of water chestnut in Little Sodus Bay and hand pulled it.

ACTION: The Working Group will conduct Asian clam diving inventory surveys in Owasco Lake to determine the population and effectiveness of control methods.

- The Working Group surveyed the Emerson Park area for Asian clams on July 31st.
- The Working Group surveyed the Burtis Point area on August 12th.
- Michele Wunderlich and Bruce Natale collected Asian clams on September 23rd to send to the Darrin Fresh Water Institute for research on a possible parasite.
- Michele Wunderlich presented on the survey of the Asian clam at a WQMA meeting.

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

- Bruce Natale assisted with the identification of hemlock wooly adelgid populations in Cayuga County.
- Stefan Lutter & Cornell Faculty, Mark Whitmore, held a public hemlock wooly adelgid awareness meeting in the Moravia Masonic Hall.
- Stefan Lutter has reinvigorated the Master Forest Owner program and in the June 2015, Ag Alert and a subsequent Eco-talk article made the public aware of this site visit based scouting opportunity forest owners concerned about hemlock wooly adelgid.
- SWCD discovered the population of water chestnut in Little Sodus Bay.
- The Working group surveyed the Burtis Point area in Owasco Lake for Asian clams.

4. PRIORITY: Education, training and public participation

ACTION: The Working Group will provide educational materials and training programs on the WQMA priority species of concern to WQMA members, lake associations, nurseries, marinas and boat launches, fishing bait sellers and users, aquarium sellers and users, sport and outdoor shops and other citizen groups

- Michele Wunderlich attended the OWLA meeting in July to present on invasive species in Owasco Lake and how to prevent new ones from entering.
- Michele Wunderlich held a presentation for the public on invasive species on July 15th as part of NY Invasive Species Week.
- Michele Wunderlich taught kids about invasive species as part of Conservation Field days.
- Bruce Natale presented on invasive species as part of Wells College's Sustainability Perspectives series.
- Doug Ververs attended three meeting of the NYS-DEC Great Lakes Action Agenda SE Working Group as well as hosted one of their meetings for 30+ attendees in the CCE Cayuga office.

ACTION: The Working Group will prepare and publish two Eco-Talk articles per year on invasive species.

- Stefan Lutter of CCE wrote two articles for The Citizen:
 - June 4th: What makes a plant native to its area?
 - May 21st: The emerald ash borer is still a threat.

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.

- The Working Group helped advertise March to Lake Day and Owasco Lake Day.
- The invasive species presentation at the OWLA meeting and the one held during invasive species week were advertised at Owasco Lake Day.

5. PRIORITY: Invasive species control

ACTION: The Working Group will support existing invasive species control programs including the County's aquatic harvesting program and will assist as able in other control programs.

- The WQMA passed a resolution WQMA recommending to the Cayuga County Legislature that budget reductions to CCSWCD and CCE, and any other agencies/ departments engaged in water quality protection and improvement work be restored to the budget to address water quality concerns and that potential strategic increases be considered.

NUTRIENT AND SEDIMENT REDUCTION WORKING GROUP

1. PRIORITY: Local government outreach and assistance

ACTION: Planning will work with Cayuga County Towns and Villages, beginning with those adjacent to Owasco Lake, to encourage adoption of ordinances similar to Owasco’s Erosion and Sediment Control Plan for Small Homesite Construction ordinance as well as identifying “best practices” that ensure these measures are implemented at the Town and Village level.

- Planning assisted in the data collection for the “Owasco Lake Watershed Institutional Framework and Assessment of Local Laws, Programs, and Practices Affecting Water Quality Report” that was developed as part of the Owasco Lake Watershed Management and Waterfront Revitalization Plan. Planning held off of working with the Town and Villages until this document was completed which was completed in late October to see which of them needed this assistance.
- Planning will begin working with Town and Village elected and appointed officials from municipalities within the Owasco Lake Watershed beginning in January 2016 (when new elected officials take office) on expansion and adoption of regulations and/or best practices for sediment and erosion control.

ACTION: Planning will conduct training to selected municipalities regarding incorporating steep slope protections in their development review and/or building permit process.

- Planning assisted in the data collection for the “Owasco Lake Watershed Institutional Framework and Assessment of Local Laws, Programs, and Practices Affecting Water Quality Report” that was developed as part of the Owasco Lake Watershed Management and Waterfront Revitalization Plan. Planning held off of working with the Town and Villages until this document was completed which was completed in late October to see which of them needed this assistance.

ACTION: Planning will investigate the adoption of storm water regulations within the County and explore viable catch basin maintenance programs that could be implemented at the local level during subdivision and other development review procedures.

- No action taken.

ACTION: SWCD will encourage code enforcement officers and highway department personnel to attend their Erosion and Sediment Control Workshops for Construction Site Contractors and Operators.

- SWCD held nine NYS DEC Endorsed 4 hour Erosion and Sediment Control Workshops for Construction Site Contractors and Operators.

ACTION: SWCD will encourage highway department personnel to participate in training from Cornell Local Roads Program and follow ditch maintenance practices that will reduce erosion.

- SWCD and OLWIP staff attended three Highway Superintendent meetings.
- SWCD and OLWIP staff participated in numerous field visits with Highway Department Superintendents to review erosion and offer advice.
- Owasco Lake Watershed Inspection Program staff provided ongoing Inspection Program information and updates, particularly with ditching and educational opportunities.

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- Owasco Lake Watershed Inspection Program staff organized a one-day workshop to demonstrate new products and practices associated with ditching and slope stabilization for highway staff.
- SWCD completed roadside ditch hydroseeding work for Cayuga County Highway Department and the Towns of Fleming, Niles and Scipio Highway Departments.
- SWCD collaborated with the Town of Scipio on a road bank stabilization project in the Owasco Lake Watershed.

2. PRIORITY: Best management practices

ACTION: Promote the sediment and nutrient reduction practice methodology created by the Working Group.

- The Working Group reviewed the decision support tool and added new best management practices from the Whole Farm Best Practices Partnership.
- The Working Group integrated sustainable agriculture practices into the decision support tool.

ACTION: Monitor the preparation of watershed management plans and other County plans and advocate including strategies for addressing reducing sediment and nutrient loading.

- The Working Group reviewed the goals of the Owasco Lake Watershed Management Council.
- WQMA members participated on the Owasco Lake Watershed Management Plan Advisory Committee and provided comments and input on sediment and nutrient loading strategies during development of the plan.

ACTION: Continue to focus sediment and nutrient reduction activities in the County based on the New York State Department of Environmental Conservation's priority waterbodies list and the Dutch Hollow Brook Watershed Restoration Grant Project.

- SWCD completed the installation of a grass waterway as part of the project.

3. PRIORITY: Watershed tools and models

ACTION: Review current work in creating GIS based watershed delineation tools and nutrient loading models and determine opportunities for practical applications in Cayuga County, such as EPA's My Watershed Locator Tool and the web based runoff generating area mapping tool developed by Cornell University.

- No action taken.

4. PRIORITY: Public participation

ACTION: Engage Lake Associations in implementing programs to protect water quality such as the "adopt a shoreline/stream" approach.

- CCE Cayuga held a public Information meeting at the Ward O'Hara Ag Museum on July 29th on harmful algal blooms (HAB). Speakers included Dr. Nelson Hairston from Cornell University and David MacNeill of NY Sea Grant as well as Stefan Lutter from

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CCE Cayuga. Nearly 70 people attended that evening session which also include water quality sample organism identification.

SOLID WASTE WORKING GROUP

1. PRIORITY: Work plan development

ACTION: Develop a work plan for the Solid Waste Working Group.

- This group was dissolved by consensus on April 2, 2015 by the WQMA.

ADDITIONAL WORK

Presentations:

- Liz Moran from Ecologic, LLC. presented information on the Cayuga Lake Modeling Project, which is a detailed study of the sources and fate of phosphorus in Cayuga Lake.
- Drew Snell presented on the ditch assessment that was conducted in the Owasco Lake Watershed, work that has been conducted by Rebecca Schneider of Cornell University on road ditches in the Cayuga Lake Watershed, and the sediment traps that have been built by the Cayuga County Soil and Water Conservation District for placement in high velocity ditches in the Owasco Lake Watershed.
- Hilary Lambert discussed the update of the Cayuga Lake Watershed Restoration and Protection Plan and requested volunteers from the Cayuga County WQMA to participate on the Watershed Advisory Committee or one or more of the Technical Advisory Committees.
- Scott Kishbaugh from the New York State Department of Environmental Conservation presented on harmful algal blooms and the NYS plan for the summer.
- Tim DiGuilio, the Division of Water Engineer from the New York State Department of Environmental Conservation (NYSDEC), discussed the work being done in this region by the NYSDEC and support they could give.
- Jason Cuddeback presented on “Innovative Farming Practices in Cayuga County.”

Resolution:

Resolution passed by WQMA recommending to the Cayuga County Legislature that budget reductions to CCSWCD and CCE, and any other agencies/departments engaged in water quality protection and improvement work be restored to the budget to address water quality concerns and that potential strategic increases be considered.

Correspondence by the WQMA:

- On March 5, 2015 letters sent to the New York State Department of Environmental Conservation, New York State CAFO working group and the County's State elected officials recommending the following:
 - application of liquid manure be avoided on frozen and/or snow covered soils, when soils are saturated from rainfall or snowmelt, or when a check of the 48 hour weather forecast predicts snowmelt or runoff conditions;

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- an increase in penalties for violations of current water quality laws and regulations in cases where the violation has been caused by negligence or deliberate malfeasance;
- and encouraging adoption of State and Federal laws and regulations that identify acceptable parameters for nutrients leaving farm operations.”
- A letter was sent on February 25, 2015 in support of the proposal “The Critical Watershed and Lake Restoration Actions Program of OWLA.”
- Letter was sent on May 12, 2015 to the EPA in support of the prohibition of the discharge of all boats into all the waters of Cayuga County.
- Letter was sent on July 31, 2015 to the NYSDEC, State Representatives and County Legislators about the WQMA's concern of the sediment washing into our waterbodies and requesting that they create a plan to address this issue.

Ad Hoc Committees:

- The Communication Ad Hoc Committee was formed to develop a communications plan of what the Cayuga County WQMA is and the agencies and organizations involved.
 - This Committee worked with Cayuga County Planning and Economic Development Department to submit a request that the Finger Lakes Lake Ontario Watershed Protection Alliance funding be used to hire a professional to create a communications/marketing plan but it was denied.

Harmful Algal Blooms:

- The New York State Department of Environmental Conservation (NYSDEC), the Cayuga County Health Department, the Cayuga County Planning and Economic Development Department, the OWLA, and the Owasco Lake Watershed Inspection Program (WIP) implemented a plan to respond to Harmful algal blooms occurrences in 2015. The WIP conducted weekly visual surveillance of the entire shoreline of Owasco Lake. When blooms were seen, water samples were collected and sent to SUNY ESF to be analyzed for the presence of blue-green algae and their related toxins. In addition, other water quality parameters, such as phosphorus levels, in the area of the blooms were evaluated. The Health Department informed the public of these occurrences and provided health risk information through various outreach activities. NYSDEC provided information on its webpage and OWLA kept their members informed. Significant blooms associated with high toxin levels were seen from August through October

Others:

WQMA:

- Participated in the development of the Owasco Lake Watershed Management and Waterfront Revitalization Plan.
- Promoted the cleanup of County ditches because they are waterways for Drinking Water Week.
- Participated on the Advisory Committee to the Cayuga County Manure Management Working Group and on the Cayuga County Manure Management Working Group. They released the “Recommendation Report of the Advisory Committee to the Cayuga County Manure Management Working Group” and "Improving Manure Management: A Fourteen-Point Agenda for Action” and held two public meetings.

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- Submitted updated Waterbody Inventory/Priority Waterbody List Assessment Worksheets for Lake Como, Cayuga Lake and Owasco Lake to the NYSDEC for their data solicitation for the 2016 Clean Water Act Section 303(d) List.

Health Department:

- Reported two numbered streams in Genoa where all the vegetation was removed and the farmer channelized the streams into ditches to the NYSDEC and ACOE.
- Reviewed over 2000 septic system inspection reports that were submitted to the Health Department by certified inspectors.
- Reviewed design proposals for 78 new septic system installations and 73 modified/ repaired septic system installations.
- Followed-up on 37 septic system failures and violations of the Sanitary Code.
- Participated on the Cayuga County Manure Management Working Group

Parks:

- Is working with an architect to advance the Emerson Park Master Plan.

Planning:

- Submitted a Consolidated Funding Application to expand the Owasco Lake Watershed Management and Waterfront Revitalization Plan to include the Environmental Protection Agency's nine key elements.
- Held a planning board training on July 15th on site plan review.
- Participated in the Regional Emerald Ash Borer Task Force in cooperation with CCE.
- Led a paddle on the Owasco Inlet on June 20th for the Finger Lakes Land Trust.
- Led the development of the Owasco Lake Watershed Management and Waterfront Revitalization Plan.
- Participated on the Cayuga County Manure Management Working Group

Solid Waste Office:

- In cooperation with CCE and SWCD conducted electronics collection events in May (Earth Week), September (Fall Event) and November (America Recycles Day). There were 20% more cars and volume for the electronics collection in May than previously (1006 cars).
- In cooperation with CCE and SWCD collected approximately 2500 tires and 22 pounds of lead from about 192 deliveries from the June tire collection event.
- In cooperation with CCE and SWCD held the Household hazardous waste collection event in October.
- Participated in a regional meeting with the NYSDEC Commissioner and Materials Management staff to discuss how to make solid waste management sustainable and issues with the State's computer recycling law.

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SWCD:

- Provided assistance on a streambank stabilization project in the Cayuga Lake Watershed.
- Submitted nine applications to the NYS Agricultural Nonpoint Source Abatement & Control Grant Program for a total of approximately \$3.6 million.
- Contracted with the NYS Department of Environmental Conservation (NYSDEC) for critical area stabilization.
- Worked on their five year Agricultural Environmental Management (AEM) strategy.
- Worked on a retrofit of a stormwater basin in the Town of Owasco that is funded by the WQIP Program.
- Fixed up minor winter damage to the new shoreline stabilization project at Emerson Park.
- Received \$75,000 for work on the Moon Beach shoreline from the Great Lakes Commission through FLOWPA.
- Met with the Ag Commissioner to discuss concerns that they have with the grant process and other issues including climate resiliency, expanding roles of districts, and buffer program restrictions and the costs that the program does not cover.
- Assisted the Town of Venice with a plan to stabilize Mather's Road.
- Worked with the City of Auburn on their wood waste recycling.
- Received an Ecosystem Based Management Soil Health Grant for \$25,000.
- Received a \$6,000 grant to repair the streambank at Aqueduct Park in Weedsport.
- Participated on the Cayuga County Manure Management Working Group

Duck Lake Association:

- Conducted herbicide application during the summer.
- Participated in the Citizen's Statewide Lake Assessment Program (CSLAP).

Lake Como Association:

- Conducted a roadside cleanup of Lake Como Road.
- Promoted boating training on June 13th at Lake Como.
- Participated in the Citizen's Statewide Lake Assessment Program (CSLAP).

OWLA:

- Circulated a petition to ban spreading of liquid manure on frozen ground.
- Received \$600,000 for the "Enhanced Restoration Actions Program" request for funds.
- Donated \$5,000 towards the surveying costs of a parcel of land at the south end of Owasco Lake and Owasco Flats that the Finger Lakes Land Trust is working on securing a conservation easement for.

Skaneateles Lake Association, Inc.:

- Controlled Eurasian watermilfoil through matting.
- Hired boat stewards to check for aquatic vegetation on boats.
- Improved their website.
- Received a \$7,500 grant from Onondaga County for the Eurasian watermilfoil matting program.
- Worked on trying to get consistent regulations for shoreline properties on Skaneateles Lake.

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Cayuga County Sewer and Water Authority:

- Assisted Village of Fair Haven in development of new Local Sewer Law
- Filled Full-Time Water Maintenance Person position
- Coordinated with County to earmark remaining Infrastructure Funds (approx \$50K) to development of countywide comprehensive water and sewer plan. In 2016, CCWSA plans to submit a grant application to the NYS Department of State under the Local Government Efficiency (LGE) Program to secure necessary grant dollars to fund a comprehensive water and sewer plan for the County.
- Successful 20th Anniversary (1995-2015) Open House held in July 2015.
- Developed draft Mission, Vision, Values, and Goals Document, to be used as “roadmap” for the organization moving forward.
- Requested that NYSEFC consider expanding their Engineering Planning Grant program to fund “Drinking Water” not just “Clean Water” (i.e. wastewater) projects.

Cornell Cooperative Extension

- Helped five Field Corn growers establish and maintain at least 1 replicated Adapt-N strip trial each in 2015 that include 3-5 nitrogen rates with 3-4 replications, and include 0%-N-at sidedress strips of at least 200ft. length with minimal starter/manure inputs earlier in the season.
- Connected the Cornell Adapt-N team with growers interested in piloting the use of historical yield monitor data and soil health information for variable N rate prescription maps.
- Encourage Ag Field crop clients to assess their soil health, use the Adapt-N tool, and determine the N supply capacity of their soils by sharing yield data from 0%-N sections of their sampled fields.
- Continued CCE Cayuga participation in Adapt-N field trails with Cayuga County growers since 2011.
- Our CCE applied research work resulted in simulation of at least 2,000 acres and implementation of the 0% N - Adapt-N rate on at least 100 acres in 2015.
- Participated on the Advisory Committee to the Cayuga County Manure Management Working Group and on the Cayuga County Manure Management Working Group.
- Participated in the Regional Emerald Ash Borer Task Force.

Finger Lakes Partnership for Invasive Species Management (FLPRISM):

- Held a hemlock woolly adelgid monitoring hike at Behar Nature Preserve on January 17th.

Finger Lakes Institute:

- Began a mercury study of the Finger Lakes.

The Institute for the Application of Geospatial Technology, Inc.:

- Developed a watershed kit with tax parcels that can be used in the field.