

Cayuga County Water Quality Management Agency



2016 Year End Report

**Approved by the Cayuga County Water Quality Management Agency
on February 2, 2017**

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.

2016 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 Owasco
City of Auburn
Cayuga County Association of Town Supervisors
Cayuga County Association of Villages

Edward Wagner
Seth Jensen
Vacant
Harry Hinman

Representatives from Waterbody Associations in Cayuga County

Cayuga Lake Watershed Network
Central New York Waterways, Inc.
Duck Lake Association
Lake Como Association
Owasco Watershed Lake Association
Skaneateles Lake Association Inc.

Jim Young
Carl Wieszalis
Dale Powell
Barb Harvey
Robert Brower
Kathleen Gorr

Partners

Central New York Regional Planning and Development Board
Finger Lakes Institute at Hobart and William Smith Colleges
Institute for the Application of Geospatial Technology at Cayuga Community College, Inc.
Owasco Lake Watershed Management Council
Finger Lakes Partnership for Regional Invasive Species Management
Cayuga County Water and Sewer Authority

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.

Websites

Cayuga County Water Quality Management Agency: www.cayugacounty.us/wqma.
Cayuga County Manure Management Working Group – 14-Point Action Agenda:
www.cayugacounty.us/manuremanagement.

CAYUGA COUNTY WATER QUALITY MANAGEMENT AGENCY
2016 WORK PLAN

COMMUNICATION AND OUTREACH WORKING GROUP

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

ACTION ITEM #8: Publish quarterly or annual reports and press releases summarizing the New York State Department of Environmental Conservation records relating to complaints regarding manure activities, sharing the results of analysis of New York State Department of Environmental Conservation 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 within 60 days after receiving the information from the Cayuga County Department of Planning and Economic Development.
 - *Data is currently being collected as Action Item #7 and this work will be conducted in 2017.*
- Resources Required:
 - Action Item #6: Cayuga County Legislature has to request on a monthly basis, records compiled by the New York State Department of Environmental Conservation relating to complaints regarding manure activities and the investigations of them.
 - *Completed.*
 - Action Item #7: The Cayuga County Department of Planning and Economic Development will need to analyze New York State Department of Environmental Conservation 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.
 - *Data is currently being collected and this work will be conducted in 2017.*

ACTION ITEM #11: Develop a Request for Proposals from qualified professionals to create a branding and communications plan for WQMA. Seek funds from educational foundations and other potential sources to create and implement an effective communications plan.

- Specific Tasks and Timeline:
 - Develop Request for Quotes to create a branding and communications plan by May 30, 2016.
 - *"Cayuga County Request for Quotes for preparation of Communications and Branding Plan for the Cayuga County Water Quality Management Agency" draft was sent to the Cayuga County WQMA for review on May 4, 2016.*
 - Release Request for Quotes to create a branding and communications plan by June 2016.
 - *"Cayuga County Request for Quotes for preparation of Communications and Branding Plan for the Cayuga County Water Quality Management Agency" was released in July. A pre-submittal meeting was held July 14, 2016 and quotes were due on July 29, 2016." The Request for Quotes was sent to seven PR firms to get an idea of what activities they suggested to improve the communications and branding of the Cayuga County WQMA. Two responses were received.*
 - Determine if any Request for Quotes to create a branding and communications plan meets the needs of the WQMA by July 31, 2016.
 - *The Working Group met to discuss the responses of two firms to the "Cayuga County Request for Quotes for preparation of Communications and Branding Plan for the Cayuga County Water Quality Management Agency." They decided that they liked the response that included research and visioning, development of a brand and logo, development of a website, an e-newsletter template and marketing campaign. The estimated cost is \$10,000 to \$25,000.*
 - Seek funds by October 1, 2016 to create and implement the communications plan.
 - *An application was submitted to the Emerson Foundation for funding the preparation of Communications and Branding Plan for the Cayuga County Water Quality Management Agency.*
 - *On December 19, 2016, a grant for \$25,000 was received from the Emerson Foundation for the preparation of Communications and Branding Plan for the Cayuga County Water Quality Management Agency.*

- Resources Required:
 - Funding to create and implement the communications plan.
 - *Funding has been found through a grant from the Emerson Foundation.*

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 New York State Department of Environmental Conservation 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 in 2017.
 - Add information from Action Item #3 and Action Item #8 in 2017.
- Resources Required:
 - Need Action Item #11 completed first.
 - *Will be completed in 2017.*
 - Need Action Item #3 and Action Item #8 completed.
 - *Will be completed in 2017.*

INVASIVE SPECIES WORKING GROUP

1. 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 Regional Invasive Species Management (FL-PRISM) and this working group.

- *Cayuga County Department of Planning and Economic Development presented on the Finger Lakes Partnership for Regional Invasive Species Management's (FL-PRISM) priority aquatic invasive species at the November 3, 2016 WQMA meeting.*
- *Cornell Cooperative Extension of Cayuga County brought new printed resources to Cayuga County which include:*
 - *Spotted Wing Drosophila: An invasive in Fruit Crops - Michigan State Extension.*
 - *Hemlock Woolly Adelgid – Trouble for Hemlock trees - Michigan State Extension.*
 - *Alternatives to Invasive Plants – New York State Integrated Pest Management.*
 - *Habitattitude: Protect our Environment – Do NOT release Fish and Aquatic plants – United States Fish and Wildlife Service and National Aquatic Nuisance Species (ANS) Taskforce.*

ACTION: The Working Group will update and maintain the Cayuga County WQMA website and promote the Finger Lakes Partnership for Regional Invasive Species Management (FL-PRISM) website.

- *Cayuga County Department of Planning and Economic Development updates the website and promotes the Finger Lakes Partnership for Regional Invasive Species Management (FL-PRISM) website.*

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

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

- *Cayuga County Planning assisted the Finger Lakes Partnership for Regional Invasive Species Management (FL-PRISM) in the survey of water chestnut populations in Seneca River near Howland's Island, Little Sodus Bay and Sterling Creek as part of the Finger Lakes Institute's Water Chestnut Control Program funded through the Environmental Protection Agency's Great Lakes Research Initiative.*

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

- *Asian clam survey conducted on July 27, 2016. Cayuga County Department of Planning and Economic Development wrote the survey report and presented it to the WQMA and Owasco Lake Watershed Management Council.*

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

- *Cayuga County Department of Planning and Economic Development checked the Village of Cayuga and the Village of Union Springs boat launches and adjacent areas for hydrilla in October.*

3. PRIORITY: Education, training and public participation

ACTION: The Working Group will work with the PRISM to maximize resource and will provide educational materials and training programs on the 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.

- *Cayuga County Department of Planning and Economic Development provided training on invasive species at Wells College as part of New York State Invasive Species Week.*
- *Cayuga County Department of Planning and Economic Development provided invasive species education at Conservation Field Days and at Camp Rotary.*
- *Cayuga County Department of Planning and Economic Development provided information on hydrilla for the Village of Cayuga's newsletter.*
- *Cayuga County Department of Planning and Economic Development participated in two Hydrilla Hunts where residents could bring samples of plants to a collection station for identification in October.*

ACTION: The Working Group will prepare and publish two Eco-Talk articles per year on invasive species. We exceeded this action with five Eco Talks as follows:

- *Cornell Cooperative Extension of Cayuga County wrote an Eco Talk article that was published in The Citizen on February 19, 2016: "No better time than now to spot hemlock wooly adelgid."*
- *Cornell Cooperative Extension of Cayuga County wrote an Eco Talk article that was published in The Citizen on April 21, 2016: "How to lower the emerald ash borer's continued threat."*
- *Cornell Cooperative Extension of Cayuga County wrote an Eco Talk article that was published in The Citizen on July 15, 2016: "What to know about Invasive Species Week"*
- *Cornell Cooperative Extension of Cayuga County wrote an Eco Talk article that was published in The Citizen on July 28, 2016: "How invasive species harm Owasco Lake."*

- *Cornell Cooperative Extension of Cayuga County wrote an Eco Talk article that was published in The Citizen on September 29, 2016: “What you can do to stop invasive species.”*

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 WQMA co-sponsored March to Lake Day and Owasco Lake Day.*
- *The WQMA invited stakeholders and partners to Finger Lakes Partnership for Invasive Species Management (FL-PRISM) meetings and workshops, New York State Invasive Species Week activities, iMapInvasive trainings, watercraft inspection steward program leader workshops, and other invasive species training and activities.*

4. 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.

- *Cayuga County Department of Planning and Economic Development participated in a water chestnut hand pulling in the Howland Island area as part of the Finger Lakes Institute’s Water Chestnut Control Program funded through the Environmental Protection Agency’s Great Lakes Research Initiative.*
- *Cornell Cooperative Extension of Cayuga County is working with the Finger Lakes Partnership for Regional Invasive Species Management on the eastern shore Cayuga Lake Hydrilla Response Plan.*

NUTRIENT WORKING GROUP

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

ACTION ITEM #1: Analyze the results of a literature search recently undertaken as part of the Cayuga Lake Watershed Plan Update Project to identify priority nutrient management research needs; Continually update the literature search and the analysis and distribute the results of the analysis in periodic reports; Meet with representatives of universities and other research institutions and organizations to identify and endorse proposals that address the priority needs and to assist in the creation of strategic, cooperative research partnerships.

- Specific Tasks and Timeline:
 - Identify information needs regarding effective nutrient management practices (by 7/30/2016) - Nutrient Working Group.
 - *Completed and attached as Appendix A.*
 - Contact researchers involved with the Cayuga Lake project to obtain information from their recent literature search and other studies (by 9/1/2016) - Nutrient Working Group.
 - *The information is not yet available from the researchers.*
 - Identify gaps in information about nutrient loading (by 10/1/2016) - Nutrient Working Group.
 - *Will be completed once information from Cayuga Lake project is available.*
 - Meet with researchers/scientists to discuss research needs (by 2/1/2017) - Nutrient Working Group.
 - *RIT's Venture Creations Incubator has reached out to Cayuga County officials to partner with a pilot project to demonstrate the removal of phosphorus from biodigester effluent produced in Cayuga County and further process the resulting material into marketable organic products. Further outreach to researchers will take place in 2017.*

ACTION ITEM #3: Direct the WQMA to expand the membership of one of its working groups to insure greater participation and input from the agricultural community and assign that working group the tasks of reviewing existing standards for manure management (including the NRCS Code 590 Standard) and developing its own set of locally appropriate standards addressing issues and practices.

- Specific Tasks and Timeline:
 - Identify strategy for engaging agricultural community (includes identifying possible ag advisors/partners to the Working Group) (by 6/30/2016) - Manure Management Group.
 - *The working group reached out to a number of farmers requesting their assistance in reviewing manure management practices for the County to promote. Ten farmers agreed to participate.*
 - Review Code 590 to develop an interpretation of guidance (by 2/1/2017) - Nutrient Working Group.
 - *Completed.*
 - Create a list of key elements from existing standards and guidelines to promote (by 2/1/2017) – Nutrient Working Group.
 - *Is on schedule to be completed in February 2017.*

ACTION ITEM #4: Determine what field conditions must exist and what management practices must be followed in order for manure application on frozen, snow covered and/or saturated soil to be considered acceptable; Seek advice and guidance on this issue from representatives of the Natural Resources Conservation Service (NRCS), The New York State Department of Environmental Conservation, Cornell University; In discussing standards for application on saturated soil, address issues relating to the Code 590 Standard.

- Specific Tasks and Timeline:
 - Create a list of questions regarding appropriate field conditions that must exist in order for farmers to be able to spread manure on frozen, snow covered and/or saturated (by 10/1/2016) - Nutrient Working Group.
 - *A list of questions was sent to Jackie Lendrum of New York State Department of Environmental Conservation.*
 - Set up meetings with DEC, NRCS, and Cornell to create concrete interpretation (by 11/1/2016) - Nutrient Working Group.
 - *New York State Department of Environmental Conservation, in consultation with Natural Resource Conservation Service, ProDairy, and New York State Ag and Markets, responded to the questions in writing.*

Other Priorities

PRIORITY: Septic Systems (includes holding tanks)

ACTION: Inspect properties in Tompkins and Onondaga Counties in search of problem septic systems – Owasco Lake Watershed Inspection Program.

- *Watershed Inspectors began inspecting properties in Tompkins County for problem septic systems.*

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

- *Completed*

ACTION: Deliver “Welcome packages” to new homeowners about proper septic system maintenance – Owasco Lake Watershed Inspection Program, Owasco Watershed Lake Association, Duck Lake Association, and Lake Como Association.

- *Brochures and magnets with the Owasco Lake Watershed Inspection Program information sent to landlords who rent properties on the Owasco Lake shoreline.*

ACTION: Establish a set of criteria for municipal officials to use when considering extending public sewers – Cayuga County Department of Planning and Economic Development.

ACTION: Research alternative septic systems that may result in improved operation – Cayuga County Health Department.

- *Ongoing.*

PRIORITY: Waterfowl

ACTION: Research the effectiveness of light reflecting prisms at the park to discourage waterfowl – Owasco Lake Watershed Inspection Program.

- *Prisms were purchased with grant funds and installed at Emerson Park.*

PRIORITY: Stormwater

ACTION: Install medallions on storm drains–Owasco Lake Watershed Inspection Program.

- *Medallions were installed in the Village of Moravia and the Towns of Owasco and Locke.*

ACTION: Encourage the installation of medallions on storm drains - Association of Villages, Association of Towns, and the Cayuga County Department of Planning and Economic Development.

ACTION: Encourage stream corridor protection by property owners – Owasco Watershed Lake Association, Cayuga County Soil and Water Conservation District, and the Owasco Lake Watershed Inspection Program.

- *Cayuga County Soil and Water Conservation District Staff assisted three municipalities and eight property owners with technical assistance and permit guidance associated with streambank and shoreline protection. Of these, seven were in the Owasco Lake Watershed, one in the Lake Ontario Watershed, two in the Cayuga Lake Watershed and one in the Seneca River Watershed.*
- *The Cayuga County Soil and Water Conservation District assisted with the implementation of 220 feet of streambank stabilization in the Seneca River watershed and 110 feet in the Owasco Lake Watershed.*

ACTION: Investigate which County properties might be good locations for permeable pavements based upon soils – Cayuga County Department of Planning and Economic Development.

- *Cayuga County Department of Planning and Economic Development and Parks and Trails investigated the feasibility of permeable pavement at Emerson Park.*

ACTION: Encourage the installation of permeable pavement where possible – Cayuga County Department of Planning and Economic Development, and Cayuga County Parks and Trails.

- *The Owasco Flats Wetland Restoration and Riparian Buffers Initiative Project plan proposes a mesh reinforced type permeable paving system instead of the gravel road first laid out by the consultant.*

ACTION: Identify densely populated areas that contribute stormwater runoff and promote practices that can reduce direct conveyances to the lake and/or streams – Cayuga County Department of Planning and Economic Development, Cornell Cooperative Extension of Cayuga County, Central New York Regional Planning Board, Association of Villages, Association of Towns, and the Owasco Lake Watershed Inspection Program.

- *Cayuga County Department of Planning and Economic Development staff presented information on erosion, sediment control stormwater practices to towns and villages officials in the Owasco Lake Watershed.*

PRIORITY: Pet Waste

ACTION: Improve education regarding proper handling of pet waste – Cornell Cooperative Extension of Cayuga County, Watershed Inspection Program, Duck Lake Association, Owasco Watershed Lake Association, and Cayuga County Parks and Trails.

- *Pet waste brochures were provided by the WQMA to the Duck Lake Association.*
- *Cornell Cooperative Extension of Cayuga County provides information on pet care & proper disposal of pet waste to the public thru Dog Obedience Classes and dog judging events. There was a 6 week dog class in Spring 2016 and a dog show at the Remember Big Six Picnic. Emerson Park animal waste policies were in place and*

followed by pet owners during the entire event. All animal waste from the Big Six Picnic was placed into roll-off units and transported off-site for composting.

ACTION: Encourage municipalities to install pet waste receptacles in public parks and trails – Parks, Association of Villages, Association of Towns, and the Cayuga County Department of Planning and Economic Development.

PRIORITY: Golf Courses

ACTION: Evaluate nutrient management plans and drainage of golf courses – Cayuga County Soil and Water Conservation District.

- *As a result of the County's concerted focus on manure management, the Cayuga County Soil and Water Conservation District did not have any resources available to compete this task in 2016.*

PRIORITY: Lawn Care

ACTION: Publish and distribute information regarding the ban on phosphorus in lawn fertilizer and appropriate ways to manage lawn waste – Cornell Cooperative Extension of Cayuga County and the Owasco Watershed Lake Association.

- *The Owasco Lake Watershed Inspection Program provided a link to the New York State Department of Environmental Conservation website about the zero-phosphorus fertilizer law and water quality protection on the Owasco Lake Watershed Inspection Program Facebook page.*
- *Cornell Cooperative Extension of Cayuga County Master Gardeners provide fact sheets and resources on lawn fertilizing and yard waste to home owners and clients seeking assistance from them.*

ACTION: Reach out to home and garden stores regarding posting information of phosphorus law – Cornell Cooperative Extension of Cayuga County.

- *Cornell Cooperative Extension of Cayuga County redeveloped a series of factsheets in 2016 including ones on soil testing and the use of zero P fertilizers. These were shared by their Master Gardeners as handouts and at public events such as VaVa Bloom.*

PRIORITY: Burning

ACTION: Publish and distribute information regarding backyard burning laws and proper disposal of ash – Cornell Cooperative Extension of Cayuga County, Owasco Watershed Lake Association, and the Owasco Lake Watershed Inspection Program.

- *Owasco Lake Watershed Inspectors worked with homeowners to get ash off the shoreline of Owasco Lake.*
- *Cornell Cooperative Extension of Cayuga County Ag staff and Master Gardeners provide information on open burning bans and seasonal dates. During Drought conditions extra burn warnings were provided via the Northeast Drought Network*

monitoring, which included New York State Department of Environmental Conservation, New York State Office of Parks Recreation and Historic Preservation and New York State Department of Environmental Conservation Officers.

PRIORITY: Deer Carcasses

ACTION: Provide education regarding proper disposal of deer carcasses – Cornell Cooperative Extension of Cayuga County and the Owasco Lake Watershed Inspection Program.

- *Article in The Citizen on December 22, 2016 “Owasco Inspectors: Don't discard deer carcasses in streams.”*
- *Owasco Lake Watershed Inspectors placed signs in areas that have seen dumping of deer carcasses.*
- *Cornell Cooperative Extension of Cayuga County requested that deer disposal educational posters be displayed by New York State Department of Environmental Conservation License Sales locations. New York State Department of Environmental Conservation Region 8 Cortland and Central Office in Albany both confirmed that deer disposal educational posters could not be requested to be displayed by New York State Department of Environmental Conservation License Sales locations.*

ACTION: Provide guidance and referrals on wildlife mortality composting to highway and DPW departments - Cornell Cooperative Extension of Cayuga County.

- *Wildlife mortality composting education for highway departments is provided from the Cornell Local Roads program as well as the Waste Management Institute both based at Cornell. Cornell Cooperative Extension of Cayuga County hosted two Local Roads Program meetings in 2016.*

PRIORITY: Agriculture

ACTION: Encourage the New York State Department of Environmental Conservation to increase the frequency of inspections of Confined Animal Feeding Operations (CAFOs) – Cayuga County WQMA.

ACTION: Encourage farmers to establish or update their nutrient management plans and to allow the Cayuga County Soil and Water Conservation District to review them - Cayuga County Soil and Water Conservation District, and the Owasco Lake Watershed Inspection Program.

- *The Cayuga County Soil and Water Conservation District held several workshops that focused on nutrient management planning.*
- *Cayuga County Soil and Water Conservation District Staff provided technical review and assistance to thirteen agricultural operations with respect to their nutrient management plans. Of these, seven were in the Cayuga Lake Watershed, five in the Owasco Lake Watershed and one in the Seneca River Watershed.*

ACTION: Create a network between farmers and gardeners who may need fertilizer – Cornell Cooperative Extension of Cayuga County.

- *Cornell Cooperative Extension of Cayuga County redeveloped a series of factsheets in 2016 including soil testing and the use of zero P fertilizers. These were shared by their Master Gardeners as handouts and at public events such as VA VA Bloom.*
- *A joint Manure handling Workshop was held at the Cayuga County Soil and Water Conservation District on Feb 24th. Partners included New York State Department of Environmental Conservation, Pro-Dairy, Cayuga County Soil and Water Conservation District and Cornell Cooperative Extension of Cayuga County.*

ACTION: Identify critical areas and encourage the use of Conservation Easements, Finger Lakes Land Trust, New York State Agriculture Land Trust and American Farmland Trust – Cayuga County Department of Planning and Economic Development and Cornell Cooperative Extension of Cayuga County.

- *The Cayuga County Department of Planning and Economic Development discussed possible project areas for conservation easements or acquisition with the Finger Lakes Land Trust.*
- *The Cayuga County Department of Planning and Economic Development assisted the Finger Lakes Land Trust in their work on a conservation easement on a parcel on the northeast corner of Owasco Flats.*
- *A Soil Health Workshop was held on December 14, 2016 at Cornell Cooperative Extension of Cayuga County. Included were discussion on cover crops, conservation innovation grants, interseeding and reduced till management. Presenters included Northern New York Cornell Ag team, Morrisville State College, Natural Resource Conservation Service, Cornell Cooperative Extension of Delaware County, Cornell – Soil Health Lab, and American Farmland Trust.*

ACTION: Identify farms where cows have access to streams in order to enforce existing regulations that prohibit this practice– Owasco Lake Watershed Inspection Program.

PRIORITY: All Areas

ACTION: Encourage the New York State Department of Environmental Conservation to include environmental projects as part of any penalties issued – Cayuga County WQMA.

ACTION: Investigate the feasibility of providing incentives to landowners who install and maintain buffers – Cayuga County Soil and Water Conservation District and the Owasco Watershed Lake Association.

- *Cornell Cooperative Extension of Cayuga County Ag Alert Mailing “Farmers Guide to help Organic Producer’s apply for Buffer Initiative – June 2016”.*
- *The Cayuga County Soil and Water Conservation District directed interested landowners to existing programs available through the Federal Government that assist landowners with buffers.*

ACTION: Develop a monitoring plan for drain tile discharge – Owasco Lake Watershed Inspection Program, Cayuga County Soil and Water Conservation District, Cayuga County Health Department, and the Cayuga County Department of Planning and Economic Development.

- *The WQMA sent a letter requesting that the Natural Resources Conservation Service (NRCS) analyze the viability of installing valves at the end of tile lines, and if viable, incorporate these valves into new projects funded by the NRCS.*

SEDIMENT WORKING GROUP

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

ACTION ITEM #5: Craft and implement a program promoting: (1) the Local Standards established by the Nutrient Working Group under Action Item #3; and (2) 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:
 - Provide a brief explanation of a watershed concept and how sediment travels through and impacts the system (by 8/2016).
 - *A watershed definition and sediment movement description has been drafted.*
 - Identify potential areas of high resource concerns (by 7/2016).
 - *Several maps have been created as a starting point of evaluating the potential resource concerns. We are in the process of determining their usefulness.*
 - Explore the feasibility to develop a case study in a particular sub-watershed to collect information that can be utilized as a possible model in other areas (by 12/2016)
 - *The group evaluated several possibilities of exactly how this may be able to be executed. Additional discussion needs to take place. Variables such as costs of planning and implementation of best management practices (BMPs) will affect the degree of implementing the case study.*
 - Evaluate the current list of Best Management Practices (BMPs) that are available and create a list of BMPs standards and specifications to promote (by 5/2017).
 - *Work is ongoing with regards to the best management practices (BMPs). Each situation is unique and may take several BMPs to accomplish a desired outcome. There are concerns that promoting a limited list will encourage individuals to consider only the listed BMPs over potentially more beneficial BMPs.*

- Develop a list of potential funding sources for the installation of best management practices (BMPs) (by 9/2016).
 - *Sources of funding for the planning and implementation of beneficial best management practices (BMPs) may include Federal, State and Private Sources. Including, but not limited to USDA-Natural Resource Conservation Service Programs such as Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Conservation Reserve Enhancement Program (CREP), New York State funding programs such as Agricultural Non-point Source Abatement and Control Program, Water Quality Improvement Project Program (WQIP), Great Lakes Sediment and Nutrient Reduction Program and private donations and local grant opportunities.*

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:
 - Create and promote potential opportunities to engage the public, including the agricultural community, to discuss and highlight erosion and sediment control practices (by 8/2016).
 - *The Cayuga County Soil and Water Conservation District held a Conservation Bus tour.*
 - *An on-farm "Dairy at Dusk" tour was held on a local Dairy operation.*
 - *The Cayuga County Soil and Water Conservation District completed a presentation on Agricultural best management practices (BMPs) at Owasco Lake Day.*
 - *A soil health workshop is currently being planned.*
 - *A meeting was held to discuss the Agricultural Environmental Management (AEM) program in Cayuga County.*
 - *Projects highlighting important best management practices (BMPs) work have been submitted and published by The Citizen newspaper.*
 - *Eleven New York State Department of Environmental Conservation Endorsed 4 hour Erosion and Sediment Control Training for Contractors have been held by the Cayuga County Soil and Water Conservation District Staff.*
 - *A training that focused on erosion and sediment control techniques was held specifically for County and Town highway personnel.*
 - *Several additional opportunities have been identified.*

- Identify specific types of events that are needed to promote best management practices (BMPs) that protect water quality and enhance sustainable agriculture (by 8/2016).
 - *The Cayuga County Soil and Water Conservation District plans on holding a conservation bus tour, cover crop workshop and Agricultural Environmental Management (AEM) planning meeting.*
 - *A subsurface drainage treatment best management practices (BMPs) demonstration project would be beneficial.*
 - *Proper streambank and shoreline stabilization measures workshops are needed.*
 - *A workshop on proper check dam implementation for Highway Departments is needed.*
 - *To determine how many events are able to be held is dependent upon funding availability.*

- Identify sources and seek funding opportunities to help offset the costs to conduct conferences, forums, and demonstration and training events (by 5/2017).
 - *Possible sources of funding to assist with the completion of education events include County and local municipalities, Cornell Cooperative Extension, the Agricultural Environmental Management (AEM) Program, Local donations/partners, New York State Department of Environmental Conservation, and other State/Federal partners.*

APPENDIX A

WQMA Nutrient Group

August 1, 2016

Recommended Topics for Future Research

1. Investigation of drain tile treatment systems.
2. Investigation of technologies for extracting nutrients (especially phosphorus) from manure so that they can be used more effectively.
3. The effectiveness of application of nutrients to growing crops using new technologies, with a focus on utilizing liquid manure as the source.
4. Quantification of nutrient loading reductions resulting from various nutrient management practices.
5. Assessment of the extent to which cows are provided access to streams in Cayuga County.