

Cayuga County Water Quality Management Agency

2004 Work Plan

APPROVED
February 5, 2004

Acronyms can be found at end of document.

MULTIPLE WATERSHEDS

Agriculture:

SWCD	Staff member working on becoming certified as a Nutrient Management Plan Specialist. Once certified, this staff person will review comprehensive Nutrient Management Plans from consultants to see if plans are adequate.
SWCD	Conduct Comprehensive Nutrient Management Plans (CNMP) for farms.
SWCD	Complete Agricultural Environmental Management (AEM) Plans for farms, identify best management practices (BMPs) from those AEMs, look for assistance to implement these BMPs, and measure the effectiveness of these BMPs.
SWCD & CCE	Encourage farmer participation in state and federal programs that relate to water quality and issues; and pursue forms of assistance such as continued federal and state grants and cost share programs.
SWCD & NRCS	Provide incentives and programs for farmers to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.
SWCD & NRCS	Encourage farmers to join the Conservation Reserve Program.
CCE, OWLA & SWCD	Continue to develop a program and criteria for providing signs for lake friendly farmers or watershed friendly farmers.
CCE, SWCD & City	Provide public education and news articles/columns on agriculture and the environment.
CCE & Plan	Encourage agritourism.
SWCD & City	Encourage use of whole farm plans.
SWCD	Present farm, conservationist, and educator of the year awards.
CCE & Plan	Implement PDR (purchase of development rights) where feasible. CCE will provide educational materials on PDR.
Plan	Encourage towns to change local laws to allow additional business enterprises on farms.
Plan & NRCS	Explore funding options and ways to assist farmers in cleanup after storm events.
SWCD	Take advantage of new technologies to deal with agricultural waste.

Aquatic Vegetation

SWCD	Continue existing aquatic vegetation control program.
SWCD	Encourage the use of nutrient management plans for golf courses, developments, parks, etc.
OWLA, CCE, City & SWCD	Educate the public and developers on how to reduce nutrient introduction to the lake.
CCE & Plan	First year of the Weeds Watch Out! education and monitoring program for invasive aquatic plants. Volunteer weed watchers will be trained to identify aquatic plants and will conduct monitoring on waterbodies in Cayuga County.

Chemicals: Yard Garden and Household Chemical Use and Waste Disposal

Plan, CCE & SWCD	Continue to search for ways to reduce hazardous material in the County.
Plan & CCE	Continue household hazardous waste collection event offerings and explore ways to make the service available on a year round basis, especially for fuel products.

Plan, CCE & City	Provide information on proper use and disposal of household chemicals; suggested media includes annual water quality reports by water providers, water bill messages, direct mailings, and the WQMA webpage.
Plan & CCE	Promote pest management practices that reduce pesticide use in the watershed, including integrated pest management and non-toxic pest management.
Plan & CCE	Examine ways to change people's attitudes about the "perfect lawn" through education.
CCE	Conduct education programs to help homeowners prevent groundwater contamination; include wells, well maintenance, septic system use, yard waste, composting, etc.

Collaboration

CNY RPDB	Continue to provide communication forums for county & regional partners to discuss water quality priorities, identify divergences & opportunities for facilitation & coordination across jurisdictional boundaries through the Regional Non-point Source Strategy meeting series.
-----------------	---

Education

WQMA	The Cayuga Co. WQMA should encourage and promote a coordinated approach to public education among its member organizations.
WQMA	Conduct an educational tour.
CCE	Develop an on-going educational program on watershed and related issues for schools and school aged children.
CCE & Plan	Make watershed issues more accessible to citizens by utilizing the internet, direct mailings, and media releases.
CCE & Everyone	Agencies and organizations that conduct public education programs should utilize the local media to its fullest extent to promote programs, highlight events, and draw larger audiences.
CCE & Everyone	Develop promotional campaigns that will interest a larger variety of participants in education programs.
CCE	Agencies and organizations that promote water quality should enable trainers and educators to continually develop skills and expertise.
Park	Displays at Emerson Park tied to watershed protection and information from USGS water monitoring station.

Exotic, Introduced and Invasive Species Management

CNY RPDB, CCE & Network	Continue to participate on CNY Water Chestnut Task Force to assist region in formulating strategies and solutions to water chestnut problems.
Network, SWCD, Plan, CCE & OWLA	First year of the Weeds Watch Out! education and monitoring program for invasive aquatic plants. Volunteer weed watchers will be trained to identify aquatic plants and will conduct monitoring on waterbodies in Cayuga County.
Health	Educate landowners about how to put in intake pipes and treatment methods for dealing with zebra mussels in intake pipes.

Forestry

CCE	Coordinate information and technical services with landowners.
CCE	Provide forest landowners with information on what resources & services are available for forest management; information & training on proper forest management practices; and information on such topics such as carbon sequestration & highgrading to encourage landowners to retain existing well managed woodlots.

CCE	Encourage development of forest plans.
CCE	Encourage owners to apply for cost-sharing forest management programs.

Hazardous Material Spills and Spill Response

Plan & CCE	Update the water quality contact list yearly.
Plan	Work with CEMO to improve capabilities to respond to spills.

Fuel and Chemical Storage

Plan	Try to obtain NYSDEC updates to their database on bulk petroleum storage facilities. Update the County's watershed database if updates are available.
-------------	--

Funding Options

Everyone	Explore full range of funding alternatives; examples include surcharge to users, franchise fees, use of percentage of revenues from septic system inspections, grants, loans, etc.
-----------------	--

Highway Deicing

Plan	Conduct a survey of highway departments on salt storage structures and contained mixing areas and where they are needed. Also survey their deicing policies and procedures.
Plan	Explore funding options for those that need salt storage structures and contained mixing areas.

Highway Maintenance

SWCD & CCE	Increase the use of the Cornell Local Roads Program, Highway School, and LEAPE by highway officials.
SWCD	Encourage use of structural controls of sediments on steep roads, roadbanks and in high flow ditches.
SWCD	Encourage and provide information on timely revegetation of road ditches and banks.
SWCD	Encourage use of and provide information on best management practices (BMPs) to reduce roadbank erosion.
SWCD	Provide an annual informational report for highway superintendents and workers.
SWCD	Organize local training programs through SWCD and Highway Superintendents Association.
SWCD	Examine ways to prevent sediment eroded from plowed fields by wind and water from ending up in the ditches to the lake; especially during heavy rainfalls.
SWCD	Examine ways to prevent roadside ditches from deeping and eroding.

Lakeshore Erosion

CCE & OWLA	Promote and distribute existing shoreline erosion control guidebooks and information sheets with specific information on plantings that will help reduce shoreline erosion.
-----------------------	---

Land Use

CNY RPDB & Plan	CNY RPDB & Planning, in conjunction with the Institute for the Application of Geospatial Technologies will evaluate the impacts of future development & urban sprawl on municipalities within the Owasco Lake Watershed through use of a GIS & computer based growth model. Upon request, guidance & support will be provided to watershed municipalities seeking to improve or create legislation to effectively control the impacts of development and sprawl.
Plan	Educate planning boards about land use issues such as drainage, buffer zones, stormwater runoff, etc.

Plan	Provide assistance to towns and villages to design, adopt and/or implement standards and guidelines; provide model ordinances, regulations, standards, and guidelines.
Plan	Explore opportunities to protect streambank areas. Use data from streambank assessments and management plans to search for funding.
Plan	Conduct a survey of open space areas.
Plan	Review and update the webpage directory of zoning provisions and other development regulations of towns and villages.

Private and Municipal Wastewater Treatment

Health	Continue to implement the Cayuga County Sanitary Code and provide information to others as needed.
Health	Explore federal or state assistance to replace or upgrade septic systems of people with limited incomes.
Plan	Encourage the adoption of comprehensive plans that describe the capacity of public facilities and services required to serve new development and discourage growth where adequate facilities and services are not available.
Plan	Explore what grants & loans are available for water & waste disposal systems for rural communities.

Stormwater and Sediment Control

SWCD & Plan	Continue to work closely with the DEC on the Phase II Stormwater Rules & Regulations. Provide assistance for towns and villages to comply with the Phase II Stormwater Rules and Regulations.
SWCD & Plan	Continue to conduct education to local decision makers, planning and zoning boards, Code Enforcement Officers, Highway Superintendents, residents, WQMA, and others about the Phase II Stormwater Rules & Regulations & the use of recognized development BMPs to protect water quality.
SWCD & Plan	As further guidance is provided by the regulatory agencies, examine and/or encourage local governments to create & enforce their own stormwater management and erosion control ordinances.
CNY RPDB	Conduct general Phase II construction permit education and outreach for local governments and the general public by providing sample and guidance materials as they become available.
SWCD	Continue to conduct stormwater control projects.
SWCD	Continue hydroseeding assistance programs for local governments in critical areas, such as road ditches, and promote the program to increase use throughout the watershed.
SWCD	Provide model site design guidelines for contractors.
SWCD	Staff person in training to become a Certified Professional in Erosion and Sediment Control (CPESC).
SWCD	Encourage use and provide information on structural measures to control sediments and other pollutants from stormwater runoff.
SWCD	Examine the use of infiltration trenches, detention ponds, siltation ponds, basins, vegetated swales and filter strips in critical areas and in demonstration projects.

Streambanks and Stream Corridor Management

SWCD & Plan	Reevaluate streambank erosion assessments and search for funding for implementation.
SWCD	Search for funding and implement streambank stabilization on severely eroding streams using fluvial geomorphology and other bioengineering methods where feasible.
SWCD	Identify funding sources for comprehensive streambank restoration & management programs.
SWCD, NRCS & Plan	Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas. Find funding opportunities for buffer installation, management and maintenance.
NRCS & SWCD	Promote the use of Best Management Practices (BMPs) such as livestock exclusion from streams and vegetative filter strips.
SWCD & NRCS	Continue having staff members of the SWCD and NRCS assist in the preparation of grant and cost share applications to reduce streambank erosion and implement buffering.
Plan	Provide model buffer and stream corridor protection ordinances to the municipalities.
Plan	Examine debris accumulation in streams and determine whose jurisdiction it is to remove it and have it removed.
Plan & OWLA	Educate landowners on what debris can be removed from streams and how to remove it properly.
SWCD & OWLA	Conduct tours, put up signs and provide information on demonstration projects for streambank erosion and stream buffering.

Urban/Community Forestry

CCE	Educate towns, villages, and the public on the values and benefits of urban and community trees and forests, trees suitable for urban planting in this area, and how to care for them.
CCE	Encourage training to develop inventories of trees and tree sites.
Plan	Encourage towns and villages to apply to grant programs for tree planting.
Plan & CCE	Provide a model town or village tree ordinance.
CCE	Encourage community forest plans.

Waste Sites

Landfills, Inactive Hazardous Waste Sites, Solid Waste Management and Other Waste Sites

Plan & Health	The conditions of the seven closed solid waste landfills and the inactive hazardous waste site should be inspected for changing site conditions. Any significant changes should be reported to the DEC.
Plan & Health	Discourage open burning and encourage alternatives such as pay by the bag programs for residential solid waste disposal.
OWLA, City & Plan	Inventory junkyards.

Waste Sites

Roadside and Illegal Dumping

Plan	List all municipal codes and ordinances for roadside and/or illegal dumping.
Plan	Provide sample codes or ordinances on roadside and/or illegal dumping to municipalities without them. For those that do, encourage raising fines & increasing prosecution.

Waterborne Illness

Health	Continue to monitor bathing beaches.
---------------	--------------------------------------

Health	Continue to provide information to residents using untreated lake water as a drinking water source and encourage them to install some type of treatment system to disinfect their drinking water.
Health	Provide educational materials through the Cayuga County Health Department.
SWCD	Use Best Management Practices (BMPs) and Environmental Protection Agency Regulations to reduce contamination from pastures.
WQMA	Explore funding to compile and maintain the WQMA database.

CAYUGA LAKE

WQMA	Work to implement the Cayuga Lake Restoration and Protection Plan as it pertains to Cayuga County. As more specific work plans are developed, the WQMA will re-examine its involvement.
Network & WQMA	Continue water sampling under Citizens Lake Assessment Program (CSLAP) through FLOWPA funding.
Network	Provide award for leadership and commitment to protect the Cayuga Lake Watershed
Network	Conduct cleanup of Fall Creek.

DUCK LAKE

Duck, Plan & SWCD	Begin work on a Duck Lake Watershed Management Plan.
Duck	Aquatic weed control to include identification and removal methods and use of new harvester.
Duck, Health, & Plan	Continue water sampling including Citizens Lake Assessment Program (CSLAP) through FLOWPA funding.
Duck & Health	Monitor phosphorus levels in the lake.
Duck	Monitor coliform levels in the lake.
Duck	Identify lake level problems.
Duck	Continue to create awareness of dangers of spreading unwanted weeds and zebra mussels as well as feeding ducks and geese.

LITTLE SODUS BAY

Plan	Fair Haven Sewer Project, Village of Fair Haven. Provide requested technical assistance.
Plan	Assist the Center for Environmental Information, Inc. as they work on developing the Lake Ontario Coastal Initiative.

OWASCO LAKE

Aquatic Vegetation

Plan	Search for funding to inventory and map aquatic vegetation in Owasco Lake, compare to historical data, and determine management needs. Publish findings as an educational tool.
Plan & OWLA	Determine water quality, including phosphorus level, in Owasco Lake and the tributaries, and the effect it has on aquatic vegetation. Search for funding to do this.

Plan	Search for funding to develop and implement a sampling plan for determining sources of phosphorus into Owasco Lake.
CCE	Search for funding to examine reducing sources of phosphorus to Owasco Lake identified through sampling program.
SWCD	Continue work needed to dredge the South end of Owasco Lake.
Plan	Review intake and other temperature data to see if the lake has been warmer the past few years, which may cause algae to start blooming earlier and longer.

Biosolids

City & Health	Continue to enforce the Watershed Rules and Regulations which state: “No human excreta or sewage shall be deposited or spread upon the surface of the ground at any point on the watershed. Composted sludge, pursuant to a permit issued by an appropriate State or local agency having jurisdiction, if any, shall be allowed.”
--------------------------	---

Boating

Plan & OWLA	Research the “carrying capacity” of boats and jet skis on Owasco lake and study the level of pollution from motorized crafts.
Plan	Examine the need for a pumpout station on Owasco Lake.

Education

OWLA	Provide educational columns for the newspaper.
-------------	--

Exotic, Introduced and Invasive Species Management

Plan & CCE	Search for funding to initiate a regular inventory and monitoring program for exotic, introduced and invasive species in Owasco lake and watershed.
-----------------------	---

Fish and Wildlife Management

Plan & OWLA	Search for funding to determine water quality, including phosphorus level, dissolved oxygen and chlorophyll, in Owasco Lake and the tributaries and the effect it has on fish and wildlife.
------------------------	---

Highway Maintenance

Plan	Conduct a roadside erosion survey in the Owasco Lake Watershed.
-------------	---

Lake Level

City & Plan	Continue to educate watershed residents on what to expect in regards to lake level, the hydrologic system, the “rule curve,” about downstream uses of water, and why different people want different lake levels.
City	Encourage local officials who are responsible for lake level management to continue working with others in their region to coordinate flood period discharges (i.e. Balance lake impacts, downstream impacts, etc).
SWCD	Continue work needed to dredge the South end of Owasco Lake.

Land Use

Plan	Inventory wetlands and open space resources in the watershed.
-------------	---

Monitoring

OWLA	Continue work on the monitoring buoy for Owasco Lake with IAGT.
OWLA	Continue coliform monitoring of Owasco Lake.
OWLA	Continue to examine conducting hydrocarbon monitoring in Owasco Lake.

Owasco Flats

Plan & Parks	Conduct annual cleanup at Owasco Flats.
-------------------------	---

Private and Municipal Wastewater Treatment

Health & Plan	Explore the possibility of upgrading the Groton Wastewater Treatment Facility. Permit is due for renewal in 2006.
--------------------------	---

Public Access

Parks, Plan, & OWLA	Encourage low impact activities in the watershed like hiking, canoeing and fishing instead of motorized use.
--------------------------------	--

Streambanks and Stream Corridor Management

SWCD & NRCS	Train staff in remedial fluvial geomorphology and conduct pilot projects on tributaries to Owasco Lake, particularly Dutch Hollow Brook and the Inlet.
------------------------	--

Waterborne Illness

Parks	Continue to address the bird problem in Emerson Park and entire lake by trying realistic methods.
OWLA, Plan & City	Implement a continuous monitoring program in Owasco Lake and the major tributaries.

Acronyms and Abbreviations

- Ag:** Agriculture
- BMP:** Best Management Practices
- CCE:** Cayuga County Cornell Cooperative Extension
- Cayuga Lake RPP:** Cayuga Lake Watershed Restoration and Protection Plan
- CEMO:** Cayuga County Emergency Management Office
- CNY RPDB:** Central New York Regional Planning and Development Board
- City:** City of Auburn
- DEC:** New York State Department of Environmental Conservation
- Duck:** Duck Lake Association
- FLLOWPA:** Finger Lakes Lake Ontario Watershed Protection Alliance
- Health:** Cayuga County Department of Health and Human Service Environmental Health Division
- Highway:** Cayuga County Highway Department
- IAGT:** The Institute for the Application of Geospatial Technology
- Network:** Cayuga Lake Watershed Network
- NRCS:** Natural Resource Conservation Service
- OWLA:** Owasco Watershed Lake Association
- Parks:** Cayuga County Parks and Trails
- Plan:** Cayuga County Department of Planning and Development
- SWCD:** Cayuga County Soil and Water Conservation District
- Tour:** Cayuga County Department of Tourism