

Cayuga County Water Quality Management Agency

2003 Work Plan

Approved on February 6, 2003

Acronyms can be found on page 10.

COUNTY-WIDE

WQMA	Conduct an educational tour.
Health	Will continue to enforce the Sanitary Code.
Plan, CCE & SWCD	Hazardous waste collection day for farm pesticides if grant funding is awarded.
Plan	Continue to search for ways to reduce hazardous material releases in the watershed. For example, find ways to reduce mercury releases, such as collecting auto and household mercury switches and fluorescent bulbs.
Plan	In 2002, obtained and modified the New York State Department of Environmental Conservation (NYSDEC) database on bulk petroleum storage facilities to develop a watershed based database. On an annual basis, obtain updates from the NYSDEC.
Plan	Educate towns and villages about the new Phase II Stormwater Rules and Regulations.
CNY RPDB	Conduct a federally funded study of land development pressures in the Finger Lakes area and provide recommendations to municipalities.
CNY RPDB	Identify and publicize educational programs planned for the CNY Region; identify gaps between current educational offerings and stated municipal needs; and when possible, develop, coordinate and provide training programs to fill those needs.
CNY RPDB	Continue to conduct research and compile information as a basis for developing a regional strategy to eliminate water chestnut. Conduct research and prepare proposal to NYSDEC on the behalf of the Water Chestnut Task Force Committee for permit to test chemical controls in river and lake test plots.
CNY RPDB	Continue to provide communication forums for county and regional partners to discuss water quality priorities, identify divergences and opportunities for facilitation and coordination across jurisdictional boundaries through the Regional Non-point Source Strategy meeting series.
SWCD	Continue to do stormwater control projects.

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 by Cayuga Lake Watershed IO committees, the WQMA will re-examine its involvement.
Network & WQMA	Water sampling under Citizens Lake Assessment Program (CSLAP).
Network, CCE, Plan, SWCD, and OWLA	Educational program for invasive species in the Cayuga and Owasco Lakes, as well as other lakes in Cayuga County.
SWCD	Conduct comprehensive Nutrient Management Plans (CNMP) for farms in the Cayuga Lake Watershed.
Plan	Fire departments and other agencies in Cayuga Lake Watershed in Cayuga Co. surveyed in 2002 to verify who has materials for an immediate response to a hazardous material spill (spill response kits). Examine funding options where spill response kits are lacking. Report findings to WQMA.
Network	Education and monitoring of the Cayuga Lake Watershed.

IO	Carry out the work funded by the \$230,854 award from the NYS Department of State grant for erosion control in streambanks and roadsides. Targeted roads include Genoa/Lansing Townline Road and Lake Road in Genoa.
IO	Work with stakeholders towards including the Cayuga-Seneca Canal in the IO.
IO	Increase public awareness and knowledge of the watershed and related issues and increase stewardship through education. A primary focus of the IO's Education, Public Participation, and Outreach Committee will continue to be a floating classroom on Cayuga Lake.
IO	Cooperate with the Tompkins County SWCD to carry out implementation of federally funded agricultural BMPs in the Cayuga Lake and Owasco Lake watersheds.
IO	Inform federal and state legislators of the IO and its mission and engage them in its support.
IO	Reach out to all village, town, city, and county boards, as well as agencies, organizations and board players in the watershed to inform them of the IO and its mission and engage them in its activities.
IO	Continue to respond to municipalities seeking collaboration on projects and funding applications.
IO	Continue to respond to and take position on issues affecting water quality.

DUCK LAKE

Duck	Aquatic weed control to include identification and removal methods and use of new harvester.
Duck, Health, & Plan	Water sampling including Citizens Lake Assessment Program (CSLAP).
Duck	Identify lake level problems, mainly beaver dam issues.
Duck	Examine jet ski 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.
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OWASCO LAKE

Agriculture

SWCD	Complete Agricultural Environmental Management (AEM) Plans for farms in the Owasco Lake Watershed, 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 in Owasco Lake Watershed and pursue forms of assistance such as continued federal and state grants and cost share programs.
SWCD & NRCS	Provide incentives and programs for farmers and landowners 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	Signs for lake friendly farmers or watershed friendly farmers.
CCE, SWCD & City	Provide public education and monthly news articles/columns on agriculture and the environment.
CCE & Plan	Encourage agritourism.

SWCD & City	Encourage use of whole farm plans.
Plan, SWCD & CCE	Hazardous waste collection days for farm pesticides if grant funding comes through.
SWCD	Present the "Farm of the Year" award.
OWLA & Health	Monitor streams above and below farms.
CCE & Plan	Implement PDR (purchase of development rights) where feasible. CCE will provide educational materials on PDR.
Plan	Towns could change local laws to allow additional business enterprises on farms.
Plan & NRCS	Explore funding options to assist farmers in cleanup after storm events.
SWCD	Take advantage of new technologies to deal with agricultural waste.

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	Develop and implement a sampling plan for determining sources of phosphorus into Owasco Lake. Search for funding to do this.
SWCD & NRCS	Provide incentives and programs for farmers and land-owners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.
SWCD	Encourage the use of nutrient management plans for golf courses, parks, developments, etc. in the watershed.
OWLA, CCE, City & SWCD	Educate the public and developers on how to reduce nutrient introduction to the lake.
SWCD & DEC	Examine alternative methods for aquatic vegetation control besides harvesting.
City & 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. Present results to the WQMA.
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.
CCE & OWLA	Look for funding to teach volunteers to identify aquatic plant species and map them.

Biosolids

EMC	Survey use of biosolids in the Owasco Lake Watershed.
City & Health	Continue to enforce the Watershed Rules and Regulations which states: "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."
Plan & Health	Monitor New York State rules and regulations of biosolids.
Plan & Health	Monitor research on heavy metal mobility in biosolids.

Boating

Plan & OWLA	Research the "carrying capacity" of boats and jet skis on the lake and study the level of pollution from motorized crafts.
Plan & OWLA	Research the impact of excessive wave action.

OWLA	Provide public education on perceived problems of boaters, speed limit and boating setbacks.
OWLA & Plan	Examine building a pumpout station on the North and South end of the Lake.
OWLA	Examine increasing the boating and jet ski setbacks from shore regarding the speed limit.

Chemicals

Yard, Garden and Household Chemical Use and Waste Disposal:

Plan & CCE	Cayuga Co. and Town of Skaneateles 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, and direct mailings.
Plan & CCE	Continue to search for ways to reduce hazardous materials releases in the watershed. For example, find ways to reduce mercury releases, such as collecting auto and household mercury switches and fluorescent bulbs.
Plan, CCE & City	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 and peer pressure.
CCE	Conduct education programs to help homeowners prevent groundwater contamination; include wells, well maintenance, septic system use, yard waste, composting, etc.
SWCD & NRCS	Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.
Plan	Promote municipal level yard waste composting to move the nutrients contained in yard waste away from lakeshore areas.

Hazardous Material Spills and Spill Response

Plan & CCE	Have the Water Quality Management Agency or designated County agency develop, update and provide on an annual basis a listing of who to contact on water quality issues, including who to call to report spills.
Plan	Fire departments and other agencies surveyed in 2002 to verify who has materials for an immediate response to a hazardous material spill (spill response kits). Examine funding options where spill response kits are lacking. Report findings to WQMA.

Education

WQMA	The Cayuga Co. WQMA should encourage and promote a coordinated approach to public education among its member organizations.
CCE	Develop an on-going educational program on watershed and related issues to 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

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

OWLA	Survey residents to see if they have been impacted by zebra mussels especially by zebra mussels in their intake pipes.
Health & CCE	Educate landowners about how to put in intake pipes and treatment methods for dealing with zebra mussels in intake pipes.

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 aquatic vegetation, fish and wildlife.
SWCD	Implement streambank stabilization on severely eroding streams.
SWCD & NRCS	Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.

Fuel and Chemical Storage

Plan	In 2002, obtained and modified the New York State Department of Environmental Conservation (NYSDEC) database on bulk petroleum storage facilities to develop a watershed database. On an annual basis, obtain updates from the NYSDEC.
Plan	Inventory small fuel tanks in the watershed.
Plan	Compile information on chemical storage in the watershed.
Plan	Inventory underground storage tanks in flood zones (such as home heating oil).

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.
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Highway Deicing

Plan	Conduct a survey of highway departments to see who has salt storage structures and contained mixing areas and where they are needed.
Plan	Survey salt policies and procedures for each municipality yearly.
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 and provide information on structural measures to control sediments and other pollutants from stormwater runoff.
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 in the watershed.
SWCD	Organize local training programs through Soil and Water Conservation Districts and Highway Superintendents Association.
SWCD	Examine the use of infiltration trenches, detention ponds, siltation ponds, basins, vegetated swales and filter strips in critical areas and in demonstration projects.
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	Explore why roadside ditches are deepening and develop methods of prevention.
Plan	Encourage local code enforcement officers and local planning boards to establish and enforce site and construction standards and erosion control measures for private roads (Part of Phase II Stormwater Rules and Regulations).

Lake Level

City	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 & Plan	Place the “rule curve” on the Internet. Add a link to the USGS website and their lake level data.
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.

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.
CCE	Distribute landscaping for erosion control information to all contractors and nurseries as well as individual homeowners and realtors.
CCE & OWLA	Conduct Lakeshore Homeowner Workshops on shoreline erosion, vegetative options, yard waste management, etc.

Land Use

Plan	Review and update the webpage directory of zoning provisions and other development regulations of towns and villages, that was created in 2002.
Plan	Inventory wetlands and open space resources in the watershed.
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. (Survey where needed). Use data from streambank assessments and management plans to search for funding.
Plan	Target specific open space areas for an open space system.

Owasco Flats

Plan & Parks	Conduct annual cleanup at Owasco Flats.
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Private and Municipal Wastewater Treatment

Health	Continue the Cayuga County sanitary program, encourage other counties to have similar programs in the Owasco Lake Watershed and monitor water quality status in lake.
Health	Develop a more complete assessment of the wastewater treatment and water supply needs in problematic locales.
Health	Explore federal or state assistance to replace or upgrade septic systems of people with limited incomes.
Health	Encourage the use of water conservation measures through education, financial incentives and appropriate regulations. (<i>Education this year</i>)
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 and loans are available for water and waste disposal systems for rural communities by using the Catalog of Federal Domestic Assistance.
Health: get data	Explore the possibility of upgrading the Groton Wastewater Treatment Facility.

Public Access

Parks, Plan, OWLA & Owasco Flats Committee	Encourage low impact activities in the watershed like hiking, canoeing and fishing instead of motorized use.
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Stormwater and Sediment Control

SWCD	Continue hydroseeding assistance programs for towns and villages in critical areas, such as road ditches, and promote the program to increase use throughout the watershed.
SWCD & CNYRPDB	Continue to conduct regional workshops on stormwater management to educate local decision makers, planning and zoning boards, Code Enforcement Officers, Highway Superintendents and residents about the use of recognized development BMPs to protect water quality and EPA Phase II rules.
SWCD	Provide model site design guidelines for contractors.
SWCD	Have a Certified Professional Erosion and Sediment Control (CPESC) person review existing municipal land use regulations throughout the watershed (i.e. comprehensive plans, zoning codes, subdivision regulation, site plan review), as well as their implementation and enforcement, for adequacy in minimizing the impacts to water quality from development and recommend changes.
SWCD, Plan & CNYRPDB	Encourage towns in the watershed to create and enforce stormwater management and erosion control ordinances by providing a model laws and ordinances for stormwater and erosion control. Provide assistance for towns and villages to comply with Phase II Stormwater Rules and Regulations.

Streambanks and Stream Corridor Management

SWCD & Plan	Conduct streambank erosion assessments throughout the watershed.
SWCD	Implement bank stabilization practices on the most severely eroding banks, as quickly as feasible.
SWCD	Funding sources need to be identified for comprehensive streambank restoration and 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) in the watershed such as livestock exclusion from streams and vegetative filter strips.
CCE & Plan	Develop educational programs on the protection of stream areas and stream maintenance (i.e. What are landowners allowed to do without permits, when are permits needed, and who to contact).
SWCD & NRCS	Continue having staff members of the Soil and Water Conservation District (SWCD) and the Natural Resource Conservation Service (NRCS) assist in future 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 & NRCS	Train staff in remedial fluvial geomorphology and conduct pilot projects on tributaries to Owasco Lake, particularly Dutch Hollow Brook and the Inlet.
SWCD & OWLA	Conduct tours, put up signs and provide information on demonstration projects for streambank erosion and stream buffering.
CCE	Develop a program to plant buffers; provide seedlings, education and instructions.

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.
CCE & Plan	Develop community programs that protect existing trees and encourage significant new plantings in areas where tree plantings would be beneficial.

Waste Sites

Landfills, Inactive Hazardous Waste Sites and Solid Waste Management

Plan	The conditions of the seven closed solid waste landfills and the inactive hazardous waste site should be inspected by a designated Cayuga County agency annually for changing site conditions. Any significant changes should be reported to the DEC.
Plan & Health	Discourage open burning and provide alternatives such as pay by the bag programs for residential solid waste disposal.

Other Waste Sites

OWLA, City & Plan	Inventory junkyards.
OWLA, City & Plan	Inventory permitted and abandoned sand, gravel, and other mines.

Roadside and Illegal Dumping

OWLA, City & Plan	Create an inventory of roadside dumping hot spots and illegal dumping along watercourses.
Plan	List all municipal codes and ordinances for roadside and/or illegal dumping.
Plan	If a municipality does not have a code or ordinance for roadside and/or illegal dumping, provide a sample code or ordinance. For those that do, encourage raising fines and increasing persecution.
OWLA	Communicate illegal dumping problems to the public and how to anonymously report dumping activities.

Waterborne Illness

WQMA	Explore funding to compile and maintain the Water Quality Management Agency (WQMA) database.
Parks	Continue to address the bird problem in Emerson Park and entire lake by trying realistic methods.
Health	Encourage residents using untreated lake water as a drinking water source 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.
SWCD & NRCS	Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.
OWLA, Plan & City	Implement a continuous monitoring program in Owasco Lake and the major tributaries.

Acronyms

CCE: Cayuga County Cornell Cooperative Extension

City: City of Auburn

DEC: New York State Department of Environmental Conservation

Duck: Duck Lake Association

EMC: Cayuga County Environmental Management Council

Forest: Cayuga County Chapter of the New York Forest Owners Association

Health: Cayuga County Department of Health and Human Service Environmental Health Division

Highway: Cayuga County Highway Department

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