

WQMA 2002 Work Plan: Year End Report

Acronyms

CCE: Cayuga County Cornell Cooperative Extension

City: City of Auburn

CNY RPB: Central New York Regional Planning Board

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

COUNTY-WIDE

AGENCY	ACTION	PROGRESS TO DATE
Health	Will continue to enforce the Sanitary Code.	On-going. This year all properties bordering the mean high water mark of Owasco Lake and Little Sodus Bay, and property transfers are subject to the Cayuga County Sanitary Code mandatory septic systems and storm water/drainage pipe inspections. FLOWPA funding is pending that provides money for septic system inspections.
Plan, CCE, & SWCD	Hazardous waste collection day for farm pesticides.	Clean Sweep held October 2002 with 23 participants. Filled 43 drums for a total of 8600 pounds. Possible follow-up event in Spring 2003 for wider audience if funding is obtained. Applied for additional funding through a Level 2 New York State Soil and Water Conservation Committee 2002 County Water Quality Coordinating Committee Mini-grant.
Plan, CCE, & SWCD	Continue to search for ways to reduce hazardous material releases in the watershed.	Household electronics and propane tank collection day held in April with over 15 tons of material collected and 365 participants. Clean Sweep held October 2002 with 23 participants.

CAYUGA LAKE

AGENCY	ACTION	PROGRESS TO DATE
WQMA	Work to implement the Cayuga Lake RPP as it pertains to Cayuga Co.	Assisted the Cayuga Lake Network with collecting contact information for those engaged in monitoring in the Cayuga Lake watershed. Applied for a Level 3 mini-grant to address failing on-site wastewater treatment systems along the shorelines of Duck Lake and Cayuga Lake (Honoco Rd). Will provide information to the Cayuga Lake Watershed Agricultural Committee as requested.
Network, CCE, Plan, SWCD, and OWLA	Educational program for invasive species in the Cayuga Lake and Owasco Lake Watersheds.	John DeHollander from the Oswego County Soil and Water Conservation District presented information on water chestnut to the WQMA in January. Water chestnut alert printed as cover article in Cayuga Lake Network Newsletter and a related display were showcased at Earth Day & Water Week. Presentation on water chestnuts to Network Board, High School class and display at Water Week. Signs provided to CCE by the NYSDEC on water chestnut and other invasive exotics for display at County lakes. CCE and other WQMA member agencies formed a local task force to address the water chestnut issue. CCE became clearinghouse for water chestnut information, with the Network providing additional support for Cayuga Lake. CCE and Plan added information on water chestnut to the WQMA webpage. SWCD, CCE, Plan, and OWLA provided funding to get water chestnut booklets printed for distribution in Cayuga County. CCE and Plan personnel attended a training program to identify aquatic plants. CCE held aquatic plant workshop with 28 attendees. CCE and Plan and agencies from other Counties submitted a regional application to the Great Lakes Protection Fund for aquatic plant education. CNY RPDB is conducting research and compiling information as a basis for developing a regional strategy to eliminate water chestnut.

DUCK LAKE

AGENCY	ACTION	PROGRESS TO DATE
Duck	Aquatic weed control to include identification and removal methods.	Appointed a committee to identify weeds and make determination as to annual weed control application. Identified areas to be treated. This committee will also locate any Angled Spikerush (<i>Eleocharis quadrangular</i>), which has been identified by the National Heritage Program as an endangered species of plant. None found. Approved the purchase of a weed harvester.
Duck, Health and Plan	Water sampling.	Continued water sampling for coliform. Appointed a committee to commence the summer lake monitoring program. Joined the Citizen Statewide Lake Assessment Program to conduct monitoring through funding from the FLOWPA program. Plan is working with NYSDEC to find funding for the NYSDEC to do some coliform monitoring of Duck Lake.
Duck	Identify lake level problems, mainly beaver dam issues.	Monitoring lake level and trying to determine why the lake level is dropping.

Duck	Investigate removal of silt from man-made channels (determine if dredging is possible).	Found that there was no property set aside to allow dredging, no right-of-way. No funding available.
Duck	Jet ski problems.	Discovered the need for policing.
Duck	Initiate program to create awareness of dangers of spreading unwanted weeds and zebra mussels as well as feeding ducks and geese.	Sign provided by NYSDEC on water chestnut and other invasive exotics that will be displayed at County lakes, including Duck Lake.

LITTLE SODUS BAY AND LAKE ONTARIO

AGENCY	ACTION	PROGRESS TO DATE
Plan	Fair Haven Sewer Project, Village of Fair Haven. Respond to NYSDEC consent order affecting the Village related to long-term quality of Little Sodus Bay.	Working with the National Small Flows Clearinghouse to review the Village of Fair Haven Sewage Project.

OWASCO LAKE

Agriculture

AGENCY	ACTION	PROGRESS TO DATE
SWCD	Complete AEM Plans for farms in the Owasco Lake Watershed, identify BMPs from those AEMs, look for assistance to implement these BMPs, and measure the effectiveness of these BMPs.	<p>Received a New York State Agricultural Non-point Source Abatement and Control Program grant for \$7,262 to continue the AEM process for 35 farms in the Owasco Lake Watershed.</p> <p>Received \$45,000 of EPA funding through Congressman Walsh in November. Allocated for BMPs in the Owasco Lake Watershed using the AEM process.</p> <p>Received \$49,400 of Bond Act monies to implement rotational grazing in the Owasco Lake Watershed. Five systems are complete and others in progress.</p> <p>Tompkins County SWCD: Received Clean Water /Clean Air Bond Act and Environmental Protection Fund Monies (\$259,640) to implement rotational grazing in the Cayuga and Owasco Watersheds. The Tompkins County SWCD will coordinate the installation of 57 BMPs (such as fencing, alternative animal watering systems, and pasture management) for implementing new Rotational Grazing Systems and improving existing ones on 37 livestock farms located in the Owasco and Cayuga Lake watersheds.</p> <p>Also received New York State Agricultural Non-point Source Abatement and Control Program grant for \$305,528 to do barnyard management on five farms in the Owasco Inlet Watershed.</p>

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.	Received Environmental Protection Funds totaling \$11,931 to develop comprehensive nutrient management plans (CNMPs) in the Owasco and Cayuga Lake Watersheds. One is approved and two more are underway. Received \$45,000 of EPA funding through Congressman Walsh in November. Allocated for BMPs in the Owasco Lake Watershed using the AEM process. Facilitated farmer participation in EQIP.
SWCD & NRCS	Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.	Support Conservation Reserve Program (CRP). 5 landowners have put 272 acres into the CRP under 10 year contracts. Obtained a no till seeder and tractor. This equipment that can be used for a fee to establish buffers. Working with landowners to establish buffers. One landowner has applied for 7250 feet of vegetative buffer along streams. Examining other ways to encourage buffers.
SWCD & NRCS	Encourage farmers to join the Conservation Reserve Program.	On-going program. 5 landowners have put 272 acres into the CRP under 10 year contracts.
OWLA	Signs for lake friendly farmers or watershed friendly farmers.	Not yet.
CCE, SWCD & City	Provide public education and monthly news articles/columns on agriculture and the environment.	CCE's Eco Talk published in The Citizen on 5/3 and 5/31. SWCD publishes a monthly newsletter. Conservation Field Days and Envirothon. Work with local newspapers to get articles in the paper. Publication of a bi-monthly newsletter for interested Cayuga County farmers and the public called Ag Alert. Publication of regional publications, Profit Manager and Ag Viewpoint.
CCE	Encourage agritourism.	Developed the Cayuga County Passport Program. Revived and facilitated the Ag Promotion Council. Created the "Cayuga Grows" brochure in cooperation with the Ag Promotion Council.
SWCD, City & CCE	Encourage use of whole farm plans.	Received a New York State Agricultural Non-point Source Abatement and Control Program grants of \$369,688 to develop comprehensive nutrient management plans for 23 farms in the Owasco, Cayuga and Seneca River watersheds. Provided resources and tools for farmers interested in whole farm plans.
Plan, SWCD & CCE	Hazardous waste collection days for farm pesticides.	Clean Sweep held October 2002 with 23 participants. Filled 43 drums for a total of 8600 pounds. Possible follow-up event in Spring 2003 for wider audience if funding is obtained. Applied for additional funding through a Level 2 New York State Soil and Water Conservation Committee 2002 County Water Quality Coordinating Committee Mini-grant.

SWCD	Develop a "Farm of the Year" award.	Awarded Fessenden Farms the Farm of the Year Award in April.
OWLA, City & Health	Monitor streams above and below farms.	Applied for an Environmental Protection Fund Grant to conduct monitoring on the four main tributaries to Owasco Lake.
CCE & Plan	Examine purchasing development rights.	American Farmland Trust Seminar held at CCE in April. Meeting in May with Ag Protection Board. CCE's Eco talk published in The Citizen on 5/3 and 5/31. American Farmland Trust presented to the County Planning Board in October.
Plan	Towns could change local laws to allow additional business enterprises on farms.	Begun research.
Plan	Explore funding options to assist farmers in cleanup after storm events.	Not yet.
SWCD	Take advantage of new technologies to deal with agricultural waste.	Working with a consultant on the feasibility of a regional digester. Applied for a NYSERDA grant to examine using the STRUVITE process on wastewater from methane digesters to create a form of phosphorus that can be used as fertilizer.

Aquatic Vegetation

AGENCY	ACTION	PROGRESS TO DATE
Plan (search for funding)	Inventory and map aquatic vegetation in Owasco Lake, compare to historical data, and determine management needs. Publish findings as an educational tool. Search for funding for this inventory and mapping.	Research started. CCE and Plan personnel trained to identify aquatic plants.
Plan (search for funding)	Determine water quality, including phosphorus level, in Owasco Lake and the tributaries, and the effect it has on aquatic vegetation.	Applied for an Environmental Protection Fund grant to monitor the lake and its tributaries. Current monitoring program with stations at Dutch Hollow Brook and the Owasco Inlet. Monitors level, rainfall, and flow. Takes samples for lab analysis of total and soluble reactive phosphorus and total solids. OWLA is in planning stage to purchase a buoy and data logger to conduct monitoring.
Plan (search for funding)	Develop and implement a sampling plan for determining sources of phosphorus into Owasco Lake.	Applied for an Environmental Protection Fund grant to conduct monitoring of Owasco Lake and its tributaries.

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.	Support Conservation Reserve Program (CRP). 5 landowners have put 272 acres into the CRP under 10 year contracts. Obtained a no till seeder and tractor. This equipment that can be used for a fee to establish buffers. Working with landowners to establish buffers. One landowner has applied for 7250 feet of vegetative buffer along streams.
SWCD	Encourage the use of nutrient management plans for golf courses, parks, developments, etc. in the watershed.	Worked with ACS Consultants to complete a nutrient management plan for Dutch Hollow Brook County Club. Has offered program to Auburn County Club and Owasco Country Club.
OWLA, CCE, City & SWCD	Educate the public and developers on how to reduce nutrient introduction to the lake.	Meeting with residents of Koenig's Point to look at bacteria and nutrients entering stormwater drainage system. Working to develop understanding and to educate. Offered a program, which has not been accepted at this time. Funding obtained from the Great Lakes Commission, Great Lakes Basin Program for Soil Erosion and Sediment Control to conduct educational programs for homeowners and landscape professionals on buffers and water quality oriented lawn care practices.
SWCD	Examine alternative methods for aquatic vegetation control besides harvesting.	Ongoing projects up in the watershed such as streambank protection utilizing various techniques such as fluvial geomorphology, critical area seeding, seeding area roadbanks, and providing hydroseeding to the towns and villages to reduce nutrients and sediments into the lake.
SWCD	Learn about life cycles to recommend harvesting times for both municipal and private harvesting efforts.	Have modified the harvesting: examine areas for cutting and no more clear cutting.
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.	Data has been collected and sent to Plan for review.
CCE (Look for funding)	Examine reducing sources of phosphorus to Owasco Lake identified through sampling program.	No funding sources found this year.
SWCD	Examine dredging and explore funding opportunities to dredge the South end of Owasco.	NEA Consultants in Maine have developed the plan. Permits have been sent. Confirmation from the Army COE and NYSDEC has sent a Notice of Complete Application and is working on its review. Place found for spoils and lawyer working on an agreement to use it. Grant to fund it.

OWLA	Teach volunteers to identify aquatic plant species and map them.	Funding for this type of program written into a regional grant application to the Great Lakes protection fund for aquatic plant education.
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Biosolids

AGENCY	ACTION	PROGRESS TO DATE
EMC	Survey use of biosolids in the Owasco Lake Watershed.	Data being collected.
City & Health	Continue to enforce the Watershed Rules and Regulations.	Continued, as part of the regular work plan.
Plan & Health	Monitor New York State rules and regulations of biosolids.	Being monitored.
Plan & Health	Monitor research on heavy metal mobility in biosolids.	Being monitored.
Plan	Summer Hill's local law regulating the disposal of septage, sewage sludge, and sludge as a model law.	Available at Plan.
Plan	Groton's local law regulating solid waste management facilities as a model law.	Available at Plan.

Boating

AGENCY	ACTION	PROGRESS TO DATE
Plan & OWLA	Research the "carrying capacity" of boats and jet skis on the lake and study the level of pollution from motorized crafts.	Research started.
Plan & OWLA	Research the impact of excessive wave action.	Not yet.
OWLA	Provide public education on perceived problems of boaters, speed limit and boating setbacks.	OWLA webpage.
OWLA & Plan	Examine building a pumpout station on the North and South end of the Lake.	Research funding opportunities.
OWLA	Examine increasing the boating and jet ski setbacks from shore regarding the speed limit.	Not yet.

Chemicals*Yard, Garden and Household Chemical Use and Waste Disposal:*

AGENCY	ACTION	PROGRESS TO DATE
Plan & CCE	Provide info on proper use & disposal of household chemicals; suggested media includes annual water quality reports by water providers, water bill messages, and direct mailings.	Website for information on household hazardous waste. Information on WQMA website on Integrated Pest Management (IPM) practices and pesticide free lawns. IPM information distributed via CCE Master Gardener program.

<p>Plan & CCE</p>	<p>Continue to search for ways to reduce hazardous materials releases in the watershed.</p>	<p>Household electronics and propane tank collection day held in April with over 15 tons of material collected and 365 participants. CCE's Eco Talk published in The Citizen on 4/19. Clean Sweep held October 2002 with 23 participants. Filled 43 drums for a total of 8600 pounds. Possible follow-up event in Spring 2003 for wider audience if funding is obtained. Applied for additional funding through a Level 2 New York State Soil and Water Conservation Committee 2002 County Water Quality Coordinating Committee Mini-grant. Mercury switch collection planning event held in July to canvas community/sponsor interest in holding a larger collection event.</p>
<p>Plan, CCE & City</p>	<p>Promote pest management practices that reduce pesticide use in the watershed, including integrated pest management and non-toxic pest management.</p>	<p>WQMA website has information on lawn care without pesticides and links to other websites with more info. CCE's Eco Talk published in the Citizen on 3/8. Funding obtained from Great Lakes Commission to conduct an environmental program on riparian and lakeshore erosion and IPM on landscape plants and lawns for homeowners and landscape professionals. IPM material distributed via CCE Master Gardener program.</p>
<p>Plan & CCE</p>	<p>Examine ways to change people's attitudes about the "perfect lawn" through education and peer pressure.</p>	<p>WQMA website has information on lawn care without pesticides and links to other websites with more info. Funding obtained from Great Lakes Commission to conduct an environmental program on riparian and lakeshore erosion and IPM on landscape plants. Will be completed in 6/2003. Webpage is on-line. Workshop on water conservation for Master Gardeners in June 2002.</p>
<p>CCE</p>	<p>Provide Home*A*Syst type workshops to help homeowners prevent groundwater contamination; include wells, well maintenance, septic system use, yard waste, composting, etc.</p>	<p>Funding obtained from Great Lakes Commission to conduct an environmental program on riparian and lakeshore erosion and IPM on landscape plants. Will be completed in 6/2003. Webpage is on-line. Storm drain stenciling project conducted July 2002. CCE's Eco Talk published in the Citizen on 2/8. Workshop for Master Gardeners on Backyard Composting conducted August 2002. Compost workshop and bin sale held in Fall 2002. 100 participants. Funding through SWCD. Water well education program for Town of Ledyard residents. Approximately 75 participants.</p>

SWCD & NRCS	Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.	Support Conservation Reserve Program (CRP). 5 landowners have put 272 acres into the CRP under 10 year contracts. Obtained a no till seeder and tractor. This equipment that can be used for a fee to establish buffers. Working with landowners to establish buffers. One landowner has applied for 7250 feet of vegetative buffer along streams.
Plan	Promote municipal level yard waste composting to move the nutrients contained in yard waste away from lakeshore areas.	Not yet.

Hazardous Material Spills and Spill Response

AGENCY	ACTION	PROGRESS TO DATE
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.	First draft completed.
Plan	Survey fire departments and other agencies 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.	Contacted the CEMO to verify who has materials for an immediate response to a hazardous material spill. Does not have the information. Survey will be sent. County has spill response trailer for petroleum spills.

Education

AGENCY	ACTION	PROGRESS TO DATE
WQMA	The Cayuga Co. WQMA should encourage and promote a coordinated approach to public education among its member organizations.	On-going.
CCE	Develop an on-going educational program on watershed and related issues to schools and school aged children.	Watershed Watch program was revised and conducted. Webpage is online. Two trainings were held in April. Several water monitoring kits are now in use by youth groups and classrooms. Participation in Auburn Montessori School Earth Day celebration in June. Conservation Field Days held in September 2002.
CCE & Plan	Make watershed issues more accessible to citizens by utilizing the internet, direct mailings, and media releases.	All outlets were utilized for the Earth Day Collection and Watershed Watch. CCE webpage is in the process of being updated. WQMA webpage was updated and new pages added.

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.	On-going
CCE & Everyone	Develop promotional campaigns that will interest a larger variety of participants in education programs.	On-going. CCE has expanded mailing lists and is working with Plan to develop watershed specific mailing lists.
CCE	Agencies and organizations that promote water quality should enable trainers and educators to continually develop skills and expertise.	Watershed Watch was conducted on a Train the Trainer basis.

Exotic, Introduced and Invasive Species Management

AGENCY	ACTION	PROGRESS TO DATE
Plan: funding	Initiate a regular inventory and monitoring program for exotic, introduced and invasive species in the lake and watershed.	CCE and Plan personnel trained to identify aquatic plants. CCE, Plan, and other regional partners have submitted an aquatic plant education and monitoring grant to the Great Lakes Protection Fund.
CCE, Plan, OWLA, SWCD, Network	Invasive exotic species education program.	Water chestnut alert printed as cover article in Cayuga Lake Network Newsletter & related display was showcased at Earth Day and Water Week. Signs provided to CCE by the NYSDEC on water chestnut and other invasive exotics that will be displayed at County lakes. CCE became clearinghouse for water chestnut information, with the Network providing additional support for Cayuga Lake. CCE and other WQMA member agencies formed a task force to address the water chestnut issue. CCE and Plan added info on water chestnut to the WQMA webpage. SWCD, CCE, Plan, and OWLA provided funding to get water chestnut booklets printed for distribution in Cayuga County. CCE and Plan personnel trained to identify aquatic plants. CCE and Plan worked with other Counties to submit a regional application to the Great Lakes Protection Fund for aquatic plant education. Aquatic plant workshop held with 28 attendees.

Zebra Mussels

AGENCY	ACTION	PROGRESS TO DATE
OWLA	Survey residents to see if they have been impacted by zebra mussels especially by zebra mussels in their intake pipes.	Not yet.
Health	Educate landowners about how to put in intake pipes and treatment methods for dealing with zebra mussels in intake pipes.	In planning stages.

Fish and Wildlife Management

AGENCY	ACTION	PROGRESS TO DATE
Plan: funding	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.	Applied for an Environmental Protection Fund grant to conduct monitoring of Owasco Lake and its tributaries. OWLA is in planning stage to purchase a buoy and data logger to conduct monitoring.
SWCD	Implement streambank stabilization on severely eroding streams.	Projects completed in 2002 include 250 feet of rip rap on Dutch Hollow Brook (DHB) in Owasco and 235 feet of rip rap on DHB and Owasco Lake at the mouth of DHB. NYSDEC and Army COE approved permits for streambank stabilization work on DHB (3 projects), DHB and Owasco Lake (2 projects), and the Owasco Inlet (1 project). Shumaker Consultants examining fluvial geomorphology concept on the Owasco Inlet and Dutch Hollow Brook. Staff from SWCD and Plan are assisting and gaining hands on experience. Survey work is being conducted on DHB for future fluvial geomorphology work. Volunteers from Auburn High School planted willow wattles. Permitting process for stabilization work on Owasco Inlet, waiting for implementation. Received grant from Great Lakes Watershed Restoration Program for stream assessment of Owasco Inlet and stabilization of its banks.
SWCD & NRCS	Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.	Support Conservation Reserve Program (CRP). 5 landowners have put 272 acres into the CRP under 10 year contracts. Obtained a no till seeder and tractor. This equipment that can be used for a fee to establish buffers. Working with landowners to establish buffers. One landowner has applied for 7250 feet of vegetative buffer along streams.

Forestry Management

AGENCY	ACTION	PROGRESS TO DATE
CCE	Coordinate information and technical services for forest landowners.	Determined not to be a priority for 2002.
Plan	Suggest (target audience is municipal planning officials) that forest land use cover is complementary to more intensive uses as part of comprehensive land use plans.	Participation on a Statewide Steering Committee and a Regional Advisory Team to develop guidelines for better forest stewardship plans for landowners.

Fuel and Chemical Storage

AGENCY	ACTION	PROGRESS TO DATE
Plan	Compile information on chemical storage in the watershed.	Not yet.

Funding Options

AGENCY	ACTION	PROGRESS TO DATE
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.	<p>Applied for an Environmental Protection Fund grant to conduct monitoring of Owasco Lake and its tributaries.</p> <p>Great Lakes Basin Program grants received for Owasco Lake Tributary Assessment and Management Plan Development and Green Thumbs for Blue Water: Landscaping for Erosion Control.</p> <p>Applied for Level 1, 2, and 3 New York State Soil and Water Conservation Committee 2002 County Water Quality Coordinating Committee Mini-grants. Level 1 funding was received for writing a report of the WQMA. Levels 2 and 3 have not been announced. Level 2 funding would be for a Clean Sweep Program and Level 3 would address failing on-site wastewater treatment (OSWT) systems along the shorelines of Duck Lake and Cayuga Lake.</p> <p>CNY RPDB will identify available federal, state, local, and private water and environmental related grant opportunities and post them on their website during the summer of 2002.</p> <p>Received two New York State Agricultural Non-point Source Abatement and Control Program grants. The first is \$7262 to do AEM plans for 35 farms in the Owasco Lake Watershed. The second is \$369,688 to do nutrient management plans for 23 farms in the Owasco, Cayuga and Seneca River watersheds.</p> <p>Received \$374,000 through the Great Lakes Watershed Restoration Program to do stream assessment and stabilization projects on the Owasco Inlet.</p>

Highway Deicing

AGENCY	ACTION	PROGRESS TO DATE
Plan	Conduct a survey of highway departments to see who has salt storage structures and contained mixing areas and where they are needed.	Provided the Town of Locke information when they applied to the Bond Act for a salt storage shed.
Plan	Survey salt policies and procedures for each municipality yearly.	Planning stage.
CCE	Increase the use of the Cornell Local Roads Program and Highway School by highway officials.	SWCD District field manager discussed Program with Cayuga County Highway Superintendents. Many attend already.

Highway Maintenance

AGENCY	ACTION	PROGRESS TO DATE
SWCD	Increase the use of the Cornell Local Roads Program and Highway School by highway officials.	SWCD District field manager discussed Program with Cayuga County Highway Superintendents. Many attend already.
SWCD	Encourage use of structural controls of sediments on steep roads, roadbanks and in high flow ditches.	Sennett, Locke, Owasco and Niles working with SWCD for control structures, seedlings, fabric, riprap, etc.

SWCD	Encourage and provide information on timely revegetation of road ditches and banks.	Working with County, Towns, and State DOT to provide hydroseeding. Provide free labor.
SWCD	Encourage use and provide information on structural measures to control sediments and other pollutants from stormwater runoff.	Designed drop inlet and surface inlet structures and made recommendations for adequate and protected outlets on highway ditches.
SWCD	Encourage use of and provide information on BMPs to reduce roadbank erosion.	Working with County, Towns, and State DOT to provide hydroseeding. Provide free labor. County wide have hydroseeded 10 acres.
SWCD	Provide an annual informational report for highway superintendents and workers in the watershed.	Will be mailing out copies of report.
SWCD	Organize local training programs through Soil and Water Conservation Districts and Highway Superintendents Association.	SWCD district filed manager attends highway superintendent meetings to keep them up to date on what is going on at SWCD.
SWCD & Plan	Examine the use of infiltration trenches, detention ponds, siltation ponds, basins, vegetated swales and filter strips in critical areas and in demo projects.	Several projects in planning stage. Constructed a retention pond in Moravia. Detention basin designed for the Auburn Country Club.
SWCD	Examine ways to prevent sediment eroded from plowed fields by wind & water from ending up in the ditches to the lake; especially during heavy rainfalls.	Project in beginning stages.
SWCD	Explore why roadside ditches are deepening and develop methods of prevention.	Roadside ditches can deepen when fast moving water enters from other ditches. Working with the towns to place stabilized outlets where this is occurring.
SWCD	Encourage the use of erosion and sediment control standards in all highway construction and maintenance plans, bids and contracts.	At the local level to create standards around Owasco and Cayuga Lakes. SWCD provides technical assistance and reviews plans for erosion and sediment control projects for local highway departments, towns and villages.

Lake Level

AGENCY	ACTION	PROGRESS TO DATE
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.	Continuing as part of their regular work plan.
City	Place the “rule curve” and daily lake levels on the Internet.	Not yet

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).	Efforts to continue operations continue as part of their regular work plan.
SWCD	Examine dredging and explore funding opportunities to dredge the South end of Owasco Lake.	NEA Consultants in Maine have developed the plan to dredge the South end of Owasco Lake. Permits applications have been sent. Confirmation from the Army COE and NYSDEC has sent a Notice of Complete Application and is working on its review. Place found for spoils. Grant to fund it.
OWLA	Begin dialogue on lake level.	Not yet.

Lakeshore Erosion

AGENCY	ACTION	PROGRESS TO DATE
CCE & OWLA	Promote and distribute existing shoreline erosion control guidebooks and information sheets with specific information on plantings that will help reduce shoreline erosion.	Great Lakes Basin Program grant received for Green Thumbs for Blue Water: Landscaping for Erosion Control. Website on-line.
CCE & OWLA	Conduct Lakeshore Homeowner Workshops on shoreline erosion, vegetative options, yard waste management, etc.	Great Lakes Basin Program grant received for Green Thumbs for Blue Water: Landscaping for Erosion Control.

Land Use

AGENCY	ACTION	PROGRESS TO DATE
Plan	Create a directory of zoning provisions and other development regulations of towns and villages, & provide directory on a webpage.	Directory completed.
Plan	Inventory wetlands and open space resources in the watershed.	Beginning inventory. Addition to New York States Open Space Supplemental List: Owasco Lake Stream Buffer Initiative.
Plan	Educate planning boards about land use issues such as drainage, buffer zones, stormwater runoff, etc.	Continuously. American Farmland Trust presented to Cayuga County Planning Board. Plan and CCE trained in LEAPE (Locally-led Education for Protecting the Environment). Conduct a training workshop for the Town of Scipio in December 2002.
Plan	Provide assistance to towns and villages to design, adopt and/or implement standards and guidelines; provide model ordinances, regulations, standards, and guidelines.	Continuously.

Plan & SWCD	Explore opportunities to protect streambank areas. (Survey where needed).	Great Lakes Basin Program grant received for Owasco Lake Tributary Assessment and Management Plan Development for Veness, Sucker and Dutch Hollow Brooks. Management Plan developed for the Owasco Inlet.
Plan	Target specific open space areas for an open space system.	Additions to New York States Open Space Supplemental List: Owasco Lake Stream Buffer Initiative

Private and Municipal Wastewater Treatment

AGENCY	ACTION	PROGRESS TO DATE
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.	On-going. This year all properties bordering the mean high water mark of Owasco Lake and Little Sodus Bay, and property transfers are subject to the Cayuga County Sanitary Code mandatory septic systems and storm water/drainage pipe inspections. FOLLOWPA funding is pending that provides money for septic system inspections.
Health	Develop a more complete assessment of the wastewater treatment and water supply needs in problematic locales.	In planning process.
Health	Explore federal or state assistance to replace or upgrade septic systems of people with limited incomes.	Continuously.
CCE & Health	Encourage the use of water conservation measures through education, financial incentives and appropriate regulations. (<i>Education this year</i>)	CCE's Eco talk published in The Citizen on 5/3 and 3/29. Presentation on water conservation to Master Gardeners in June.
Health	Provide educational workshops on on-site septic systems for residents.	Working on determining if there is a need.
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.	Started research.
Health: get data	Explore the possibility of upgrading the Groton Wastewater Treatment Facility.	Beginning data collection. Letter send on WQMA's behalf to the NYSDEC to look at phosphorus from Groton and put a limit on it.

Public Access

AGENCY	ACTION	PROGRESS TO DATE
OWLA & Plan	Encourage low impact activities in the watershed like hiking, canoeing and fishing instead of motorized use.	Plan developed a canoe access map of Cayuga County.

Stormwater and Sediment Control

AGENCY	ACTION	PROGRESS TO DATE
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.	Received Great Lakes grant to do hydroseeding. Applied for a grant to the Great Lakes Basin Program to fund hydroseeding assistance programs at South end of the lake (denied funding). Volunteer to assist town highways to do seedings. Provides free labor. Towns pay for supplies.
SWCD, Plan & CNY RPB	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.	CNYRBPB will continue outreach and assistance efforts to define specific ways to assist various entities with SPDES Stormwater Phase II compliance. Stormwater presentation given to the County Planning Board in December.
SWCD	Provide model site design guidelines for contractors.	Not yet.
SWCD	Have a Certified Professional Erosion and Sediment Control (CPESC) person review existing municipal land use regulations throughout the watershed as well as their implementation and enforcement, for adequacy in minimizing the impacts to water quality from development and recommend changes.	Clark Jillson is a CPESC person. Three site plans submitted and reviewed. Existing ordinances have not been adopted by the towns yet.
SWCD	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.	Model law available. Tried to have county and towns adopt it in past.

Streambanks and Stream Corridor Management

AGENCY	ACTION	PROGRESS TO DATE
SWCD & Plan	Conduct streambank erosion assessments throughout the watershed.	Great Lakes Basin Program for Soil Erosion and Sediment Control grant received for Owasco Lake Tributary Assessment and Management Plan Development for Veness, Sucker and Dutch Hollow Brook. Survey work is being conducted on Dutch Hollow Brook for future fluvial geomorphology work. Assessment completed for the Owasco Inlet. Assessment and GPS of Owasco Inlet in report form.

<p>SWCD</p>	<p>Implement bank stabilization practices on the most severely eroding banks, as quickly as feasible.</p>	<p>Projects completed in 2002 include 250 feet of rip rap on Dutch Hollow Brook (DHB) in Owasco and 235 feet of rip rap on DHB and Owasco Lake at the mouth of DHB. NYSDEC and Army COE approved permits for streambank stabilization work on DHB (3 projects), DHB and Owasco Lake (2 projects), and the Owasco Inlet (1 project). Shumaker Consultants examining fluvial geomorphology concept on the Owasco Inlet and Dutch Hollow Brook. Staff from SWCD and Plan are assisting and gaining hands on experience. Survey work is being conducted on DHB for future fluvial geomorphology work. Volunteers from Auburn High School planted willow wattles. Permitting process for stabilization work on Owasco Inlet, waiting for implementation. Received grant from Great Lakes Watershed Restoration Program for stream assessment of Owasco Inlet and stabilization of its banks.</p>
<p>SWCD</p>	<p>Funding sources need to be identified for comprehensive streambank restoration and management programs.</p>	<p>Have a list of organizations for funding. Will be contacting organizations for matching funds for the Great Lakes Watershed Restoration Program grant on the Owasco Inlet. Has EPA funds and are looking for partnerships.</p>
<p>SWCD & NRCS & Plan</p>	<p>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.</p>	<p>Support Conservation Reserve Program (CRP). 5 landowners have put 272 acres into the CRP under 10 year contracts. Obtained a no till seeder and tractor. This equipment that can be used for a fee to establish buffers. Working with landowners to establish buffers. One landowner has applied for 7250 feet of vegetative buffer along streams.</p>
<p>NRCS & SWCD</p>	<p>Promote the use of Best Management Practices (BMPs) in the watershed such as livestock exclusion from streams and vegetative filter strips.</p>	<p>Pasture walk conducted with 8-10 farmers. Received \$49,400 of Bond Act monies to implement rotational grazing in the Owasco Lake Watershed. Five systems are complete and others in progress. Tompkins County SWCD: Received Clean Water /Clean Air Bond Act and Environmental Protection Fund Monies (\$259,640) to implement rotational grazing in the Cayuga and Owasco Watersheds. The Tompkins County SWCD will coordinate the installation of 57 BMPs (such as fencing, alternative animal watering systems, and pasture management) for implementing new Rotational Grazing Systems and improving existing ones on 37 livestock farms located in the Owasco and Cayuga Lake watersheds.</p>

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.	Received \$374,000 through the Great Lakes Watershed Restoration Program to do stream assessment and stabilization projects on the Owasco Inlet. Other stabilization projects will be completed on the Owasco Inlet under EPA according to the terms in the NYSDEC permit.
Plan	Provide model buffer and stream corridor protection ordinances to the municipalities.	Available at Plan.
Plan	Examine debris accumulation in streams and determine whose jurisdiction it is to remove it and have it removed.	Not yet.
SWCD & Plan	Train staff in remedial fluvial geomorphology and conduct pilot projects on tributaries to Owasco Lake, particularly Dutch Hollow Brook and the Inlet.	Great Lakes Basin Program for Soil Erosion and Sediment Control grant received for Owasco Lake Tributary Assessment and Management Plan Development for Veness, Sucker and Dutch Hollow Brook. Pilot project on Dutch Hollow Brook is providing on the job training. Received \$374,000 through the Great Lakes Watershed Restoration Program to do stream assessment and stabilization projects on the Owasco Inlet. Includes fluvial geomorphology.
SWCD & OWLA	Conduct tours, put up signs and provide information on demonstration projects for streambank erosion and stream buffering.	Watershed signs refurbished and installed.

Urban/Community Forestry

AGENCY	ACTION	PROGRESS TO DATE
Plan	Encourage towns and villages to apply to grant programs for tree planting.	Community tree planting program
Plan	Provide a model town or village tree ordinance.	Available at Plan.
Plan	Examine funding to do community forest plans and to plant trees.	Community tree planting program

Waste Sites

Landfills, Inactive Hazardous Waste Sites and Solid Waste Management

AGENCY	ACTION	PROGRESS TO DATE
Health & 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.	Begun.
Plan & Health	Discourage open burning and provide alternatives such as pay by the bag programs for residential solid waste disposal.	In progress.

Other Waste Sites

AGENCY	ACTION	PROGRESS TO DATE
OWLA & Plan	Inventory junkyards.	Not yet.
Plan	Inventory permitted and abandoned sand, gravel, and other mines.	Not yet.

Roadside and Illegal Dumping

AGENCY	ACTION	PROGRESS TO DATE
OWLA, City & Plan	Create an inventory of roadside dumping hot spots and illegal dumping along watercourses.	Not yet.
Plan	List all municipal codes and ordinances for roadside and/or illegal dumping.	Started.
OWLA	Put up signs to discourage dumping.	Not yet.
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.	Not yet.
Plan	Encourage town cleanup days.	Not yet.
OWLA	Communicate illegal dumping problems to the public and how to anonymously report dumping activities.	Not yet.

Waterborne Illness

AGENCY	ACTION	PROGRESS TO DATE
WQMA	Explore funding to compile and maintain the Water Quality Management Agency (WQMA) database.	Not yet.
Parks	Continue to address the bird problem in Emerson Park and entire lake by trying realistic methods.	Continue bird aversion and stopping people from feeding the birds. Task Force on Emerson Park Beaches Bacteria Contamination created by the Legislature Planning Committee. Worked on addressing the coliform contamination of the Emerson Park Beaches.
Health	Encourage residents using untreated lake water as a drinking water source to install some type of treatment system to disinfect their drinking water.	In planning process.
Health	Provide educational materials through Cornell Cooperative Extension and the Cayuga County Health Department.	In planning process.

<p>SWCD</p>	<p>Use BMPs and Environmental Protection Agency Regulations to reduce contamination from pastures.</p>	<p>Received \$49,400 of Bond Act monies to implement rotational grazing in the Owasco Lake Watershed. Five systems are complete and others in progress. 25 farmers maintain pasture systems. Tompkins County SWCD: Received Clean Water /Clean Air Bond Act and Environmental Protection Fund Monies (\$259,640) to implement rotational grazing in the Cayuga and Owasco Watersheds. Also received New York State Agricultural Non-point Source Abatement and Control Program grant for \$305,528 to do barnyard management on five farms in the Owasco Inlet Watershed.</p>
<p>SWCD & NRCS</p>	<p>Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.</p>	<p>Support Conservation Reserve Program (CRP). 5 landowners have put 272 acres into the CRP under 10 year contracts. Obtained a no till seeder and tractor. This equipment that can be used for a fee to establish buffers. Working with landowners to establish buffers. One landowner has applied for 7250 feet of vegetative buffer along streams.</p>
<p>OWLA, Plan, City, & Health</p>	<p>Implement a continuous monitoring program in Owasco Lake and the major tributaries.</p>	<p>Applied for the Environmental Protection Fund grant to conduct monitoring of Owasco Lake and its tributaries. Current monitoring program with stations at Dutch Hollow Brook and the Owasco Inlet. Monitors level, rainfall, and flow. Takes samples for lab analysis of total and soluble reactive phosphorus and total solids. Health sampled the months of creeks into Owasco Lake this summer for coliform bacteria.</p>

Additional Work Conducted in 2002 (not included in the WQMA 2002 Work Plan)

<i>Additional Work: County</i>		
WQMA	Work on the Septage Spreading issue in Cayuga County.	Recommended that the Legislative Committee of Planning and Economic Development recommend enacting a County law to prohibit septage spreading County-wide. Requested that the NYSDEC not issue any landspreading permits for new haulers until certain conditions are met. Held two informational meetings on septage spreading in May.
WQMA & EMC	Comment on the proposed rules to the New York State Solid Waste Management Regulations.	Comments from the EMC and WQMA sent as a resolution to the Cayuga County Legislature which adopted it in February.
WQMA	Well testing.	Provided a well testing program in November in the Town of Ledyard.
WQMA & EMC	Coliform contamination in Owasco Lake.	Task Force on Emerson Park Beaches Bacteria Contamination created by the Legislature Planning Committee. Worked on addressing the coliform contamination of the Emerson Park Beaches.
CCE & Plan	Provide LEAPE (Locally-led Education and Action for Protecting the Environment) training.	Presented information on the LEAPE program to the County Planning Board in October. Provide training to the Town of Scipio in December.
CNY RPDB	Education.	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	Invasive Species.	CNY RPDB is conducting research and compiling 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	Communication.	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	Stormwater control.	Detention basin was built in Aurelius.

<i>Additional Work-Cayuga Lake</i>		
Network	Education and monitoring.	<p>Cayuga Lake Network Newsletter articles provided information on manure management, water chestnut, water quality benefits of grazing, update on Aurelius/ Springport/ Fleming groundwater contamination, lake levels and benefits of agriculture.</p> <p>Assisted the Intermunicipal Organization with a workshop on water monitoring in the Cayuga Lake Watershed. Collected contact information for those engaged in monitoring efforts.</p> <p>Volunteers trained to monitor through Citizen Statewide Lake Assessment Program. There will be four Cayuga Lake sites including Farley's Point at Union Springs and Aurora.</p> <p>Co-sponsored a cleanup of Fall Creek that removed 3300 lbs of trash from seven stretches of Fall Creek from Lake Como to Cayuga Lake.</p> <p>Public tour of Patterson Farms focusing on manure management to protect water quality.</p>
SWCD	Comprehensive Nutrient Management Plans (CNMP)	<p>10 farms have completed comprehensive nutrient management plans in the Cayuga Lake Watershed.</p> <p>Received \$109,487 of Environmental Protection Funds to develop CNMPs in the Cayuga Lake Watershed. Four plans have been completed and reviewed using this funding.</p>
Cayuga Lake Intermunicipal Organization		<p>\$230,854 grant from NYS Department of State for erosion control in streambanks and roadsides. Targeted roads include Genoa/Lansing Townline Road and Lake Road in Ledyard.</p> <p>Initiation of an effort to develop a floating classroom in Cayuga Lake.</p> <p>Educational radio spots on water quality issues.</p> <p>Letters of support for funding applications.</p> <p>Seminar on monitoring in the watershed.</p>

<i>Additional Work-Little Sodus Bay and Lake Ontario</i>		
WQMA		Co-sponsored New York's North Coast: A Troubled Coastline Conference

<i>Additional Work-Owasco Lake Watershed</i>		
Plan	Compile information on fuel storage in the watershed.	Compiled in August and available through Plan.
SWCD		Provide cost share for containment vessels for fuel storage at homeowners request. No requests to date.
Plan	Survey fire lanes in the watershed for erosion.	Completed in 2002.
Plan & Parks	Participate in the American Littoral Society Beach Cleanup Day.	Conducted a cleanup of Owasco Flats in September, which removed twelve bags of trash plus pallets, tires, 55 gallon drum, and additional materials that did not fit in the trash bags. Parks picked up the trash.