

Cayuga County Water Quality Management Agency

2005 Year End Report

Approved
January 5, 2006

2005 WQMA Membership

Chair: Bruce Natale

Vice-Chair: David Miller

Cayuga County Legislature's Environmental Advisors:

Director of Cayuga County Planning and Economic Development
Director of Cayuga County Environmental Health
Park Maintenance Supervisor
Director of Cayuga County Soil & Water Conservation District
Cayuga County Solid Waste Management Program Administrator
Cayuga County Cooperative Extension Director

David Miller
Eileen O'Connor
Gary Duckett
Jim Hotaling
Bruce Natale
Kathy Scholl

Non-County, Local Officials

Association of Towns
Association of Villages
City of Auburn Owasco Lake Watershed Inspector

Vacant
Vacant
Anthony DeCaro

Representatives from Interested Regional, State and Federal Agencies:

CNY Regional Planning
NYS DEC Region 7 Forest Practice Board
NYS DEC Region 7 Water Resources
USDA Farm Service Agency
USDA NRCS

Kristy LaManche
Dick Fox
Scott Cook
Jane Cabal
Vacant

Representatives from Waterbody Associations in Cayuga County

Owasco Watershed Lake Association
Duck Lake
Cayuga Lake Intermunicipal Organization

Al Kozlowski
Dale Powell
Darby Kiley

Critical Water Quality Issues of Cayuga County

The following is a list of the top ten critical water quality issues of Cayuga County as determined by the members of the Cayuga County Water Quality Management Agency (WQMA). This list is based on which issues were discussed at WQMA meetings in 2004 and which issues the WQMA members feel will be critical in 2005.

1. Coliform bacteria in County waterbodies, especially in the Emerson Park Beach area of Owasco Lake
2. Stormwater runoff, erosion and sediment loading
3. Invasive Species
4. Phosphorus loading to Owasco and Cayuga Lakes
5. Owasco Lake's Lake Level
6. Hazardous waste and chemicals
7. Overdevelopment of shorelines
8. Excessive recreational use of water
9. Lack of groundwater data
10. Habitat restoration

2005 Work Plan

Acronyms and Abbreviations

CCE: Cayuga County Cornell Cooperative Extension

Cayuga Lake RPP: Cayuga Lake Watershed Restoration and Protection Plan

CEMO: Cayuga County Emergency Management Office

CLWN: Cayuga Lake Watershed Network

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

FLI: Finger Lakes Institute

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

IO: Cayuga Lake Intermunicipal Organization

NRCS: Natural Resource Conservation Service

OWLA: Owasco Watershed Lake Association

Parks: Cayuga County Parks and Trails

Planning: Cayuga County Department of Planning and Development

SWCD: Cayuga County Soil and Water Conservation District

Tour: Cayuga County Department of Tourism

WQMA: Water Quality Management Agency

Agriculture

Action	Responsible Organizations	Work Conducted in 2005
<p>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.</p>	<p>SWCD, NRCS, CCE, Planning, CLWN, IO</p>	<p>Cayuga County SWCD received a NYS Agricultural Non-Point Source Abatement and Control Program grant for \$91,646 to implement best management practices on four farms to address nutrient loading into the Cayuga Lake Watershed. Two farms in Scipio and one in Venice will install silage leachate containment systems. A manure pit and a system to direct animal waste and milk house waste into the pit will be installed in Scipio.</p> <p>Cayuga County SWCD received an Agricultural Non-Point Source Abatement and Control Program Grant in the amount of \$77,600 to implement GrazeNY best management practices such as watering systems, laneways, fencing, etc. on 15 farms.</p> <p>Tompkins County SWCD received a NYS Agricultural Non-Point Source Abatement and Control Program grant for \$151,770 to implement best management practices on 23 livestock farms in the subwatersheds of Cayuga Lake and the Owasco Lake Inlet to manage intensive grazing systems.</p> <p>Onondaga County SWCD received an \$112,743 Great Lakes Consortium Basin Program grant to implement erosion and sediment control on grazing farms in Onondaga and Cayuga Counties.</p>
<p>Conduct Comprehensive Nutrient Management Plans for farms</p>	<p>SWCD</p>	<p>Six Comprehensive Nutrient Management Plans have been completed for six farms in 2005, which covers approximately 3,555 acres.</p>
<p>Once SWCD staff member is certified as a Nutrient Management Plan Specialist, this staff person will review comprehensive Nutrient Management Plans from consultants to see if plans are adequate</p>	<p>SWCD</p>	<p>Staff Member working on becoming certified.</p> <p>Staff member has completed three plans that need to be reviewed.</p>
<p>Complete Agricultural Environmental Management (AEM) Plans for farms.</p>	<p>SWCD</p>	<p>1 complete AEM Farm Plan has been finished for 28.5 acres in the Town of Mentz.</p>
<p>Identify best management practices (BMPs) from AEMs and look for assistance to implement and measure the effectiveness of these BMPs.</p>	<p>SWCD</p>	<p>Milkhouse waste system, roof water management, manure loading concrete pad, and concrete barnyard pad implemented from the AEM plan completed in 2005 in the Town of Mentz (see above).</p>

<p>Take advantage of new technologies to deal with agricultural waste.</p>	<p>SWCD</p>	<p>SWCD has received funds from NYSERDA to investigate the feasibility of the Community Based Anaerobic Digester project. A business plan and a draft report on the financial aspects of the project were completed. Cayuga County SWCD received a \$1,000,000 Clean Energy Project grant from NYSERDA, Rural Development and Ag & Markets for this project. Additional grant applications have been submitted to fund this project.</p> <p>The CLWN worked with Patterson Farms to conduct a tour of their farm in September to allow the public to view the manure digester that was developed through grants from SWCD, NYSERDA, and USDA Rural Development.</p> <p>SWCD worked with Patterson Farms to conduct a tour in October with County staff to view the manure digester that was developed through grants from SWCD, NYSERDA, and USDA Rural Development.</p>
<p>Encourage farmers to join the Conservation Reserve Program.</p>	<p>SWCD</p>	<p>One contract signed for 2005 for approximately 162 acres.</p>
<p>Provide incentives and programs for farmers to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.</p>	<p>SWCD</p>	<p>Conservation Reserve Enhancement Program. (CREP) Initiative between NRCS and SWCD to cost share buffers for streams. 3 signed contracts for 2005, for approximately 23 acres of buffers through CREP for 2005.</p>
<p>Implement PDR (purchase of development rights) where feasible. CCE will provide educational materials on PDR.</p>	<p>CCE, Planning</p>	<p>Planning assisted in the successful submittal of a \$1,888,485 Farmland Protection Implementation Grant for a 1,181 acre dairy farm in Cayuga County in the Owasco Lake Watershed.</p>
<p>Provide public education and news articles/columns on agriculture and the environment.</p>	<p>CCE, SWCD, City, CLWN</p>	<p>SWCD has quarterly newsletter, <u>Conservation Highlights</u>, which reports on conservation projects designed and implemented by the SWCD.</p>
<p>Present farm, conservationist, and educator of the year awards.</p>	<p>SWCD</p>	<p>None to date.</p>
<p>Continue to develop a program and criteria for providing signs for lake friendly farmers or watershed friendly farmers.</p>	<p>CLWN, IO OWLA, SWCD</p>	<p>CLWN is working on developing a lake friendly farming program in the Cayuga Lake Watershed.</p>
<p>Encourage agritourism.</p>	<p>CCE, Planning</p>	<p>Planning assisted the Locke Fire Department in their application for a Farmers Market Round IV grant, which was funded for \$22,175. This funding will be used to install handicap accessible restroom facilities and a secure office space for market operations.</p>

2005 WQMA Year End Report

<p>Encourage towns to change local laws to allow additional business enterprises on farms.</p>	<p>Planning, IO, CNY RPDB</p>	<p>Planning is actively encouraging town officials to be more lenient in the regulations in regards to agricultural based businesses.</p> <p>As part of a \$15,000 grant for the Town of Ledyard from the State's Quality Communities Program, Planning staff is working with the Town to allow farm based businesses to become established in agricultural areas.</p> <p>CNY RPDB is working with town officials to review and revise comprehensive plans and local laws. CNY RPDB will recommend changes in language that hinders or precludes agricultural business.</p>
<p>Explore funding options and ways to assist farmers in cleanup after storm events.</p>	<p>Planning</p>	<p>None to date.</p>

Additional Work

<p>Farmland Protection</p>	<p>Planning, CNY RPDB</p>	<p>Planning assisted the Town of Ledyard in a successful \$15,000 grant application to the State's Quality Communities Program. Planning and American Farmland Trust will work with Ledyard to develop state of the art land use planning and regulations to preserve the agricultural activity in the Town.</p> <p>CNYRPDB discussed the importance of farming and farmland protection with municipal officials in the Owasco Lake watershed. Staff will work with municipalities to obtain funding and pursue land protection initiatives.</p>
<p>Cayuga Lake Watershed Restoration and Protection Plan work.</p>	<p>IO, CLWN</p>	<p>The IO and CLWN reconvened the Cayuga Lake Watershed Agricultural Committee, which is a forum for county representatives, agencies, watershed groups, and farms to discuss pertinent issues in the Cayuga Lake Watershed in regards to agriculture.</p>

Aquatic Vegetation

Action	Responsible Organizations	Work Conducted in 2005
<p>Continue existing aquatic vegetation control program.</p>	<p>SWCD</p>	<p>SWCD continued aquatic vegetation control during the summer of 2005. SWCD harvested aquatic vegetation from Owasco and Otter Lakes, Lake Como, and Little Sodus Bay utilizing County and FLOWPA funds.</p> <p>Jim Hotaling and Tim Lozier of the SWCD spoke to the Owasco Lakefront Owners on August 13th to discuss aquatic vegetation management.</p>

<p>Second year of the Weeds Watch Out! education and monitoring program for invasive aquatic plants.</p>	<p>CCE, CLWN, Planning</p>	<p>Water chestnut and European frogbit were discovered on Sterling Creek near the Sterling Nature Center. CCE and Sterling Nature Center staff conducted hand pulling of the water chestnut on two separate occasions.</p> <p>Weeds Watch Out! Program accomplishments include:</p> <ul style="list-style-type: none"> • The completion of invasive weed identification guides; • Updates to the website (co.cayuga.ny.us/weedswatchout.htm); • mailing of 920 project/workshop brochures to residents of Cross Lake (both in Cayuga and Onondaga Counties), Little Sodus Bay and Duck Lake watersheds; • presentations given to the Cayuga County Legislature Planning and Economic Development Committee, Cayuga County Youth Celebration, and Scipio Lake Property Owners Association; • volunteer training in Auburn for 11 participants on June 15th; • distribution of informational signs around Cayuga County; and • “Weeds Watch Out!” presentation to Cornell Cooperative Extension educators at the 2005 Association of Cornell Cooperative Extension Educators Conference in Buffalo; <p>Articles in <u>The Citizen</u>:</p> <p>“Workshop teaches how to control weeds.” April 8, 2005. “Group calls on state to weed out invasive plants.” August 2, 2005.</p> <p>“Eco Talk” columns written by the staff of CCE published in <u>The Citizen</u>:</p> <p>“Battle against invasive plants.” June 6, 2005. “Volunteers to wage war on invasive plants.” July 30, 2004.</p>
<p>Search for funding to inventory and map aquatic vegetation in County lakes, compare to historical data, and determine management needs. Publish findings as an educational tool.</p>	<p>Planning</p>	<p>Preliminary mapping of Cayuga County aquatic vegetation was part of the Weeds Watch Out! Program.</p>
<p>Continue aquatic weed control program in Duck Lake including herbicide applications and use of new harvester.</p>	<p>Duck</p>	<p>The Duck Lake Association treated 35 acres with Navigate.</p>

2005 WQMA Year End Report

<p>Determine water quality, including phosphorus level, in Owasco Lake and the tributaries, and the effect it has on aquatic vegetation. Search for funding.</p>	<p>Planning, OWLA, CCE</p>	<p>CCE released the report “Total Phosphorus Sampling Program for the Owasco and Cayuga Lake Watersheds.” This is part of the P-Project which was funded by a FLOWPA Special Projects grant. Report was placed on the P-Projects website.</p> <p>P-Project results presented to the WQMA in January. Groton Waste Water Treatment Plant identified as a target area. Recommend NYSDEC require phosphorus removal when it renews Groton’s permit to discharge.</p> <p>P-Project results presented at FLOWPA Spring Workshop by Kelly Fallone.</p> <p>Continued sampling Owasco Lake tributaries for phosphorus with funds from FLOWPA.</p> <p>GIS analyst with Planning developed a preliminary spatial analysis of non-point source pollutant loading in the Cayuga County portion of the Owasco Lake Watershed. The map developed from this analysis is the result of an initial effort to estimate the relative difference in particulate phosphorus loads across the Cayuga County portion of the Owasco Lake Watershed.</p>
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Biosolids

Action	Responsible Organizations	Work Conducted in 2005
<p>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.”</p>	<p>City & Health</p>	<p>Completed</p>

Boating

Action	Responsible Organizations	Work Conducted in 2005
<p>Research the “carrying capacity” of boats and jet skis on Owasco Lake and study the level of pollution from motorized crafts.</p>	<p>Planning, OWLA</p>	<p>Started collecting articles at Planning.</p>

Chemicals: Yard Garden and Household Chemical Use and Waste Disposal

Action	Responsible Organizations	Work Conducted in 2005
Promote NYSDEC Clean Sweep Events.	Planning, CCE	CCE and Planning promoted the NYSDEC Clean Sweep event which was held on April 25 th .
Continue household hazardous waste collection event offerings.	Planning, City, SWCD, CCE	<p>A household hazardous waste, computer and propane tank collection event was held in Casey Park on May 7th. 643 households and two farms participated. 46,800 lbs of household hazardous waste and 24,990 lbs of electronics were collected. The electronics included 111 televisions and 162 computer monitors. 474 propane tanks were also collected. This event was sponsored by the Cayuga County Legislature, Solid Waste Management Program Office, CCE, SWCD, and Planning, & the City of Auburn, Nucor and NYSDEC.</p> <p>A household hazardous waste, computer and propane tank collection event was held on October 15th at SWCD. 382 households participated. Approximately 29,450 lbs of household hazardous waste including 4,500 lbs of oil-based paint, 1,500 lbs of antifreeze, 780 lbs of household batteries and 200 lbs of florescent light bulbs were collected. This event was sponsored by the Cayuga County Legislature, Solid Waste Management Program Office, CCE, SWCD, and Planning, & the NYSDEC.</p>
Continue to search for other ways to reduce hazardous material in the County.	Planning, CCE, SWCD	<p>A tire collection event was held on May 14th which collected 11,400 tires and 266 pounds of lead.</p> <p>A Conditionally Exempt Small Quantity Generator (CESQG) event was held on October 26th for schools and county agencies.</p> <p>Printer cartridge recycling program continues with RecycleFirst. Collection boxes are located in 32 locations in the county and postage paid envelopes to collect cartridges have been distributed. RecycleFirst provides free recycling plus CCE gets a small deposit for solid waste and watershed protection programs.</p> <p>Cellular phone recycling program started with RecycleFirst. Collection boxes are currently at CCE and Planning. More boxes will be added in 2006. RecycleFirst provides free recycling plus CCE gets a small deposit for solid waste and watershed protection programs.</p>
Explore ways to make special waste collection services available on a more frequent basis, especially for fuel products.	Planning, CCE	<p>Planning offered to work with the Village of Fair Haven on vehicle fluid handling if they conduct a car collection day to get rid of junk cars.</p> <p>SWCD purchased a tub grinder for wood waste recycling.</p>

2005 WQMA Year End Report

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.	Planning, CCE, City	Updated information on household hazardous wastes on the Solid Waste Management Program Office website (http://www.cayuganet.org/hazwaste/index.html). “Quick Solid Waste Reference Guide for Cayuga County Residents” printed and distributed.
Promote pest management practices that reduce pesticide use in the watershed, including integrated pest management and non-toxic pest management.	Planning, CCE	CCE conducted P-Project Lawn Care seminars for water quality on April 12 th and June 9 th in Auburn. CCE provided a lawn care series from October 26 th to November 16 th . These were 30 minute personal lawn care workshops and they included a Cornell soil test.
Examine ways to change people’s attitudes about the “perfect lawn” through education.	Planning, CCE	CCE conducted P-Project Lawn Care seminars for water quality on April 12 th and June 9 th in Auburn. CCE provided a lawn care series from October 26 th to November 16 th . These were 30 minute personal lawn care workshops and they included a Cornell soil test. CLWN Summer 2005 newsletter had an article entitled “Watershed Friendly Home and Yard Care.”
Conduct education programs to help homeowners prevent groundwater contamination; include wells, well maintenance, septic system use, yard waste, composting, etc.	CCE	Eco Talk Column written by the staff of CCE published in <u>The Citizen</u> : “Four Easy Steps to Keep Well Water Safe to Drink.” April 24, 2005.

Collaboration

Action	Responsible Organizations	Work Conducted in 2005
Continue to provide the Regional Non-point Source Strategy meeting series.	CNY RPDB	Meeting tentatively scheduled for last quarter of 2005.
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.	WQMA	On-going.

2005 WQMA Year End Report

Complete the Duck Lake State of the Lake Report and the Duck Lake Watershed Management Plan.	Planning, Duck, SWCD	Duck Lake State of the Lake Report and Watershed Management Plan completed in December utilizing funds from Congressman Walsh.
Assist the Center for Environmental Information, Inc. as they work on developing the Lake Ontario Coastal Initiative.	Planning	Planning staff assisted the Lake Ontario Coastal Initiative and FLOWPA by doing the logistics for their workshop at the Sterling Nature Center held in June. This coastal workshop was held to solicit local viewpoints on coastal priorities.

Education

Action	Responsible Organizations	Work Conducted in 2005
The Cayuga Co. WQMA should encourage and promote a coordinated approach to public education among its member organizations.	WQMA	On-going.
Develop an on-going educational program on watershed and related issues for schools and school aged children.	CCE, Planning, CNY RPDB	<p>CCE and Planning presented information on stormwater and recycling to fourth graders who toured the Cayuga County Office Building.</p> <p>Planning presented information on stormwater and watersheds to high school students at Cayuga County's student government day.</p> <p>Planning staff presented information on stormwater and watersheds to 4H students at their "Autumn Fest" in November.</p> <p>Cayuga Lake floating classroom project administered by the IO provides a hands on learning opportunity for students and residents of the Cayuga Lake Watershed.</p> <p>CNY RPDB will make educational materials available for use in Cayuga County including Stormwater and watershed management, erosion and sedimentation and nutrient management.</p>
Make watershed issues more accessible to citizens by utilizing the internet, direct mailings, and media releases.	CCE, Planning, CNY RPDB	<p>Webpages for the WQMA, P-Project, Weeds Watch Out!, CNY RPDB and Cayuga County Solid Waste Management Office were updated. These provide information on watershed issues to the public.</p> <p>CLWN updated their webpage (www.cayugalake.org).</p> <p>CCE distributed the environmental newsletter <u>Eco Logic</u> by email.</p>

		<p>52 Eco Talk articles written by CCE staff on environmental education and water quality topics were published in The Citizen.</p> <p>CLWN published and distributed their quarterly newsletter entitled "Network News."</p> <p>IO published and distributed copies of their 2005 Summer newsletter.</p>
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.	Everyone	Members utilized The Citizen and Post Standard newspapers to promote programs, highlight events and draw larger audiences.
Develop promotional campaigns that will interest a larger variety of participants in education programs.	Everyone	Members utilized The Citizen and Post Standard newspapers to promote programs, highlight events and draw larger audiences.
Agencies and organizations that promote water quality should enable trainers and educators to continually develop skills and expertise.	CCE, CNY RPDB	<p>Ongoing.</p> <p>CNY RPDB sponsored and held train the trainer sessions and practitioner workshops related to various water quality issues including municipal good housekeeping which included spill response and municipal facilities maintenance, erosion and sediment control, construction site inspection and local law review/revision workshops.</p>
Displays at Emerson Park tied to watershed protection and information from USGS water monitoring station.	Parks	WQMA, SWCD, and CNYRPDB had displays at the Owasco Lake Watershed Symposium held in October at Emerson Park.
Provide educational columns for the newspaper on Owasco Lake and its watershed.	OWLA	On-going.
Provide award for leadership and commitment to protect the Cayuga Lake Watershed	CLWN, IO	Roxy Johnston, an Environmental Analyst for the City of Ithaca Water Treatment Plant, won the IO and CLWN's annual Dave Morehouse Award which commemorates Morehouse's contributions and recognizes others who are making a difference preserving our water resources.
Conduct an educational tour.	WQMA	None to date.

Exotic, Introduced and Invasive Species Management

Action	Responsible Organizations	Work Conducted in 2005
Continue to participate on CNY Water Chestnut Task Force to assist region in formulating strategies and solutions to water chestnut problems.	CNY RPDB, CCE, CLWN	CCE, CLWN and CNYRPDB attended CNY Water Chestnut Task Force meetings this year.
Second 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 Co.	CCE, Planning, CLWN, Parks	<p>Water chestnut and European frogbit were discovered on Sterling Creek. CCE and Sterling Nature Center staff conducted hand pulling of the water chestnut on two separate occasions.</p> <p>Weeds Watch Out! Program accomplishments include:</p> <ul style="list-style-type: none"> • the completion of invasive weed identification guides; • updates to the website (co.cayuga.ny.us/weedswatchout.htm); • mailing of 920 project/workshop brochures to residents of Cross Lake (both in Cayuga and Onondaga Counties), Little Sodus Bay and Duck Lake watersheds; • presentations given to the Cayuga County Legislature Planning and Economic Development Committee, Cayuga County Youth Celebration, and Scipio Lake Property Owners Association; • volunteer training in Auburn for 11 participants on June 15th; • distribution of informational signs around Cayuga County; and • “Weeds Watch Out!” presentation to Cornell Cooperative Extension educators at the 2005 Association of Cornell Cooperative Extension Educators Conference in Buffalo; <p>Articles in <u>The Citizen</u>:</p> <p>“Workshop teaches how to control weeds.” April 8, 2005. “Group calls on state to weed out invasive plants.” August 2, 2005.</p> <p>“Eco Talk” columns written by the staff of CCE published in <u>The Citizen</u>:</p> <p>“Battle against invasive plants.” June 6, 2005. “Volunteers to wage war on invasive plants.” July 30, 2004.</p>

2005 WQMA Year End Report

Provide educational materials to landowners about how to put in intake pipes and treatment methods for dealing with zebra mussels in intake pipes.	Health	Health has educational materials for individual lake owners utilizing the lake as a water source.
Search for funding to initiate a regular inventory and monitoring program for exotic, introduced and invasive species in Owasco lake and watershed.	CCE, Planning, CNY RPDB	No additional funds found this year.

Additional

Education	CCE, CLWN	Eco Talk article written by CCE and published in the newspaper <u>The Citizen</u> : “Hogweed invasive, painful to humans,” August 1, 2005. Articles in the Spring 2005 Network Newsletter entitled “Japanese Knotweed: Invader of the Watershed” and “Intruders in Cayuga Lake: the Hidden Dangers of Introduced Fish.”
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Fish and Wildlife Management

Action	Responsible Organizations	Work Conducted in 2005
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.	Planning, OWLA	OWLA worked with IAGT to place a monitoring buoy into Owasco Lake. Data collected can be found at www.ourlake.org . CCE received a FL-LOWPA Special Project Fund grant to conduct a phosphorus sampling program on Owasco and Cayuga Lakes tributaries. Additional FLOWPA funds were utilized to continue phosphorus sampling of Owasco Lake tributaries. FLOWPA funds were utilized to continue monitoring program of Dutch Hollow Brook & the Owasco Inlet This program monitors level, rainfall, & flow. Samples are also taken for lab analysis of total & soluble reactive phosphorus and total solids.

Additional Work

Education	CLWN	CLWN held an education program entitled “Somethings fishy in Cayuga Lake” on November 12 th .
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Forestry

Action	Responsible Organizations	Work Conducted in 2005
Coordinate information and technical services with landowners.	CCE	Ongoing.

2005 WQMA Year End Report

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

Additional Work

Plant trees	CCE	CCE received a \$935 grant from the National 4-H Council to buy trees. CCE worked with Cayuga-Onondaga BOCES New Visions Environmental Science Program students along with Moravia elementary and high school students to plant 450 trees in the Owasco Lake Watershed to celebrate Arbor Day.
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Fuel and Chemical Storage

Action	Responsible Organizations	Work Conducted in 2005
Update the County's watershed database with the updated NYSDEC database on bulk petroleum storage facilities.	Planning	Requested from NYSDEC.

Funding Options

Action	Responsible Organizations	Work Conducted in 2005
Explore full range of funding alternatives; examples include surcharge to users, franchise fees, grants, loans, etc.	Everyone	Ongoing.

Hazardous Material Spills and Spill Response

Action	Responsible Organizations	Work Conducted in 2005
Update the water quality contact list yearly.	Planning, CCE	Completed and distributed to the WQMA in November.
Work with CEMO to improve capabilities to respond to spills.	Planning	None this year.

Highway Deicing

Action	Responsible Organizations	Work Conducted in 2005
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.	Planning	Survey completed. Survey information presented to the WQMA in December.
Explore funding options for those that need salt storage structures and contained mixing areas.	Planning, IO	Ongoing.

Highway Maintenance

Action	Responsible Organizations	Work Conducted in 2005
Encourage use of and provide information on best management practices (BMPs) to reduce roadbank erosion.	SWCD, IO	SWCD works with towns and gives engineering expertise upon request. IO, SWCD and the Town of Genoa received DOS grant funds to implement best management practices on a roadside project on the Genoa/Lansing Town Line Rd. These grant funds were utilized to resurface the road and line the drainage ditch with rock to reduce erosion into Salmon Creek. SWCD wrote a grant to Great Lakes Basin Program for funds to conduct hydroseeding. These funds have not been awarded yet.
Encourage and provide information on timely revegetation of road ditches and banks.	SWCD, IO	SWCD provides hydroseeding to towns, county and state. Worked with NYSDOT to conduct hydroseeding of ditches and road areas. SWCD has written a grant to Great Lakes Basin Program for funds to conduct hydroseeding. These funds have not been awarded yet. IO has written a grant to conduct hydroseeding in the Cayuga Lake Watershed.
Encourage use of structural controls of sediments on steep roads, roadbanks and in high flow ditches.	SWCD	SWCD works with towns and gives engineering expertise upon request.
Increase the use of the Cornell Local Roads Program, Highway School, and LEAPE by highway officials.	SWCD, CCE	Encourage participation through contacts with highway officials. Three SWCD staff people are members of the Highway Association.
Provide an annual informational report for highway superintendents and workers.	SWCD	Three staff persons are members of the Highway Association. One staff member from SWCD attends an annual highway meeting to report new laws to highway staff.
Organize local training programs through SWCD and Highway Superintendents Association.	SWCD	None to date.

2005 WQMA Year End Report

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	SWCD does not encourage fall plowing. However, if farmers do plow in the fall, they are encouraged to plow across slopes, use ridge tilling and seeding with rye. Part of tier I and tier II AEM planning process.
Examine ways to prevent roadside ditches from deepening and eroding.	SWCD, IO	SWCD provides hydroseeding to towns, county and state. Worked with NYSDOT to conduct hydroseeding of ditches and road areas. SWCD wrote a grant to Great Lakes Basin Program for funds for hydroseeding. These funds have not been awarded yet. IO has written a grant for hydroseeding in the Cayuga Lake Watershed.
Present the information from the roadside erosion survey to the WQMA.	Planning	Roadside erosion survey results from 2004 presented to the WQMA on March 3 rd . Funds for survey were from FLOWPA.

Lakeshore Erosion

Action	Responsible Organizations	Work Conducted in 2005
Promote and distribute existing shoreline erosion control guidebooks and information sheets with specific information on plantings that will help reduce shoreline erosion.	CCE, OWLA	Available at CCE.

Additional Work

Concerns brought to the WQMA about lakeside erosion in the Town of Sterling.	Planning, CNYRPDB	Cayuga County Planner and CNYRPDB Planner observed erosion in Sterling with Town of Sterling Code Enforcement Officer. WQMA wrote a letter of support for the Town of Sterling for a State Local Waterfront Revitalization Grant application entitled "Erosion and Flooding Study for the Town of Sterling." CNYRPDB, Planning, Sea Grant and Town of Sterling staff discussed various options to reduce lakeshore erosion along Lake Ontario.
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Lake Level

Action	Responsible Organizations	Work Conducted in 2005
Continue to work with the Army Corps of Engineers at revisiting the Owasco Lake "rule curve."	WQMA	WQMA has been in contact with the Army Corps of Engineers and has received information on how to revisit the Owasco Lake "rule curve."

2005 WQMA Year End Report

Continue to educate Owasco Lake 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, Planning	Frank DeOrio spoke to ~75 members of the Owasco Lake Homeowners Association on lake level and other issues.
Encourage local officials who are responsible for Owasco Lake level management to continue working with others in their region to coordinate flood period discharges (i.e. Balance lake impacts, downstream impacts, etc).	City	Ongoing.
Continue work needed to dredge the South end of Owasco Lake.	SWCD	The southeast corner of Owasco Lake was dredged in the winter of 2005.
Identify lake level problems at Duck Lake.	Duck	Duck Lake Association stated that the lake level remained good this year.

Additional Work

Cayuga Lake Level	WQMA	WQMA discussed the Cayuga Lake Rule Curve in April.
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Land Use

Action	Responsible Organizations	Work Conducted in 2005
Educate planning boards about land use issues such as drainage, buffer zones, stormwater runoff, etc.	Planning, IO, CNY RPDB	<p>Planning distributed a packet of stormwater education materials to Cayuga County Planning Board members at their April meeting.</p> <p>Planning publicized the NYSDEC Floodplain Management Section National Flood Insurance Program workshops in counties effected by the early April flooding to all the Towns and Villages in the County as well as the WQMA and Code Enforcement Officers.</p> <p>Planning presented Stormwater Phase II education at the Cayuga County Planning Board in October. A packet of stormwater informational material was provided to all attendees.</p> <p>CNY RPDB continues to develop and make available information, education and training for planning boards, elected officials in the areas of land use and stormwater management and drainage issues.</p>

2005 WQMA Year End Report

<p>Provide assistance to towns and villages to design, adopt and/or implement standards and guidelines; provide model ordinances, regulations, standards, and guidelines.</p>	<p>Planning, IO, CNY RPDB</p>	<p>Ongoing.</p>
<p>Explore opportunities to protect streambank areas. Use data from streambank assessments and management plans to search for funding.</p>	<p>Planning, IO</p>	<p>FLLOWPA funding was utilized to conduct streambank stabilization to Veness Brook.</p> <p>Funds from Non-Point Source Abatement and Control Water Quality Improvement Project grants were utilized to conduct streambank stabilization and Veness and Sucker Brooks. These grants were a \$4,700 grant for Sucker Brook and a \$5,500 grant for Veness Brook. Work is based on the 2003 assessments of these streams and utilizes soft techniques where possible.</p>
<p>Conduct a survey of open space areas.</p>	<p>Planning, CNY RPDB</p>	<p>CNY RPDB will continue to conduct environmental sensitivity analyses to identify critical parcels of open space in need of permanent protection.</p>
<p>Review and update the webpage directory of zoning provisions and other development regulations of towns and villages.</p>	<p>Planning</p>	<p>Updated in October.</p>
<p>CNYRPDB & Planning, in conjunction with the Institute for the Application of Geospatial Technology and the Genesee Finger Lakes Regional Planning Council, will evaluate the impacts of future development, urban sprawl and changing land uses on municipalities within the Owasco Lake Watershed and throughout the Finger Lakes region. Technical assistance, staff support and guidance will be provided to municipalities seeking tools and techniques to effectively control the impacts of development, sprawl & changing land uses.</p>	<p>CNY RPDB, Planning</p>	<p>Owasco Lake Symposium held on October 18th at Emerson Park. This is a fall mini-conference intended to bring in local elected and appointed officials, agencies, organizations and concerned citizens to discuss watershed issues and projects being conducted in the area.</p> <p>Discussed the need for improved/enhanced land use controls to protect water quality, promote agriculture, preserve open space and maintain the rural character of the Owasco Lake watershed with officials from the Towns of Fleming, Locke, Moravia, Niles, Owasco and Scipio and the Village of Groton.</p> <p>Assisted the Town of Locke with a comprehensive local property maintenance law; subdivision, lot area and setback regulations; site plan review ordinance; long term plan and stormwater phase II regulations.</p> <p>Assisted the Town of Owasco in discussions with planning board and developer; alternative tools for integrating growth and infrastructure upgrades.</p>

2005 WQMA Year End Report

Inventory wetlands and open space resources in the Owasco Lake watershed.	Planning, CNY RPDB	CNY RPDB will continue to conduct environmental sensitivity analyses to identify critical parcels, including wetlands and open space resources, in need of permanent protection.
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Monitoring

Action	Responsible Organizations	Work Conducted in 2005
Continue water sampling of Cayuga Lake under Citizens Lake Assessment Program (CSLAP) through FLOWPA funding.	CLWN, WQMA	FLOWPA provided funds to continue water sampling through the CSLAP program for two sites on Cayuga Lake in Cayuga County: Farleys Point in Union Springs and Wells College in Aurora.
Continue work on the monitoring buoy for Owasco Lake with IAGT.	OWLA	Cliff Callinan from the NYSDEC attended an OWLA meeting to discuss sampling of Owasco Lake through the Finger Lakes Monitoring Program.
Continue coliform monitoring of Owasco Lake.	OWLA, Health	OWLA and Health monitored Owasco Lake during 2005.
Continue monitoring of Dutch Hollow Brook and Owasco Inlet utilizing FLOWPA funds.	Planning, SWCD	Monitoring continued at the Dutch Hollow Brook and Owasco Inlet utilizing FLOWPA funds. Monitors level, rainfall and flow. Samples taken and analyzed for total phosphorus, soluble reactive phosphorus and total suspended solids
Continue to examine conducting hydrocarbon monitoring in Owasco Lake.	OWLA	None to date.
Continue water sampling including Citizens Lake Assessment Program (CSLAP) through FLOWPA funding.	Duck, Planning	Provided FL-LOWPA funds for the CSLAP program for one site on Duck Lake.
Monitor phosphorus levels in Duck Lake.	Duck	The Duck Lake Association looked at getting a hand held monitor to monitor phosphorus levels in the lake, but due to discussion with others who have used similar monitors that were not sensitive enough, they have put this on hold.
Monitor coliform levels in Duck Lake.	Duck	Duck Lake Association continued monitoring Duck Lake for coliform. Results have been good this year.

Additional Work

Additional Cayuga Lake Monitoring	WQMA	WQMA staff attended a meeting April 18 th where Cliff Callinan (NYSDEC) and Bill Kappel (United States Geological Survey) presented the “Framework for a Cayuga Lake Watershed Monitoring Plan” to the Tompkins Co. Water Resources Council, an advisory board to the Tompkins County Legislature.
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		<p>Roxy Johnson, an Environmental Analyst for the City of Ithaca Water Treatment Plant presented “Assessment of total phosphorus and sediment impacts for the North end of the Cayuga Lake Watershed” at the March WQMA meeting.</p>
<p>Additional Finger Lakes Monitoring</p>	<p>FLI</p>	<p>The Finger Lakes Institute is conducting monitoring of the Finger Lakes.</p> <p>The Finger Lakes Institute held a Science Research Symposium on October 8th.</p>

Nutrient Management

Action	Responsible Organizations	Work Conducted in 2005
<p>Encourage the use of nutrient management plans for golf courses, developments, parks, etc.</p>	<p>SWCD</p>	<p>SWCD has completed Nutrient Management Plans for Auburn Golf and Country Club, Dutch Hollow Country Club and Owasco Country Club. These plans address the application of chemicals and fertilizers for the maintenance of golf courses located in the Owasco Lake watershed.</p> <p>SWCD is preparing to do a Nutrient Management Plan for Fillmore Golf Club.</p>
<p>Educate the public and developers on how to reduce nutrient introduction to waterbodies.</p>	<p>OWLA, CCE, City, SWCD, CNY RPDB</p>	<p>CCE conducted P-Project Lawn Care seminars for water quality on April 12th and June 9th in Auburn.</p> <p>CCE provided a lawn care series from October 26th to November 16th. These were 30 minute personal lawn care workshops and they included a Cornell soil test</p> <p>CNY RPDB conducted several training sessions for construction site operators, code enforcement officers, planning boards and the public, developed/distributed a construction site runoff control brochure and maintains a water quality web page.</p>
<p>Continue the phosphorus monitoring of tributaries to Owasco and Cayuga Lakes through the P-Project. Identify areas that contribute high external loadings of phosphorus and target areas for education and protection efforts.</p>	<p>CCE</p>	<p>CCE released the report “Total Phosphorus Sampling Program for the Owasco and Cayuga Lake Watersheds.” This is part of the P-Project which was funded by a FLOWPA Special Projects grant. Report was placed on the P-Projects website.</p> <p>P-Project results presented to WQMA in January. Identified the Groton Wastewater Treatment Plant as a target area. Recommended that NYSDEC require phosphorus removal when it renews their permit to discharge.</p> <p>Continued sampling Owasco Lake tributaries for phosphorus with funds from FLOWPA.</p>

		<p>Kelly Fallone presented “P-Project: Reducing P in the Finger Lakes” at the FLOWPA Spring workshop.</p> <p>GIS analyst with Planning developed a preliminary spatial analysis of non-point source pollutant loading in the Cayuga County portion of the Owasco Lake Watershed. The map developed from this analysis is the result of an initial effort to estimate the relative difference in particulate phosphorus loads across the Cayuga County portion of the Owasco Lake Watershed.</p> <p>CLWN Newsletter had an article entitled “Cayuga Lake Phosphorus Levels.”</p>
Continue work needed to dredge the South end of Owasco Lake.	SWCD	Southeast corner of Owasco Lake was dredged this winter. Plan to dredge other side in the winter of 2005-2006.

Additional Work

Reduce phosphorus loading into Cayuga County Watersheds.	CCE, Parks	Parks installed two dog waste management stations supplied by CCE as part of the P-Project.
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Private and Municipal Wastewater Treatment

Action	Responsible Organizations	Work Conducted in 2005
Continue to implement the Cayuga County Sanitary Code and provide information to others as needed.	Health	Ongoing. In 2005, the townships of Genoa, Mentz and Springport as well as all property transfers in the County were subject to the Cayuga County Sanitary Code’s mandatory septic system inspections.
Explore federal or state assistance to replace or upgrade septic systems of people with limited incomes.	Health	Ongoing. Currently limited to funding available through Cayuga County Homsite.
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.	Planning, CNY RPDB	Ongoing.
Explore what grants & loans are available for water & waste disposal systems for rural communities.	Planning	Ongoing.
Explore the possibility of upgrading the Groton Wastewater Treatment Facility. Permit is due for renewal in 2006.	Health, Planning	Resolution #414-05 passed by the County Legislature on August 23 rd requesting that the NYSDEC incorporate phosphorus limits into the Village of Groton’s wastewater treatment plant’s effluent discharge permit.

		A resolution was passed by the Cayuga County Board of Health on September 27 th requesting that the NYSDEC incorporate phosphorus limits into the Village of Groton's wastewater treatment plant's effluent discharge permit.
Fair Haven Sewer Project, Village of Fair Haven. Provide requested technical assistance.	Planning	Planning prepared a Community Development Block Grant for the County Water and Sewer Authority for its Fair Haven sewer project, which was approved and funded for \$600,000

Public Access

Action	Responsible Organizations	Work Conducted in 2005
Encourage low impact activities like hiking, canoeing and fishing instead of motorized use.	Parks, Planning, OWLA	<p>Planning prepared a NYSDEC Habitat/ Access Stamp Funding Program grant to improve access to Parker Pond by building trail bridges.</p> <p>Planning undertook planning work for the Seneca River Blueway Trail project, funded with NYS DOS grant.</p> <p>Working on obtaining access to complete the Cato-Brutus Trail.</p> <p>Cayuga County retained some land that was originally for sale in Sterling and has maintained this land for public use.</p> <p>Parks at the request of the Owasco Flats Reserve group are going to place boulders to prevent vehicle access to restricted areas at Owasco Flats.</p> <p>Parks purchased materials for BOCES to install a bridge for better access along the Owasco Inlet at Owasco Flats.</p> <p>Cayuga County passed a resolution to allow the Erie Canal trail through Cayuga County.</p>

Stormwater and Sediment Control

Action	Responsible Organizations	Work Conducted in 2005
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, Planning, CNY RPDB	<p>SWCD contracted with NYSDEC to help enforce the Phase II Stormwater Rules and Regulations.</p> <p>Planning and CCE staff attended a Stormwater Project WET Workshop conducted by the NYSDEC in September.</p>

		<p>GIS Analyst developed a map of the area around Little Sodus Bay, a 303 (d) waterbody, which would require 60 day review when applying for their SPDES permit. Planning distributed this map to the Town of Sterling and the Village of Fair Haven.</p> <p>CNY RPDB serves as a liaison between DEC, municipalities and construction contractors to provide updated information and education on the Stormwater Phase II program. CNY RPDB provides training and information through workshops, mailings and a dedicated Stormwater Management webpage.</p>
<p>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.</p>	<p>SWCD, Planning, CNY RPDB</p>	<p>Planning publicized the “Erosion and Sediment Control Workshop” in South Onondaga on January 24, 2005 to all the Towns and Villages in Cayuga County.</p> <p>Network News article in Spring of 2005 entitled “It takes a watershed to reduce flooding.”</p> <p>Planning distributed a packet of stormwater education materials to Cayuga County Planning Board members at their April meeting. Packet included information from the NYSDEC and CNY RPDB.</p> <p>Planning publicized the NYSDEC Floodplain Management Section National Flood Insurance Program workshops in counties affected by the early April flooding to all the Towns and Villages in the County as well as the WQMA and Code Enforcement Officers.</p> <p>Planning presented Stormwater Phase II education at the Cayuga County Planning Board in October. A packet of stormwater informational material was provided to all attendees. Packet included information from the NYSDEC and CNY RPDB.</p> <p>Planning presented Stormwater Phase II education to the Cayuga County WQMA in October.</p> <p>Planning distributed a packet of stormwater education materials to all Towns and Villages in Cayuga County. Packet included information from the NYSDEC and CNY RPDB.</p> <p>Planning updated the stormwater section of the WQMA website (co.cayuga.ny.us/wqma).</p>

		CNY RPDB obtained grant funding to conduct Phase II construction/post-construction training workshop for planning boards in October.
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.	SWCD, Planning, CNY RPDB	<p>Packets of stormwater educational materials given to the Cayuga County Planning Board in April included the model local law language developed by the NYSDEC and NYS Department of State for localities to use if they want to set up and implement stormwater management programs, as well as the NYSDEC's strong recommendation that municipalities request that construction site operators submit copies of the Stormwater Pollution Prevention Plan to the municipality for review.</p> <p>The presentation and packets of stormwater educational materials given to the Cayuga County Planning Board in October included the NYSDEC's strong recommendation that municipalities request that construction site operators submit copies of the Stormwater Pollution Prevention Plan to the municipality for review.</p> <p>Planning distributed a packet of stormwater education materials to all Towns and Villages in Cayuga County. Packet included information from the NYSDEC and CNY RPDB included the NYSDEC's strong recommendation that municipalities request that construction site operators submit copies of the Stormwater Pollution Prevention Plan to the municipality for review.</p>
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.	CNY RPDB	CNY RPDB maintains and regularly posts Phase II Stormwater program updates & information on its regional stormwater website http://www.cnyrpdb.org/stormwater-phase2 .
Continue to conduct stormwater control projects.	SWCD	IO is working with SWCD and the Town of Genoa to conduct a roadside project on Town Line Rd with NYS Department of State funds.
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	<p>Ongoing. Provides hydroseeding equipment to towns, county and state. Worked with NYSDOT to conduct hydroseeding of ditches and road areas.</p> <p>SWCD has written a grant to Great Lakes Basin Program for funds for hydroseeding. These funds have not been awarded yet.</p>

		IO has written a grant for hydroseeding in the Cayuga Lake Watershed.
Provide model site design guidelines for contractors.	SWCD	None to date.
Encourage use and provide information on structural measures to control sediments and other pollutants from stormwater runoff.	SWCD	Ongoing. SWCD CPESC has completed five site visits for erosion and sediment control compliance.
Examine the use of infiltration trenches, detention ponds, siltation ponds, basins, vegetated swales and filter strips in critical areas and in demonstration projects.	SWCD	SWCD wrote a \$12,000 New York State Soil and Water Conservation Committee County Water Quality Coordinating Committee Mini-Grant application to implement a stormwater retrofit demonstration project in Moravia. This was not funded.

Streambanks and Stream Corridor Management

Action	Responsible Organizations	Work Conducted in 2005
Reevaluate streambank erosion assessments and search for funding for implementation.	SWCD, Planning, IO	Ongoing.
Search for funding and implement streambank stabilization on severely eroding streams using fluvial geomorphology and other bioengineering methods where feasible.	SWCD	<p>Funds from a Great Lakes Watershed Restoration Grant were utilized to conduct fluvial geomorphology work on the Owasco Inlet in a two mile stretch in the Towns of Groton and Locke.</p> <p>FLLOWPA funds were utilized to conduct streambank stabilization projects on Veness Brook.</p> <p>Funds from Non-Point Source Abatement and Control Water Quality Improvement Project grants were utilized to conduct streambank stabilization and Veness and Sucker Brooks. These grants were a \$4,700 grant for Sucker Brook and a \$5,500 grant for Veness Brook. Work is based on the 2003 assessments of these streams and utilize soft techniques where possible.</p> <p>Federal Emergency Management Agency (FEMA) funding has been approved to address eight sites on the Owasco Inlet, one site on Dutch Hollow Brook and one site on Owasco Lake that were due to the severe floods in April 2005.</p>
Identify funding sources for comprehensive streambank restoration & management programs.	SWCD	Great Lakes Watershed Restoration Grant funds were utilized to conduct fluvial geomorphology work on the Owasco Inlet in a two mile stretch in the Towns of Groton and Locke.

		<p>FOLLOWPA funds were utilized to conduct streambank stabilization on Veness Brooks.</p> <p>Funds from Non-Point Source Abatement and Control Water Quality Improvement Project grants were utilized to conduct streambank stabilization on Veness and Sucker Brooks.</p> <p>FEMA funding has been approved to address eight sites on the Owasco Inlet, one site on Dutch Hollow Brook and one site on Owasco Lake that were due to the severe flood in April 2005.</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>SWCD, NRCS, Planning</p>	<p>Network News Spring 2005 article entitled "Streamside Property Owners-Buffer Your Banks."</p> <p>SWCD provides cost share assistance.</p> <p>SWCD has a no till seeder and tractor that can be used for a fee to establish buffers.</p>
<p>Promote the use of Best Management Practices (BMPs) such as livestock exclusion from streams and vegetative filter strips.</p>	<p>NRCS, SWCD</p>	<p>SWCD received an Agricultural Non-Point Source Abatement and Control Program Grant in the amount of \$77,600 to implement GrazeNY BMP's such as watering systems, laneways, fencing, etc. on 15 farms.</p> <p>Tompkins County SWCD received a NYS Agricultural Non-Point Source Abatement and Control Program grant for \$151,770 to implement best management practices on 23 livestock farms in the subwatersheds of Cayuga Lake and the Owasco Lake Inlet to manage intensive grazing systems.</p> <p>Onondaga County SWCD received an \$112,743 Great Lakes Consortium Basin Program grant to implement erosion and sediment control on grazing farms in Onondaga and Cayuga Counties.</p>
<p>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.</p>	<p>SWCD, NRCS</p>	<p>AEM, CREP, CRP, Graze NY, etc. applications are completed by NRCS and SWCD staff.</p>
<p>Provide model buffer and stream corridor protection ordinances to the municipalities.</p>	<p>Planning</p>	<p>None to date.</p>

2005 WQMA Year End Report

Examine debris accumulation in streams and determine whose jurisdiction it is to remove it and have it removed.	Planning	None to date.
Educate landowners on what debris can be removed from streams and how to remove it properly.	Planning, OWLA	None to date.
Conduct tours, put up signs and provide information on demonstration projects for streambank erosion and stream buffering.	SWCD, OWLA	Sign will be posted at the Owasco Inlet when fluvial geomorphology work from the Great Lakes Watershed Restoration Grant is finished.
Conduct streambank stabilization projects on tributaries to Owasco Lake.	SWCD, Planning	Fluvial geomorphology work is being conducted on the Owasco Inlet in a two mile stretch in the Towns of Groton and Locke from a Great Lakes Watershed Restoration Grant. FOLLOWPA funds were utilized to conduct streambank stabilization on Veness Brook.
Train staff in remedial fluvial geomorphology and conduct pilot projects on tributaries to Owasco Lake, particularly Dutch Hollow Brook and the Inlet.	SWCD	Great Lakes Watershed Restoration Grant funds were utilized to conduct fluvial geomorphology work on the Owasco Inlet in a two mile stretch in the Towns of Groton and Locke.

Urban/Community Forestry

Action	Responsible Organizations	Work Conducted in 2005
Work with New Visions Class to plant trees in Owasco Lake Watershed.	CCE	CCE received a \$935 grant from the National 4-H Council to buy trees. CCE worked with Cayuga-Onondaga BOCES New Visions Environmental Science Program students along with Moravia elementary and high school students to plant 450 trees in the Owasco Lake Watershed to celebrate Arbor Day.
Encourage towns and villages to apply to grant programs for tree planting.	Planning	Ongoing.
Provide a model town or village tree ordinance.	Planning	Available at Planning.

Waste Sites

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

Action	Responsible Organizations	Work Conducted in 2005
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.	Planning, Health	None to date.

2005 WQMA Year End Report

Discourage open burning and encourage alternatives such as pay by the bag programs for residential solid waste disposal.	Planning, Health	Educational materials available upon request.
Inventory junkyards.	OWLA, City, Planning	None to date.

Waste Sites

Roadside and Illegal Dumping

Action	Responsible Organizations	Work Conducted in 2005
List all municipal codes and ordinances for roadside and/or illegal dumping.	Planning	None to date.
Provide sample codes or ordinances on roadside and/or illegal dumping to municipalities without them. For those that do, encourage raising fines & increasing prosecution.	Planning	None to date.
Conduct cleanup of Fall Creek.	CLWN	Cleanup held.

Waterborne Illness

Action	Responsible Organizations	Work Conducted in 2005
Continue to monitor bathing beaches.	Health	Ongoing during summer.
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	Available upon request.
Provide educational materials on waterborne illnesses.	Health	Available upon request.
Use Best Management Practices (BMPs) and Environmental Protection Agency Regulations to reduce contamination from pastures.	SWCD	<p>Cayuga County SWCD received a NYS Agricultural Non-Point Source Abatement and Control Program grant for \$91,646 to implement best management practices on four farms to address nutrient loading into the Cayuga Lake Watershed. Two farms in Scipio and one in Venice will install silage leachate containment systems. A manure pit and a system to direct animal waste and milk house waste into the pit will be installed in Scipio.</p> <p>SWCD received an Agricultural Non-Point Source Abatement and Control Program Grant in the amount of \$77,600 to implement GrazeNY BMP's such as watering systems, laneways, fencing, etc. on 15 farms.</p>

		<p>Tompkins County SWCD received a NYS Agricultural Non-Point Source Abatement and Control Program grant for \$151,770 to implement best management practices on 23 livestock farms in the subwatersheds of Cayuga Lake and the Owasco Lake Inlet to manage intensive grazing systems.</p> <p>Onondaga County SWCD received an \$112,743 Great Lakes Consortium Basin Program grant to implement erosion and sediment control on grazing farms in Onondaga and Cayuga Counties.</p>
Continue to work on the Emerson Park swale and pond coliform issue.	Health, SWCD, Planning, Parks	SWCD and Planning redesigned the swale at Emerson Park. Converted it to a dry pond with more stormwater storage and filter capacity.
Continue to address the bird problem in Emerson Park and Owasco Lake by trying realistic methods.	Parks	<p>SWCD has received their permit for egg addling for geese in Emerson Park.</p> <p>SWCD continued their geese harassment program at Emerson Park.</p> <p>Kelly Crossett presented “Waterfowl Waste Management Using Trained Border Collies” at the FLOWPA Spring Workshop.</p>
Implement a continuous coliform monitoring program in Owasco Lake and the major tributaries.	OWLA, Health, City	OWLA continued their summer coliform sampling program.
Continue to create awareness of dangers of spreading unwanted weeds and zebra mussels as well as feeding ducks and geese.	Duck	Zebra mussels may have been sighted in Duck Lake this summer, but this has not been confirmed.

Additional Work

Action	Responsible Organizations	Work Conducted in 2005
WQMA Additional Work	WQMA	WQMA received a \$1,000 New York State Soil and Water Conservation Committee County Water Quality Coordinating Committee Mini-Grant application to Develop and Present Annual Report to County Decision-Makers.

<p>Owasco Lake Additional Work</p>	<p>WQMA, City, OWLA, Planning, CNYRPDB</p>	<p>WQMA discussed Owasco Lake issues at their April meeting and held an additional special meeting in April to further discuss Owasco Lake issues.</p> <p>OLWA spoke to the Cayuga County Local Emergency Planning Committee about Owasco Lake and protecting water supplies.</p> <p>The Owasco Lake Watershed Summit was held on August 30th. This meeting had over 70 attendees and was an education session on what agencies and the City of Auburn are doing on and for Owasco Lake.</p> <p>The Owasco Lake Watershed Symposium was held on October 18th with over 60 attendees. This meeting was lead by CNYRPDB, under the Finger Lakes Water Resources, Agriculture and Open Lands Conservation Project, funded by Senator Walsh.</p> <p>Cayuga County put up samples of signs along Owasco Lake to examine using signs to aid rescue efforts.</p>
<p>Lake Ontario Additional Work</p>	<p>WQMA, Planning</p>	<p>Planning staff attended the Lake Ontario Coastal Initiative Conference in May which was about restoration, remediation, protection, and sustainable use of the Lake Ontario coastal region.</p> <p>Planning staff assisted the Lake Ontario Coastal Initiative and FLOWPA by doing the logistics for their workshop at the Sterling Nature Center. This coastal workshop was held to solicit local viewpoints on coastal priorities.</p> <p>Planning staff attended a meeting of the International Lake Ontario-St. Lawrence River Study Board when they released their candidate plans for the regulation of water levels and outflows from Lake Ontario through the St. Lawrence River.</p> <p>Richard Greene, Code Enforcement Officer from the Town of Sterling, spoke to the WQMA in July about shoreline erosion and other water quality issues in the Town of Sterling.</p> <p>WQMA wrote a letter of support for the Town of Sterling’s Waterfront Revitalization Application grant application entitled “Erosion and Flooding Study for the Town of Sterling.”</p> <p>SWCD, Planning and Parks submitted a grant application for a grasslands development project at Sterling Nature Center.</p>