

# Cayuga County Water Quality Management Agency

## **2003 Year End Report**

Approved  
February 5, 2004

Acronyms can be found at end of document.

COUNTY-WIDE

| AGENCY                      | ACTION   | PROGRESS TO DATE  |
|-----------------------------|--|---|
| <b>WQMA</b>                 | Conduct an educational tour.   | Bus tour held on September 10 <sup>th</sup> . Tour included stops at a soccer field at Emerson Park, a site on Dutch Hollow Brook that is being stabilized by Edge Saver and rip-rap, a rotationally grazed buffalo operation, a flood control structure and the South end of Owasco Lake. Talks included a discussion on grass fed chickens and the OWLA sampling program.   |
| <b>Health</b>               | Will continue to enforce the Sanitary Code.  | On-going. In 2003, all systems in the Towns of Aurelius, Locke and Fleming (outside the Owasco Lake Watershed), as well as property transfers, were subject to the Cayuga Co. Sanitary Code mandatory septic system inspections. FLOWPA funding provided money for review of septic system inspections.   |
| <b>Plan, CCE &amp; SWCD</b> | Hazardous waste collection day for farm pesticides if grant funding is awarded.  | Clean Sweep “milk run” held in November 2003. 16 participants included 12 farms, retired farmers or former farmsteads, 2 golf courses, and 2 schools. 40 drums holding about 8,000 lbs of pesticides were collected.  |
| <b>Plan, CCE &amp; SWCD</b> | Continue to search for ways to reduce hazardous material releases in the watershed. For example, find ways to reduce mercury releases, such as collecting auto and household mercury switches and fluorescent bulbs. | Home electronic and propane cylinder collection event held on April 26 <sup>th</sup> . Served 211 vehicles and collected two truckloads of electronics and 264 propane tanks. Tire Roundup held on July 12 <sup>th</sup> . Collected 12,000 tires from 730 participants. Household hazardous waste day held on October 4 <sup>th</sup> . Collected 40,000 lbs of hazardous waste from 470 households and two farms. Included 550 gal of oil based paint, 400 gal of pesticides, 490 gal of gas & other flammable liquids, 7220 lbs of batteries and over 100 propane tanks. |
| <b>Plan</b>                 | In 2002, obtained and modified the DEC database on bulk petroleum storage facilities to develop a watershed based database. On an annual basis, obtain updates from the DEC.   | Request sent in to DEC.   |

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| <b>Plan</b>     | Educate towns and villages about the new Phase II Stormwater Rules and Regulations.  | Developed a PowerPoint presentation on Phase II Stormwater Rules and Regulations. Gave presentation to Cayuga County Planning Board on October 1 <sup>st</sup> . WQMA on October 2 <sup>nd</sup> , and Legislative Committee on Planning and Economic Development on November 17 <sup>th</sup> . Created a section on stormwater on the WQMA webpage (co.cayuga.ny.us/wqma/help/stormwater.htm) and other educational materials on stormwater. Funding provided by FLOWPA.  |
| <b>CNY RPDB</b> | Conduct a federally funded study of land development pressures in the Finger Lakes area and provide recommendations to municipalities.   | The Finger Lakes Open Space and Agricultural Land Conservation Project is currently in progress and scheduled to conclude in August 2004. A stakeholders meeting was held on October 27 to raise awareness and spark interest and participation in the project. CNY RPDB assisted IAGT in researching potential computer models. An extensive array of GIS based data layers for two towns in the Owasco Lake watershed has been compiled by the Cayuga County Planning Department for use in the computer modeling component of the project. A timeline for the duration of the project has been established. A public participation plan and documents describing the project's goals and objectives have been developed. |
| <b>CNY RPDB</b> | 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.  | This program is no longer being offered by CNY RPDB under its baseline program. Focus is now on Phase II Stormwater Permit support to regulated municipal separate storm sewer systems (MS4s) in the Syracuse Urban Area and those regulated by the Construction Permit. Educational programs related to the Permits and stormwater management are part of this support.  |
| <b>CNY RPDB</b> | Continue to conduct research and compile information as a basis for developing a regional strategy to eliminate water chestnut. Conduct research and prepare proposal to DEC on the behalf of the Water Chestnut Task Force Committee for permit to test chemical controls in river and lake test plots. | Coordinated and prepared permit applications resulting in the receipt of DEC permits to conduct water chestnut chemical control trials on a one acre test plot in Ox Creek and an 8 acre test plot in Oneida Lake. Results of chemical trials were good with plant die off occurring approximately three weeks post treatment. Very little plant re-emergence was observed and no unintended negative environmental impacts were identified.  |

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| <b>CNY RPDB</b>        | 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. | County participation was expanded to include all counties under the jurisdiction of NYS DEC Region 7. Two well attended meetings were held during 2003 and generated positive feedback. Regional NPS Strategy meetings will continue to be held approximately every six-months. |
| <b>SWCD &amp; Plan</b> | Continue to do stormwater control projects.   | SWCD worked with the Town of Sennett on stormwater controls and BMPs for a new subdivision. SWCD and Planning assisted the Town of Moravia with the construction of a stormwater retention pond north of Skinner Hill Road with disaster recovery funds.                        |

**CAYUGA LAKE**

| <b>AGENCY</b>                             | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>   |
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| <b>WQMA</b>                               | Work to implement the Cayuga Lake RPP as it pertains to Cayuga Co. As more specific work plans are developed by Cayuga Lake Watershed IO committees, the WQMA will re-examine its involvement. | On-going.   |
| <b>Network, CCE, Plan, SWCD, and OWLA</b> | Educational program for invasive species in the Cayuga and Owasco Lakes, as well as other lakes in Cayuga County.  | <p>CCE, working in cooperation with Network, Planning, and several other regional organizations, received a grant from the US EPA, Great Lakes National Program Office (GLNPO) to conduct a 2-year education and monitoring program for aquatic invasive plants in the Finger Lakes. The program is slated to begin late 2003 and run through late 2005.</p> <p>CCE distributed copies of a water chestnut brochure funded by the WQMA to residents living on Cross Lake.</p> <p>Water chestnut information provided on the WQMA webpage.</p> <p>TomatoFest Boat Tours on Owasco Lake September 6 and 7 included information on invasive species.</p> <p>Attended CNY Water Chestnut Task Force meetings.</p> |
| <b>SWCD</b>                               | Conduct comprehensive Nutrient Management Plans (CNMP) for farms in the Cayuga Lake Watershed.   | <p>SWCD staff is attending training to become certified.</p> <p>NRCS has completed and reviewed several.</p>  |

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| <b>Plan</b>                            | Fire departments & other agencies in Cayuga Lake Watershed in Cayuga Co. surveyed in 2002 to verify who has materials for an immediate response to a hazardous material spill (spill response kits). Examine funding options where spill response kits are lacking. Report findings to WQMA. | Returned surveys available for review at Plan. Researched some grant programs.  |
| <b>Network &amp; WQMA</b>              | Water sampling under Citizens Lake Assessment Program (CSLAP).   | Provided FL-LOWPA funds for the CSLAP program for two sites on Cayuga Lake in Cayuga Co: Farleys Point in Union Springs and Wells College in Aurora. Scott Kisbaugh from DEC reviewed the 2002 CSLAP Monitoring Report for Cayuga Lake at Wells College in April 2003.  |
| <b>Network</b>                         | Education and monitoring of the Cayuga Lake Watershed.   | Cayuga Lake Watershed Monitoring Conference held in October, which updated scientists & professionals on new research within the watershed. The nine presentations were followed by an exploration of expanding coordination of projects and using new data and information to inform management decisions. Among the presentation USGS noted that deep groundwater in Cayuga County has a different flow pattern than surface water<br>Floating classroom on Cayuga Lake up and running. |
| <b>IO</b>                              | Carry out the work funded by the \$230,854 award from the NYSDOS grant for erosion control in stream-banks & roadsides. Targeted roads include Genoa/Lansing Townline Road & Lake Road in Genoa.   | IO has advertised for a Watershed Project Manager to oversee this work and hope to have hired one by the end of 2003 or in January, 2004.   |
| <b>IO &amp; Network</b>                | Work with stakeholders towards including the Cayuga-Seneca Canal in the IO.  | The Network in cooperation with the IO applied for private foundation funding to support this effort, including an intern. Relationships are being developed with key stakeholders.   |
| <b>IO, Network &amp; Wells College</b> | Increase public awareness and knowledge of the watershed and related issues and increase stewardship through education. A primary focus of the IO's Education, Public Participation, and Outreach Committee will continue to be a floating classroom on Cayuga Lake.                         | IO, Wells College, and the Network conducted a number of Floating Classroom trips. Was available for tour at Lakefest.<br>IO published a newsletter and distributed it by insert in the Fingerlakes Newspapers to 65,000 households in the watershed.<br>Participated in the Cayuga Lake Watershed Network Lakefest & the Water Week celebrations in Tompkins Co., with displays & educational materials.   |

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| <b>IO</b>               | Cooperate with the Tompkins Co. SWCD to carry out implementation of federally funded ag BMPs in the Cayuga & Owasco Lakes watersheds.  | None to date.  |
| <b>IO &amp; Network</b> | Inform federal and state legislators of the IO and its mission and engage them in its support.   | IO & the Network invited legislators to a tour of the Floating Classroom, through a letter and phone calls, which included information about the organizations and their mission and activities.   |
| <b>IO</b>               | Reach out to all village, town, city, & county boards, as well as agencies, organizations & board players in the watershed to inform them of the IO & its mission and engage them in its activities. | IO participates in organizations such as the Tompkins Co. Water Resources Council.<br>IO continues to seek participation from municipalities in the watershed through email and mailed invitation. All active municipal IO members were offered the opportunity to participate in the Genesee Finger Lakes Regional Planning Board Watershed Local Laws Project, to receive free assistance in drafting and adopting local laws on sediment and erosion control and other watershed related issues. The Villages of Interlaken and Lansing, and the Towns of Dryden, Scipio, Ulysses, Ledyard, and Caroline are participating. |
| <b>IO &amp; Network</b> | Continue to respond to municipalities seeking collaboration on projects and funding applications.  | IO supported requests for funding by the Village of Seneca Falls and the Tompkins Co. Water Resources Council.<br>With the Tompkins Co. Water Resources Council and the Cayuga Lake Watershed Network, we convened a Stormwater Committee, held a one day conference on stormwater management, and assisted in preparing two proposals for funding for stormwater activities in the MS4 communities in Tompkins Co.<br>IO is working with the City of Ithaca on a monitoring project in the north end of the lake.   |
| <b>IO</b>               | Continue to respond to and take position on issues affecting water quality.  | IO submitted a letter to the DEC on the Cargill Mine expansion application, stating that the information available to the public for review was inadequate. IO worked with the Tompkins Co Water Resources Council in developing recommendations on jet ski activity on the lake.<br>The Technical Advisory Committee is reviewing aspects of the RPP for improvement, in particular the source of sediment in some tributaries of the watershed.  |

**DUCK LAKE**

| AGENCY               | ACTION  | PROGRESS TO DATE  |
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| Duck                 | Aquatic weed control to include identification and removal methods and use of new harvester.                            | Duck Lake Association purchased a small Jenson weed cutter to harvest aquatic weeds. Utilized Navigate to control milfoil. Good control through summer & did not need to use weed cutter. American pondweed coming back in. |
| Duck, Health, & Plan | Water sampling including Citizens Lake Assessment Program (CSLAP).  | CSLAP program funded with FL-LOWPA funds. Health provided funding for additional water sampling.  |
| Duck                 | Identify lake level problems, mainly beaver dam issues.   | Continued to take lake levels. The level stayed up this year. Some drainage problems fixed.   |
| Duck                 | Examine jet ski problems.   | None  |
| Duck                 | Continue to create awareness of dangers of spreading unwanted weeds and zebra mussels as well as feeding ducks & geese. | Sign provided by DEC on water chestnut and other invasive exotics displayed at Duck Lake.   |

**LITTLE SODUS BAY**

| AGENCY | ACTION   | PROGRESS TO DATE   |
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| Plan   | Fair Haven Sewer Project, Village of Fair Haven. Provide requested technical assistance. | Continued to research grant and loan funding, preliminary work on environmental reviews for project. |

**OWASCO LAKE**

**Agriculture**

| AGENCY | ACTION  | PROGRESS TO DATE  |
|--------|---|---|
| SWCD   | Complete Agricultural Environmental Management (AEM) Plans for farms in the Owasco Lake Watershed, identify best management practices (BMPs) from those AEMs, look for assistance to implement these BMPs, and measure the effectiveness of these BMPs. | Bond Act monies funded the implementation of 9 rotational grazing systems in the Owasco Lake Watershed covering approximately 260 acres. Received EPA funding through Congressman Walsh to install BMPs in the Owasco Lake Watershed using the AEM process. Tompkins Co. SWCD received Clean Water/Clean Air Bond Act and EPF monies to implement rotational grazing in the Cayuga and Owasco Water-sheds. The Tompkins Co. SWCD will coordinate the installation of 57 BMPs for implementing new Rotational Grazing Systems and improving existing ones on 37 livestock farms located in the Owasco & Cayuga Lakes watersheds. State funding was delayed, therefore only one system in Tompkins Co. and two in Cayuga Co. have been installed. Tompkins Co. also received NY State Agricultural Non-point Source Abatement & Control Program grant to do barnyard management on five farms in the Owasco Inlet Watershed. State funding was delayed. Some design work has been completed for spring. |

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| <b>SWCD &amp; CCE</b>       | 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. | Dissemination of information on assistance, cost share program to farmers via Ag Alert newsletter, one-on-one consultations, etc.<br>SWCD applied for EPF funds (\$163,750) for a concrete manure waste storage facility in Cayuga and Owasco Lakes Watersheds in the Town of Scipio.  |
| <b>SWCD &amp; NRCS</b>      | Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.   | Provide cost share assistance.<br>Have a no till seeder and tractor that can be used for a fee to establish buffers.   |
| <b>SWCD &amp; NRCS</b>      | Encourage farmers to join the Conservation Reserve Program.  | Picked up 145-150 acres in 10 year CRP program county-wide.  |
| <b>CCE, OWLA &amp; SWCD</b> | Signs for lake friendly farmers or watershed friendly farmers.   | Working with statewide AEM Outreach Committee to develop recognition program for outstanding CAFO farms.   |
| <b>CCE, SWCD &amp; City</b> | Provide public education and monthly news articles/columns on agriculture and the environment.   | Article appears twice a month in Post Standard Neighbors on agriculture issues. Articles also have appeared in the following newsletters & publications: Ag Viewpoint, Profit Manager, North East Dairy Business, Country Folks, Focus on Farming.<br>Fun on Farm Days held to educate public about farms, nutrient management, etc. |
| <b>CCE &amp; Plan</b>       | Encourage agritourism.   | Work with local farmers to develop proposals for Ag Tourism grant offered through New York State.<br>Developed brochure aimed at youth to encourage them to visit farms.   |
| <b>SWCD &amp; City</b>      | Encourage use of whole farm plans.   | Provided resources and tools for farmers interested in whole farm plans.   |
| <b>Plan, SWCD &amp; CCE</b> | Hazardous waste collection days for farm pesticides if grant funding comes through.  | Clean Sweep "milk run" held in November 2003. 16 participants included 12 farms, former farmsteads, and retired farmers, 2 golf courses & 2 schools. 40 drums of pesticides were collected.  |
| <b>SWCD</b>                 | Present the "Farm of the Year" award.  | Farmer of the year awarded to Gary and Karen Gulliver of Fleming at SWCD banquet.  |
| <b>OWLA &amp; Health</b>    | Monitor streams above and below farms.   | None   |
| <b>CCE &amp; Plan</b>       | Implement PDR (purchase of development rights) where feasible. CCE will provide educational materials on PDR.  | Provide assistance to local farmers who apply for PDR through New York State Ag and Markets.<br>Conducted an Estate Planning class, which included information on PDR.   |
| <b>Plan</b>                 | Towns could change local laws to allow additional business enterprises on farms.   | Plan assisted the Town of Fleming in developing their draft laws, which include provisions to expand approved agribusinesses as well as expand types of uses allowed on agricultural land in an agricultural zone.   |

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| <b>Plan &amp; NRCS</b> | Explore funding options to assist farmers in cleanup after storm events. | Not in Owasco Lake Watershed. Assisted farmers in cleanup in Northern Cayuga County after the April ice storm. |
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**Aquatic Vegetation**

| <b>AGENCY</b>          | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>  |
|------------------------|---|--|
| <b>Plan</b>            | Search for funding to inventory and map aquatic vegetation in Owasco Lake, compare to historical data, and determine management needs. Publish findings as an educational tool. | CCE, working in cooperation with Network, Planning, and several other regional organizations, received a grant from the US EPA, Great Lakes National Program Office (GLNPO) to conduct a 2-year education and monitoring program for aquatic invasive plants in the Finger Lakes. Volunteers will be trained on aquatic plant identification and will monitor designated waterways, including Owasco Lake. Program is slated to begin late 2003 & run through late 2005.   |
| <b>Plan &amp; OWLA</b> | Determine water quality, including phosphorus level, in Owasco Lake and the tributaries, and the effect it has on aquatic vegetation. Search for funding to do this.            | OWLA is working with IAGT to place a monitoring buoy into Owasco Lake.<br>CCE submitted a proposal to FL-LOWPA Special Project Fund to conduct a phosphorus sampling program on Owasco and Cayuga Lakes tributaries. Decision expected by February 6, 2004.<br>WQMA researched phosphorus inputs from Groton Wastewater Treatment Plant into the Owasco Inlet.<br>Limited phosphorus and nitrate testing of Owasco Inlet and tributaries during the summer of 2003 by OWLA and SWCD. Samples taken before & after Groton and Moravia's wastewater treatment plants. Need more data to come to any conclusions.<br>Health purchased a test kit to measure phosphorus in the field.<br>Current monitoring program with stations at Dutch Hollow Brook & the Owasco Inlet. Monitors level, rainfall, & flow. Takes samples for lab analysis of total & soluble reactive phosphorus and total solids. Event Driven Phosphorus Loading in the Owasco Lake Watershed Interim Report distributed to WQMA. Contained analysis of results from monitoring stations. |
| <b>Plan</b>            | Develop and implement a sampling plan for determining sources of phosphorus into Owasco Lake. Search for funding to do this.  | CCE submitted proposal to FL-LOWPA Special Project Fund to conduct a phosphorus sampling program on Owasco and Cayuga Lake tributaries and a homeowner phosphorus education program. Decision expected by February 6, 2004.  |
| <b>SWCD &amp; NRCS</b> | Provide incentives & programs for farmers & landowners to install, maintain & manage buffers adjacent to streambanks, lakeshore & other sensitive areas.                        | Provide cost share assistance.<br>Have a no till seeder and tractor that can be used for a fee to establish buffers.   |

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| <b>SWCD</b>                       | Encourage the use of nutrient management plans for golf courses, parks, developments, etc. in the watershed.   | Nutrient management plan completed for the Owasco Country Club.<br>Working on a nutrient management plan for Emerson Park.<br>In contact with Auburn Country Club to do a nutrient management plan.  |
| <b>OWLA, CCE, City &amp; SWCD</b> | Educate the public and developers on how to reduce nutrient introduction to the lake.  | The “Green Thumbs for Blue Water” education and outreach program was conducted. 45 landscape, lawn care, & garden center professionals attended a one-day training seminar which focused on lawn and landscape care for riparian and lakeshore properties. 105 residents/ homeowners attended workshops focused on creating backyard buffers and lawn and landscape care for water quality. Program also produced an informational website: <a href="http://co.cayuga.ny.us/wqma/greenthumbs">co.cayuga.ny.us/wqma/greenthumbs</a><br>Composting program hosted jointly by CCE and SWCD focused on composting as a means to reduce nutrients from yard waste from entering waterways. Attended by 41 people. |
| <b>SWCD &amp; DEC</b>             | Examine alternative methods for aquatic vegetation control besides harvesting.   | None   |
| <b>City &amp; Plan</b>            | Review intake and other temperature data to see if the lake has been warmer the past few years, which may cause algae to start blooming earlier and longer. Present results to the WQMA. | AmeriCorps started project. Never finished.  |
| <b>CCE</b>                        | Search for funding to examine reducing sources of phosphorus to Owasco Lake identified through sampling program.   | CCE submitted proposal to FL-LOWPA Special Project Fund to conduct a phosphorus sampling program on Owasco and Cayuga Lake tributaries and a homeowner phosphorus education program. Decision expected by February 6, 2004.  |
| <b>SWCD</b>                       | Continue work needed to dredge the South end of Owasco Lake.   | Received NYSDEC permit. Sent a permit amendment to satisfy ACOE guidelines and will start work as soon as ACOE permits are secured.  |
| <b>CCE &amp; OWLA</b>             | Look for funding to teach volunteers to identify aquatic plant species and map them.   | CCE, working in cooperation with Network, Planning, and several other regional organizations, received a grant from the US EPA, Great Lakes National Program Office (GLNPO) to conduct a 2-year education and monitoring program for aquatic invasive plants in the Finger Lakes. Volunteers will be trained on aquatic plant identification and will monitor designated waterways, including Owasco Lake. The program is slated to begin late 2003 and run through late 2005. Brochure sent to Cross Lake residents on water chestnut identification. Included a tear off sheet if water chestnut is found to help track progression.   |

**Biosolids**

| <b>AGENCY</b>            | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>   |
|--------------------------|--|---|
| <b>EMC</b>               | Survey use of biosolids in the Owasco Lake Watershed.  | None to date.   |
| <b>City &amp; Health</b> | Continue to enforce the Watershed Rules & Regs 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." | On-going.<br>No violations were reported in 2003.                         |
| <b>Plan &amp; Health</b> | Monitor New York State rules and regulations of biosolids.   | On-going.<br>Updated WQMA on the updated Part 360 Regs regarding septage. |
| <b>Plan &amp; Health</b> | Monitor research on heavy metal mobility in biosolids.   | On-going. No new information was reviewed this year.                      |

**Boating**

| <b>AGENCY</b>          | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>   |
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| <b>Plan &amp; OWLA</b> | Research the "carrying capacity" of boats and jet skis on the lake and study the level of pollution from motorized crafts. | In talks with a professor at SUNY ESF to examine the potential for hydro-carbon monitoring. |
| <b>Plan &amp; OWLA</b> | Research the impact of excessive wave action.  | Discussions on acting as a vehicle to fund putting a sheriff on the lake.                   |
| <b>OWLA</b>            | Provide public education on perceived problems of boaters, speed limit and boating setbacks.                               | Discussions on trying to get radar on loan for tracking speeds of boats.                    |
| <b>OWLA &amp; Plan</b> | Examine building a pumpout station on the North & South end of the Lake.   | None to date.   |
| <b>OWLA</b>            | Examine increasing the boating and jet ski setbacks from shore regarding the speed limit.                                  | Discussions on trying to get radar on loan for tracking speeds of boats.                    |

**Chemicals**

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

| <b>AGENCY</b>         | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>  |
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| <b>Plan &amp; CCE</b> | Cayuga Co. and Town of Skaneateles continue household hazardous waste collection event offerings and explore ways to make the service available on a year round basis, especially for fuel products | Cayuga County held its 4 <sup>th</sup> Household Hazardous Waste Day on October 4 <sup>th</sup> . Over 40,000 lbs of hazardous wastes were collected from 470 households and two farms. Included in the wastes collected were 550 gal of oil based paint, 400 gal of pesticides, 490 gal of gas & other flammable liquids, 7220 lbs of batteries & over 100 propane tanks. |

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| <b>Plan, CCE &amp; City</b> | Provide information on proper use and disposal of household chemicals; suggested media includes annual water quality reports by water providers, water bill messages, and direct mailings.                        | Cover story on HHW in September 2003 issue of CCE's Eco Logic newsletter. Mailed to approximately 900 households.<br>Over 700 litter bags containing solid waste & water quality fact sheets were distributed to participants at the 2003 Electronics & Propane Tank Collection and HHW Day.<br>Eco Talk columns in Citizen newspaper:<br>January 10: Mercury, April 11: Home electronics info & collection event, September. 26: proper disposal of garden chemicals        |
| <b>Plan &amp; CCE</b>       | Continue to search for ways to reduce hazardous materials releases in the watershed. For example, find ways to reduce mercury releases, such as collecting auto & household mercury switches & fluorescent bulbs. | 22 pounds of mercury and mercury-containing products collected at the Cayuga County Household Hazardous Waste Day on Saturday, October 4 <sup>th</sup> .<br>Information on mercury switch replacement on webpage.  |
| <b>Plan, CCE &amp; City</b> | Promote pest management practices that reduce pesticide use in the watershed, including integrated pest management and non-toxic pest management.   | Forty-two residents attended an IPM workshop as part of the "Green Thumbs for Blue Water" education program.<br>Eco Talk articles: September 26: Disposal of garden chemicals, July 25: Garden calendar with IPM ideas, March 14: Article on IPM and Green Thumbs program  |
| <b>Plan &amp; CCE</b>       | Examine ways to change people's attitudes about the "perfect lawn" through education and peer pressure.   | Forty-two residents attended an IPM workshop as part of the "Green Thumbs for Blue Water" education program.   |
| <b>CCE</b>                  | Conduct education programs to help homeowners prevent groundwater contamination; include wells, well maintenance, septic system use, yard waste, composting, etc.   | Well education display titled "Keeping Your Water Well" was developed in 2002 & displayed throughout 2003 at CCE Education Center as well as "Fun on the Farm Days" held at O'Hara Dairy on September 27.<br>CCE, in conjunction with SWCD, held two composting workshops for residents in May 2003. 41 residents participated and took home 44 compost bins.<br>Eco Talk articles: May 9: Composting, May 23: Pavers and impervious surfaces, October 31: Composting leaves |
| <b>SWCD &amp; NRCS</b>      | Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas.  | Provide cost share assistance.<br>Have a no till seeder and tractor that can be used for a fee to establish buffers.   |
| <b>Plan</b>                 | Promote municipal level yard waste composting to move the nutrients contained in yard waste away from lakeshore areas.  | None to date.  |

**Hazardous Material Spills and Spill Response**

| AGENCY                | ACTION  | PROGRESS TO DATE   |
|-----------------------|---|--|
| <b>Plan &amp; CCE</b> | 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.                                      | A <i>Water Quality Contact</i> card was developed with input from WQMA as part of the “Green Thumbs for Blue Water” program. 400 cards were produced and distributed to all 150 program participants as well as WQMA members for distribution. |
| <b>Plan</b>           | Fire departments & other agencies surveyed in 2002 to verify who has materials for an immediate response to a hazardous material spill (spill response kits). Examine funding options where spill response kits are lacking. Report findings to WQMA. | Returned surveys available for review at Plan. Some grant opportunities researched.  |

**Education**

| AGENCY                | ACTION  | PROGRESS TO DATE   |
|-----------------------|---|--|
| WQMA                  | The Cayuga Co. WQMA should encourage & promote a coordinated approach to public education among its member organizations. | On-going   |
| <b>CCE</b>            | Develop an on-going educational program on watershed and related issues to schools and school aged children.              | Conducted a watershed education course for the BOCES Gifted and Talented program in January.<br>Continued to promote Watershed Watch monitoring program to school teachers, scout groups, & 4-H groups.<br>Nearly 1000 6-graders participated in Conservation Field Days and learned about several watershed topics including invasive species, aquatic macro-invertebrates, fish, nutrient management and more.<br>Eco Talk articles: March 21: Watershed Watch, May 16: Conservation Education Workshop for educators, July 4: Information on conservation camps for kids  |
| <b>CCE &amp; Plan</b> | Make watershed issues more accessible to citizens by utilizing the internet, direct mailings, and media releases.         | WQMA website available at <a href="http://co.cayuga.ny.us/wqma">co.cayuga.ny.us/wqma</a> .<br>Developed educational website on backyard buffers and IPM as part of “Green Thumbs for Blue Water” educational program ( <a href="http://co.cayuga.ny.us/wqma/greenthumbs">co.cayuga.ny.us/wqma/greenthumbs</a> ).<br>Updated and improved website on hazardous and solid waste disposal and recycling in Cayuga County ( <a href="http://www.cayuganet.org/hazwaste">www.cayuganet.org/hazwaste</a> )<br>Four issues of CCE’s environmental education newsletter, <i>Eco Logic</i> , were sent to 900 + households and included information on topics ranging from IPM and water quality to solid waste management.<br>52 <i>Eco Talk</i> articles on environmental education and water quality topics published in the Citizen<br>Monthly media releases on water & environmental education topics sent. |

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|---------------------------|--|---|
| <b>CCE &amp; Everyone</b> | 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. | Watershed related articles appeared in the Citizen and Post Standard newspapers on CCE's watershed related events.<br>17 Eco Talk articles on water quality related topics.<br>Appeared on WCNY's Hour CNY studio program to talk about HHW issues and event. |
| <b>CCE &amp; Everyone</b> | Develop promotional campaigns that will interest a larger variety of participants in education programs.   | None to date.   |
| <b>CCE</b>                | Agencies & organizations that promote water quality should enable trainers & educators to continually develop skills & expertise.  | CCE hosted a Train-the-Trainer satellite videoconference titled "Providing Safe Drinking Water: A Primer for Small Businesses and Organizations".   |
| <b>Park</b>               | Displays at Emerson Park tied to watershed protection and information from USGS water monitoring station.  | Two signs in on watershed protection at Emerson Park. One at the boat launch area and one on the beach.   |

**Exotic, Introduced and Invasive Species Management**

| <b>AGENCY</b>         | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>  |
|-----------------------|--|--|
| <b>Plan &amp; CCE</b> | Search for funding to initiate a regular inventory and monitoring program for exotic, introduced and invasive species in the lake and watershed. | CCE, working in cooperation with Network, Plan, & several other regional organizations, received a grant from the US EPA, Great Lakes National Program Office (GLNPO) to conduct a 2-year education & monitoring program for aquatic invasive plants in the Finger Lakes. Volunteers will be trained on aquatic plant identification & will monitor designated waterways, including Owasco Lake. The program is slated to begin late 2003 & run through late 2005. |

**Zebra Mussels**

| <b>AGENCY</b>           | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>  |
|-------------------------|---|--|
| <b>OWLA</b>             | Survey residents to see if they have been impacted by zebra mussels especially by zebra mussels in their intake pipes.    | None to date.  |
| <b>Health &amp; CCE</b> | Educate landowners about how to put in intake pipes and treatment methods for dealing with zebra mussels in intake pipes. | Health put together education on health precautions for individual lake owners utilizing the lake as a water source. |

**Fish and Wildlife Management**

| <b>AGENCY</b>          | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>  |
|------------------------|--|--|
| <b>SWCD</b>            | Implement streambank stabilization on severely eroding streams.  | Streambank stabilization work done on Dutch Hollow Brook (See Streambanks & Stream Corridor Mgmt for more info)      |
| <b>SWCD &amp; NRCS</b> | Provide incentives & programs for farmers & landowners to install, maintain & manage buffers adjacent to streambanks, lakeshore and other sensitive areas. | Have a no till seeder and tractor that can be used for a fee to establish buffers.<br>Provide cost share assistance. |

|                        |   |  |
|------------------------|---|--|
| <b>Plan &amp; OWLA</b> | Search for funding to determine water quality, including phosphorus level, dissolved oxygen and chlorophyll, in Owasco Lake and the tributaries and the effect it has on aquatic vegetation, fish and wildlife. | CCE submitted proposal to FL-LOWPA Special Project Fund to conduct a phosphorus sampling program on Owasco & Cayuga Lakes' tributaries. Decision expected by February 6, 2004. OWLA working with IAGT to place a monitoring buoy into Owasco Lake.<br>Limited phosphorus and nitrate testing of Owasco Inlet & tributaries during the summer of 2003 by OWLA & SWCD. Samples taken before & after Groton & Moravia's wastewater treatment plants. Need more data to come to any conclusions. Health purchased a field phosphorus kit to measure phosphorus in the field.<br>Current monitoring program with stations at Dutch Hollow Brook & the Owasco Inlet. Monitors level, rainfall, & flow. Takes samples for lab analysis of total & soluble reactive phosphorus and total solids. |
|------------------------|---|--|

**Fuel and Chemical Storage**

| AGENCY      | ACTION   | PROGRESS TO DATE           |
|-------------|--|----------------------------|
| <b>Plan</b> | In 2002, obtained and modified the DEC database on bulk petroleum storage facilities to develop a watershed database. On an annual basis, obtain updates from the DEC. | Requested update from DEC. |
| <b>Plan</b> | Inventory small fuel tanks in the watershed.   | None to date.              |
| <b>Plan</b> | Compile information on chemical storage in the watershed.  | None to date.              |
| <b>Plan</b> | Inventory underground storage tanks in flood zones (such as home heating oil).   | None to date.              |

**Funding Options**

| AGENCY          | ACTION   | PROGRESS TO DATE  |
|-----------------|--|---|
| <b>Everyone</b> | 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. | CCE submitted proposal to FL-LOWPA Special Project Fund to conduct a phosphorus sampling program on Owasco & Cayuga Lakes tributaries. Decision expected by February 6, 2004. Applied for EPF funding for Town of Locke to build a salt storage shed (\$65,000).<br>Plan wrote & SWCD submitted two EPF/PPG for Non-ag Nonpoint Source Abatement and Control grants to conduct streambank stabilization of Sucker Brook (\$4,700) & Veness Brook (\$5,500). |

**Highway Deicing**

| AGENCY      | ACTION   | PROGRESS TO DATE  |
|-------------|--|---|
| <b>Plan</b> | Conduct a survey of highway departments to see who has salt storage structures and contained mixing areas and where they are needed. | SWCD working with towns on salt storage.                                |
| <b>Plan</b> | Survey salt policies and procedures for each municipality yearly.  | Survey developed and under review.                                      |
| <b>Plan</b> | Explore funding options for those that need salt storage structures and contained mixing areas.                                      | Applied for EPF funding for Town of Locke salt storage shed (\$65,000). |

**Highway Maintenance**

| <b>AGENCY</b>         | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>  |
|-----------------------|--|--|
| <b>SWCD &amp; CCE</b> | Increase the use of the Cornell Local Roads Program, Highway School, & LEAPE by highway officials.   | Encourages participation through contacts with highway officials. SWCD staff person has joined the Highway Association to further contact with highway officials.  |
| <b>SWCD</b>           | Encourage use of structural controls of sediments on steep roads, roadbanks & in high flow ditches.  | Work with towns and give engineering expertise. Structural controls used include installing piping and stone, installing Hickenbottom structures on surface structures to direct flow, installing tile, installing biotech and rock, and critical area seeding.    |
| <b>SWCD</b>           | Encourage and provide information on timely revegetation of road ditches and banks.  | On-going. Expanded hydroseeding program to work with NYSDOT to do seeding on highways and ditches.   |
| <b>SWCD</b>           | Encourage use & provide information on structural measures to control sediments and other pollutants from stormwater runoff.   | Work with towns and give engineering expertise. Structural controls used include installing piping and stone, installing hick and bottom structures on surface structures to direct flow, installing tile, installing biotech and rock, and critical area seeding. |
| <b>SWCD</b>           | Encourage use of & provide information on BMPs to reduce roadbank erosion.   | Work with towns and give engineering expertise.  |
| <b>SWCD</b>           | Provide an annual informational report for highway superintendents & workers in the watershed.   | SWCD Annual Report.  |
| <b>SWCD</b>           | Organize local training programs through Soil & Water Conservation Districts and Highway Superintendents Association.  | SWCD staff is working with the president of the Highway Superintendents Association to provide training.   |
| <b>SWCD</b>           | Examine the use of infiltration trenches, detention ponds, siltation ponds, basins, vegetated swales & filter strips in critical areas and in demonstration projects.  | A demonstration project of a waterway using filter fabric & a surface inlet drainage system installed in the Town of Sennett.  |
| <b>SWCD</b>           | 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.   | Does not encourage fall plowing, however, if farmers do plow in the fall, they encourage them to plow across slope, use ridge tilling, and seed with rye. Part of Tier I and Tier II AEM planning process.   |
| <b>SWCD</b>           | Explore why roadside ditches are deepening and develop methods of prevention.  | A county highway in the Owasco Lake Watershed was deepening so they overcut and lined it with stone, sloped the bank, and seeded.  |
| <b>Plan</b>           | Encourage local code enforcement officers & local planning boards to establish & enforce site & construction standards and erosion control measures for private roads (Part of Phase II Stormwater Rules and Regulations). | On hold. Plan is waiting until sample ordinances and clearer guidance is provided by the DEC.  |

**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.               | Efforts to continue operations as part of regular work plans.   |
| City & Plan | Place the “rule curve” on the Internet. Add a link to the USGS website and their lake level data.   | Completed. On WQMA webpage at <a href="http://co.cayuga.ny.us/wqma/owasco/index.htm">co.cayuga.ny.us/wqma/owasco/index.htm</a>  |
| 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 as part of regular work plans.<br>Planning worked with City to melt two ice jams in Port Byron without adversely impacting lake level. |
| SWCD        | Continue work needed to dredge the South end of Owasco Lake.  | Received NYSDEC permit. Sent permit amendment to satisfy ACOE guidelines. Will start work as soon as ACOE permits are secured.  |

**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. | 62 residents/homeowners attended workshops focused on creating backyard buffers and reducing erosion from riparian & lakeshore properties as part of the “Green Thumbs for Blue Water” program. Several fact sheets were developed and distributed that included information on native plants for streambanks and locations to purchase plant material. In addition, all participants received <i>Fingerlakes Landscapes: Landscaping for Erosion Control</i> . |
| CCE        | Distribute landscaping for erosion control information to all contractors & nurseries as well as individual homeowners & realtors.  | The “Green Thumbs for Blue Water” education and outreach program was conducted. Forty-five landscape, lawn care, and garden center professionals attended a one-day training seminar which focused on lawn and landscape care for riparian and lakeshore properties.  |
| CCE & OWLA | Conduct Lakeshore Homeowner Workshops on shoreline erosion, vegetative options, yard waste management, etc.   | The “Green Thumbs for Blue Water” education and outreach program was conducted. 105 residents/homeowners attended workshops focused on creating backyard buffers and lawn and landscape care for water quality. CCE, in conjunction with SWCD, held two composting workshops for residents in May 2003. 41 residents participated and took home 44 compost bins.  |

**Land Use**

| AGENCY | ACTION  | PROGRESS TO DATE       |
|--------|---|------------------------|
| Plan   | Review and update the webpage directory of zoning provisions and other development regulations of towns and villages, that was created in 2002. | Information collected. |

|             |  |  |
|-------------|--|--|
| <b>Plan</b> | Inventory wetlands and open space resources in the watershed.  | Started working with EMC to do this. Presented information at the Community Planning Forum at Weedsport High School on what services Planning can provide to towns and villages to do this.  |
| <b>Plan</b> | Educate planning boards about land use issues such as drainage, buffer zones, stormwater runoff, etc.  | Stormwater education to County Planning Board on October 1 <sup>st</sup> .<br>4 trainings to the County Planning Board on Intro to the Planning Board, Board of Appeals, Comprehensive Planning and SEQR.  |
| <b>Plan</b> | Provide assistance to towns & villages to design, adopt and/or implement standards and guidelines; provide model ordinances, regulations, standards, and guidelines. | On-going. For example, worked with the Town of Fleming to update their zoning laws to include adult use, cell towers and junkyard provisions.  |
| <b>Plan</b> | Explore opportunities to protect streambank areas. (Survey where needed). Use data from streambank assessments and management plans to search for funding.           | Received a grant entitled "Owasco Lake Tributary Assessment and Management Plan Development" from the Great Lakes Commission Great Lakes Basin Program for Soil Erosion and Sediment Control. Conducted streambank assessments of Dutch Hollow, Veness and Sucker Brooks and wrote management plans.<br>Wrote two EPF grants to implement suggestions from the Veness Brook and Sucker Brook Management Plans. |
| <b>Plan</b> | Target specific open space areas for an open space system.   | Started working with EMC to do this. Presented information at the Community Planning Forum at Weedsport High School.   |

**Owasco Flats**

| <b>AGENCY</b>           | <b>ACTION</b>                           | <b>PROGRESS TO DATE</b>   |
|-------------------------|---|---|
| <b>Plan &amp; Parks</b> | Conduct annual cleanup at Owasco Flats. | Owasco Flats Cleanup Day was held on September 27 <sup>th</sup> and eighteen volunteers collected over 500 pounds of trash. |

**Private and Municipal Wastewater Treatment**

| <b>AGENCY</b> | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>  |
|---------------|---|--|
| <b>Health</b> | 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. All systems in the Towns of Aurelius, Locke & Fleming (outside the watershed), as well as property transfers, were subject to the Cayuga Co Sanitary Code mandatory septic system inspections in 2003. FLOWPA funding provided money for review of septic system inspections.<br>Sampled coliform levels at Emerson Park and other bathing beaches around Owasco Lake. |
| <b>Health</b> | Develop a more complete assessment of the wastewater treatment and water supply needs in problematic locales.   | None to date.  |

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|-----------------------------|--|---|
| <b>Health</b>               | Explore federal or state assistance to replace or upgrade septic systems of people with limited incomes.   | On-going.<br>Currently limited funding available through Cayuga County Homsite.   |
| <b>Health</b>               | Encourage the use of water conservation measures through education, financial incentives and appropriate regulations.  | None to date.   |
| <b>Plan</b>                 | 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. | On-going. Presented information at County Planning Board meetings. In negotiations to work as a consultant with towns to write comprehensive plans.   |
| <b>Plan</b>                 | Explore what grants and loans are available for water & waste disposal systems for rural communities by using the Catalog of Federal Domestic Assistance.  | Worked with USDA Rural Development.   |
| <b>Health:<br/>get data</b> | Explore the possibility of upgrading the Groton Wastewater Treatment Facility.   | <p>Health asked the NYSDEC in Albany about how much it would cost to upgrade the Groton Wastewater Treatment Plant to reduce release of phosphorus into the Owasco Inlet. Capital costs would be low, but the operating costs are dependent on the amount of phosphorus removed. WQMA sent a letter to Steve Eidt of the NYSDEC in Syracuse on the phosphorus input from the Groton plant. Steve Eidt feels that the stream can assimilate all the phosphorus before it reaches the lake, therefore it is not a problem and he will not respond to the letter. Health spoke to researchers at SUNY Brockport who have done studies on phosphorus on Conesus Lake and they do not agree with the Eidt's comment. They suggested that the NYSDEC should get additional data above and below the plant and the Owasco Inlet. SWCD and OWLA used a portable phosphorus tester to look at the phosphorus levels above and below the plant. Further testing is required before results can be determined.</p> <p>Clifford W. Callinan, P.E, who wrote the "Water Quality Study of the Finger Lakes," recommended getting the issue on the Priority Waterbodies List (PWL), which was done. Plan determined that the Groton plant accounts for 5% of the summer phosphorus input into the Lake.</p> <p>Plan suggests that when the Groton permit is up for renewal in 2006 that the WQMA press for phosphorus removal to be added.</p> |

**Public Access**

| AGENCY  | ACTION   | PROGRESS TO DATE  |
|---|--|---|
| <b>Parks, Plan, OWLA &amp; Owasco Flats Committee</b> | Encourage low impact activities in the watershed like hiking, canoeing and fishing instead of motorized use. | Canoe website at <a href="http://www.cayuganet.org/canoe/index.html">www.cayuganet.org/canoe/index.html</a> |

**Stormwater and Sediment Control**

| AGENCY                          | ACTION   | PROGRESS TO DATE   |
|---------------------------------|--|--|
| <b>SWCD</b>                     | Continue hydroseeding assistance programs for towns & villages in critical areas, such as road ditches, & promote the program to increase use throughout the watershed.  | On-going. Expanded to work with NYSDOT to do seeding on highways and ditches.  |
| <b>SWCD &amp; CNYRPDB</b>       | Continue to conduct regional workshops on stormwater management to educate local decision makers, planning & zoning boards, Code Enforcement Officers, Highway Super-intendents & residents about the use of recognized development BMPs to protect water quality & EPA Phase II rules.                                      | Stormwater education to County Planning Board on October 1 <sup>st</sup> .   |
| <b>SWCD</b>                     | Provide model site design guidelines for contractors.  | Has set up training sessions with Don Lake.  |
| <b>SWCD</b>                     | Have a CPESC person review existing municipal land use regulations throughout the watershed (i.e. comprehensive plans, zoning codes, subdivision regulation, site plan review), as well as their implementation & enforcement, for adequacy in minimizing the impacts to water quality from development & recommend changes. | Staff person in training to become a CPESC.  |
| <b>SWCD, Plan &amp; CNYRPDB</b> | Encourage towns in the watershed to create & enforce stormwater management & erosion control ordinances by providing a model laws & ordinances for stormwater & erosion control. Provide assistance for towns & villages to comply with Phase II Stormwater Rules & Regulations.   | Plan is waiting for sample ordinances & clearer guidance from DEC before encouraging towns in the watershed to create and enforce ordinances. Developed a PowerPoint presentation on Phase II Stormwater Rules and Regulations. Gave presentation to Cayuga County Planning Board on October 1 <sup>st</sup> . WQMA on October 2 <sup>nd</sup> , and Legislative Committee on Planning and Economic Development on November 17 <sup>th</sup> . Created educational materials on Stormwater and a section on stormwater on the WQMA webpage ( <a href="http://co.cayuga.ny.us/wqma/help/stormwater.htm">co.cayuga.ny.us/wqma/help/stormwater.htm</a> ). Funding provided by FLOWPA. |

**Streambanks and Stream Corridor Management**

| AGENCY                       | ACTIONS  | PROGRESS TO DATE  |
|------------------------------|--|---|
| <b>SWCD &amp; Plan</b>       | Conduct streambank erosion assessments throughout the watershed.   | Received a grant entitled "Owasco Lake Tributary Assessment & Management Plan Development" from the Great Lakes Commission Great Lakes Basin Program for Soil Erosion & Sediment Control. Conducted streambank assessments of Dutch Hollow, Veness & Sucker Brooks & wrote management plans. Also examined a new methodology to identify & assess areas of streambank erosion. This project was a "featured project" in the publication "Keeping it on the Land."   |
| <b>SWCD</b>                  | Implement bank stabilization practices on the most severely eroding banks, as quickly as feasible.   | Rip rap and installed filter sox on Dutch Hollow Brook. Edge saver installed August to restore eroded banks and edge of Dutch Hollow Brook.<br>SWCD received a Great Lakes Watershed Restoration Grant for the Owasco Inlet Streambank Stabilization Project, which will fund natural stream design on Owasco Inlet from the Tompkins and Cayuga Co line & extending one mile each way. Plans have been submitted for approval.<br>Received a Great Lakes Commission Great Lakes Basin Program for Soil Erosion & Sediment Control grant for the Dutch Hollow Brook Streambank Stabilization Project. This project will demonstrate best management practices for streambank stabilization & evaluate their effectiveness for addressing particular erosion problems on Dutch Hollow Brook. |
| <b>SWCD and Plan</b>         | Funding sources need to be identified for comprehensive streambank restoration and management programs.  | Applied for two EPF/PPG for Non-agricultural Nonpoint Source Abatement and Control grants to conduct streambank stabilization of Sucker Brook (\$4,700) and Veness Brook (\$5,500).<br>Received a Great Lakes Commission Great Lakes Basin Program for Soil Erosion and Sediment Control grant for the Dutch Hollow Brook Streambank Stabilization Project.   |
| <b>SWCD, NRCS &amp; Plan</b> | Provide incentives and programs for farmers & landowners to install, maintain & manage buffers adjacent to streambanks, lakeshore and other sensitive areas. Find funding opportunities for buffer installation, management and maintenance. | Provide cost share assistance.<br>Have a no till seeder and tractor that can be used for a fee to establish buffers.  |
| <b>NRCS &amp; SWCD</b>       | Promote the use of BMPs in the watershed such as livestock exclusion from streams & vegetative filter strips.  | On-going.   |

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| <b>CCE &amp; Plan</b>        | Develop educational programs on the protection of stream areas and stream maintenance (i.e. What are landowners allowed to do without permits, when are permits needed, and who to contact). | Information gathered.   |
| <b>SWCD &amp; NRCS</b>       | Continue having staff members of the SWCD and the NRCS assist in future preparation of grant and cost share applications to reduce streambank erosion and implement buffering.               | On-going<br>Plan wrote and SWCD applied for two EPF/PPG for Non-agricultural Nonpoint Source Abatement and Control grants to conduct streambank stabilization of Sucker Brook (\$4,700) and Veness Brook (\$5,500).   |
| <b>Plan</b>                  | Provide model buffer and stream corridor protection ordinances to the municipalities.  | None to date.   |
| <b>Plan</b>                  | Examine debris accumulation in streams and determine whose jurisdiction it is to remove it and have it removed.  | Information gathering process started.  |
| <b>Plan &amp; OWLA</b>       | Educate landowners on what debris can be removed from streams and how to remove it properly.   | None to date.   |
| <b>SWCD, Plan &amp; NRCS</b> | Train staff in remedial fluvial geomorphology & conduct pilot projects on tributaries to Owasco Lake, particularly Dutch Hollow Brook & the Inlet.   | Assisted consultant in survey of Owasco Inlet for the Owasco Inlet Streambank Stabilization Project. Surveying conducted by SWCD for future fluvial geomorphology work on Dutch Hollow Brook.   |
| <b>SWCD &amp; OWLA</b>       | Conduct tours, put up signs and provide information on demonstration projects for streambank erosion and stream buffering.   | Bus tour included a stop to view rip rap and filter sox installed on Dutch Hollow Brook.  |
| <b>CCE</b>                   | Develop a program to plant buffers; provide seedlings, education and instructions.   | 62 residents/homeowners attended workshops focused on creating backyard buffers and reducing erosion from riparian and lakeshore properties as part of the "Green Thumbs for Blue Water" program. Information was provided on native plants for streambanks and locations to purchase plant material. |

**Urban/Community Forestry**

| <b>AGENCY</b> | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>  |
|---------------|--|--|
| <b>CCE</b>    | Educate towns, villages, and the public on the values and benefits of urban and community trees and forests, trees suitable for urban planting in this area, and how to care for them. | Conducted a workshop entitled "How to Become a Tree City USA Community" for municipalities and the public in April 2003. Information was provided on the values and benefits of urban and community trees and forests, tree inventories, model town ordinances, working with volunteers, funding sources, etc. |

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|-----------------------|---|--|
| <b>CCE</b>            | Encourage training to develop inventories of trees and tree sites.  | Conducted a workshop entitled “How to Become a Tree City USA Community” for municipalities and the public in April 2003. Information was provided on tree inventories, working with volunteers, etc.   |
| <b>Plan</b>           | Encourage towns and villages to apply to grant programs for tree planting.  | Conducted a workshop entitled “How to Become a Tree City USA Community” for municipalities and the public in April 2003. Information was provided on funding sources, etc.   |
| <b>Plan &amp; CCE</b> | Provide a model town or village tree ordinance.   | Conducted a workshop entitled “How to Become a Tree City USA Community” for municipalities and the public in April 2003. Information was provided on model town ordinances, etc.   |
| <b>CCE</b>            | Encourage community forest plans.   | Conducted a workshop entitled “How to Become a Tree City USA Community” for municipalities and the public in April 2003. Information was provided on the values and benefits of urban and community trees and forests, tree inventories, model town ordinances, working with volunteers, funding sources, etc. |
| <b>CCE &amp; Plan</b> | Develop community programs that protect existing trees and encourage significant new plantings in areas where tree plantings would be beneficial. | Plan, SWCD and CCE submitted a County application for tree seedlings through the Community Tree Planting (CTP) Program of National Tree Trust (NTT) in 2002. Trees were available for pickup in 2003.  |

**Waste Sites**

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

| <b>AGENCY</b>            | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>                       |
|--------------------------|---|---|
| <b>Plan</b>              | 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. | None to date.                                 |
| <b>Plan &amp; Health</b> | Discourage open burning and provide alternatives such as pay by the bag programs for residential solid waste disposal.  | Educational materials available upon request. |

**Other Waste Sites**

| <b>AGENCY</b>                | <b>ACTION</b>  | <b>PROGRESS TO DATE</b> |
|------------------------------|--|-------------------------|
| <b>OWLA, City &amp; Plan</b> | Inventory junkyards.   | None to date.           |
| <b>OWLA, City &amp; Plan</b> | Inventory permitted and abandoned sand, gravel, and other mines. | None to date.           |

**Roadside and Illegal Dumping**

| <b>AGENCY</b>                | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>   |
|------------------------------|---|---|
| <b>OWLA, City &amp; Plan</b> | Create an inventory of roadside dumping hot spots and illegal dumping along watercourses. | While assessing the streams for the “Owasco Lake Tributary Assessment & Management Plan Development” grant, illegal dumps along Dutch Hollow, Veness & Sucker Brooks were recorded using GPS. |

|             |   |               |
|-------------|---|---------------|
| <b>Plan</b> | List all municipal codes & ordinances for roadside and/or illegal dumping.  | None to date. |
| <b>Plan</b> | 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. | None to date. |
| <b>OWLA</b> | Communicate illegal dumping problems to the public and how to anonymously report dumping activities.  | None to date. |

**Waterborne Illness**

| <b>AGENCY</b>          | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>  |
|------------------------|--|--|
| <b>WQMA</b>            | Explore funding to compile and maintain the WQMA database.   | None to date.  |
| <b>Parks</b>           | Continue to address the bird problem in Emerson Park and entire lake by trying realistic methods.  | Recommendations on geese included in the January 2003 Report of the Task Force On Emerson Park Beaches Bacteria Contamination.<br>More proactive management at the Park.   |
| <b>Health</b>          | Encourage residents using untreated lake water as a drinking water source to install some type of treatment system to disinfect their drinking water.            | Put together education on health precautions for individual lake owners utilizing the lake as a water source.  |
| <b>Health</b>          | Provide educational materials through the Cayuga Co. Health Department.  | Education materials are available upon request.  |
| <b>SWCD</b>            | Use BMPs and Environmental Protection Agency Regulations to reduce contamination from pastures.  | Tompkins Co. SWCD received Clean Water/Clean Air Bond Act and EPF monies to implement rotational grazing in the Cayuga and Owasco Watersheds. The Tompkins Co SWCD will coordinate the installation of 57 BMPs for implementing new Rotational Grazing Systems and improving existing ones on 37 livestock farms located in the Owasco & Cayuga Lakes watersheds. State funding was delayed, therefore only one system in Tompkins Co. and two in Cayuga Co. have been installed.<br>Tompkins Co. also received NY State Agricultural Non-point Source Abatement & Control Program grant to do barnyard management on five farms in the Owasco Inlet Watershed. State funding was delayed. Some design work has been completed for spring. |
| <b>SWCD &amp; NRCS</b> | Provide incentives and programs for farmers and landowners to install, maintain and manage buffers adjacent to streambanks, lakeshore and other sensitive areas. | Provide cost share assistance.<br>Have a no till seeder and tractor that can be used for a fee to establish buffers.   |

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|------------------------------|---|--|
| <b>OWLA, Plan &amp; City</b> | Implement a continuous monitoring program in Owasco Lake and the major tributaries. | OWLA conducts annual water quality sampling of Owasco Lake throughout the summer months. Health samples coliform levels at Emerson Park and other bathing beaches around Owasco Lake during the summer months. |
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**Additional Work**

**County Wide**

| <b>AGENCY</b> | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>  |
|---------------|---|--|
| <b>WQMA</b>   | Assist DEC in the revision to the Priority Waterbodies List.  | WQMA met and discussed all the waterbodies in Cayuga Co. Data sent to DEC.   |
| <b>SWCD</b>   | Complete Agricultural Environmental Management (AEM) Plans for farms in the Owasco and Cayuga Lake Watershed. | Completed 156 AEMs plans for the Cayuga and Owasco Lake Watersheds.  |
| <b>NRCS</b>   | Install BMPs to improve water quality.  | Installed 2 grassed waterways, 4 underground outlets, and 2 water control basins. Surveyed & designed six manure storage facilities.   |
| <b>SWCD</b>   | Projects conducted by SWCD.   | Total of 7 finished projects, 9 waiting for permits, 7 waiting to be constructed in 2003.  |
| <b>SWCD</b>   | Encourage farmers to join the CRP Program   | Picked up about 145-150 acres in 10 year CRP program county wide.  |
| <b>SWCD</b>   | Take advantage of new technologies to deal with agricultural waste.   | Actively working on a regional anaerobic methane digester project. A consultant from Environmentally Goal is to survey all the dairy farms within a 10 mile radius of SWCD location (approximately 68). Getting state & federal officials engaged in project. December 3 meeting on "How to Make Methane Digestion More Attainable and Profitable." Starting to work on a business plan with Global Common which will help obtain the funding. |
| <b>SWCD</b>   | Encourage timely revegetation of disturbed areas.   | Hydroseeded 22 acres in the Cayuga and Owasco Lakes Watersheds.  |
| <b>SWCD</b>   | Provide aquatic vegetation harvesting to improve access and water quality.                                    | New harvester purchased. Second largest in New York. Harvested Lake Como, Owasco Lake, Fair Haven & Otter Lake.  |
| <b>Plan</b>   | Conduct HazNY hazards analysis for Cayuga County.   | Completed. Hazardous materials in transit rated the most probable hazard we need to prepare for.   |

**Cayuga Lake**

| AGENCY                          | ACTION   | PROGRESS TO DATE  |
|---------------------------------|--|---|
| <b>SWCD</b>                     | Explore full range of funding alternatives to conduct projects in the Cayuga Lake Watershed. | <p>Applied for EPF funds (\$648,140) for six large CAFO farms in the Cayuga Lake Watershed in Cayuga &amp; Tompkins Co for manure management systems that include solids dewatering, lagoon aeration &amp; composting. These farms are located in the Towns of Aurelius, Genoa, Ledyard, Venice, Lansing &amp; Dryden.</p> <p>Applied for EPF funds (\$257,500) to implement BMPs in Cayuga Lake Watershed on seven farms. Six for silage leachate management systems &amp; one manure storage system.</p> <p>Applied for EPF funds (\$163,750) for a concrete manure waste storage facility in Cayuga and Owasco Lakes Watersheds in the Town of Scipio.</p> <p>Applied for EPF funds (\$42,165) to work with Tompkins Co. SWCD to evaluate Tier II surveys in Cayuga Lake Watershed. Will contact all farms that have completed Tier II and see if completed Tier III (Planning) or Tier IV (Implementation). Goal is to form a database to help with future planning efforts.</p> <p>Applied for EPF funds (\$178,659) for a manure management system that include solids dewatering, lagoon aeration and composting in a CAFO in Cayuga Lake Watershed.</p> <p>Applied for EPF funds to build salt storage sheds in Aurelius (\$66,450) and Springport (\$47,500)</p> |
| <b>SWCD</b>                     | Take advantage of new technologies to deal with agricultural waste.                          | Two farms in the Cayuga Lake Watershed plan to construct methane digesters.   |
| <b>SWCD</b>                     | Install BMPs to improve water quality.   | Barnyard project on a farm in the Fall Creek Watershed. Project includes installation of surface inlets to prevent highway runoff from draining into the barnyard.  |
| <b>SWCD &amp; NRCS</b>          | Establish & improve wild life habitat in the Cayuga Lake Watershed.                          | Pheasants Forever and NYSDEC seeded ten acres in Genoa for grassland wildlife habitat.  |
| <b>Network, CCE, &amp; SWCD</b> | Provide education to farmers on emergency action planning.                                   | Network, CCE, Farm Bureau and county Emergency Management Offices and SWCDs provided a series of workshops on emergency action planning for farmers. The premise of this project is that an informed and prepared agricultural community will be better able to prevent water quality contamination when accidental spills occur  |
| <b>Network &amp; IO</b>         | Education of the non-farm community on the role of agriculture in protecting water quality   | Two nutrient management tours of Patterson Farm held.   |
| <b>Network &amp; IO</b>         | David Morehouse Award established  | First annual David Morehouse Award recognized Patterson Farms for their exemplary practices and Sylvia Hurlbut for her work with the IO.  |

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| <b>Fall Creek WSC, Network &amp; Trout Unlimited</b> | Conduct cleanup of Fall Creek. | Fall Creek cleanup conducted on May 3 <sup>rd</sup> . 45 volunteers removed 2400 pounds of trash from Fall Creek and its banks. They worked from its source at Lake Como to its mouth at Stewart Park  |
| <b>Network</b>                                       | Quarterly Newsletter           | Articles highlighted actions individuals can take to reduce non-point source pollution, encouraged readers to learn about and increase their appreciation of the watershed and kept them informed about educational and environmental stewardship opportunities. |

**Owasco Lake**

| <b>AGENCY</b>          | <b>ACTION</b>  | <b>PROGRESS TO DATE</b>   |
|------------------------|--|---|
| <b>WQMA</b>            | Coliform Task Force.   | Submitted the "January 3, 2003 Report Task Force On Emerson Park Beaches Bacteria Contamination" to the Cayuga Co Legislature Planning & Economic Development Committee. Received \$14,000 from FLOWPA Special Projects Fund to conduct computer modeling by Emmet Owens as recommended in the "Task Force on Emerson Park Beaches Bacteria Contamination Report." Provided \$4000 match. |
| <b>Plan &amp; SWCD</b> | Stormwater BMPs.   | Assisted the Town of Moravia in the construction of a stormwater retention pond North of Skinner Hill Road with disaster recovery funds.  |
| <b>SWCD &amp; NRCS</b> | Establish and improve wildlife habitat in the Owasco Lake Watershed. | 75 acres of agricultural land taken out of production to become wildlife habitat. Funding provided by NRCS. Five acres seeded by Pheasants Forever and NYSDEC for wildlife habitat.   |

**Little Sodus Bay**

| <b>AGENCY</b> | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>  |
|---------------|---|--|
| <b>Plan</b>   | Assist the Center for Environmental Information, Inc. as they work on developing the Lake Ontario Coastal Initiative. | Met with representatives from the Center for Environmental Information, Inc. and provided contact information. |

**Skaneateles Lake**

| <b>AGENCY</b>          | <b>ACTION</b>   | <b>PROGRESS TO DATE</b>   |
|------------------------|---|---|
| <b>SWCD &amp; NRCS</b> | Establish and improve wildlife habitat in the Skaneateles Lake Watershed. | Eight acres seeded by Pheasants Forever and NYSDEC for wildlife habitat. Additional work to be funded under CREP. |

**Seneca River**

| AGENCY      | ACTION   | PROGRESS TO DATE   |
|-------------|--|--|
| SWCD        | Explore full range of funding alternatives to conduct projects in the Seneca River Watershed | Applied for EPF funds (\$92,728) for a barnyard runoff management system in Crane Brook Watershed. Applied for EPF funds (\$52,200) to implement grazing BMPs. Applied for EPF funds (\$26,750) for a waste storage facility in Seneca River watershed. Applied for EPF funds (\$218,252) for Cayuga and Onondaga Counties to install two manure storage facilities, three silage leachate management systems, two barnyard runoff management systems for three farms in the Towns of Cato, Elbridge, and Van Buren. |
| SWCD        | Provide education  | River Otter Boat Tour on the Seneca River from June through September on Mondays and Saturdays.  |
| SWCD & NRCS | Establish and improve wildlife habitat in the Seneca River Watershed.                        | Pheasants Forever and NYSDEC seeded thirteen acres in Brutus for grassland wildlife habitat.   |

**Acronyms and Abbreviations**

- Ag: Agriculture**
- BMP: Best Management Practices**
- CCE: Cayuga County Cornell Cooperative Extension**
- Cayuga Lake RPP: Cayuga Lake Watershed Restoration and Protection Plan**
- CNY: Central New York**
- CNY RPDB: Central New York Regional Planning and Development Board**
- CPESC: Certified Professional in Erosion and Sediment Control**
- CSLAP: Citizens Lake Assessment Program**
- City: City of Auburn**
- DEC: New York State Department of Environmental Conservation**
- DOS: New York Department of State**
- Duck: Duck Lake Association**
- EMC: Cayuga County Environmental Management Council**
- EPF: Environmental Protection Fund**
- Fall Creek WSC: Fall Creek Watershed Committee**
- 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**
- Network: Cayuga Lake Watershed Network**
- NRCS: Natural Resource Conservation Service**
- NSP: Non-point Source Pollution**
- OWLA: Owasco Watershed Lake Association**
- Parks: Cayuga County Parks and Trails**
- Plan: Cayuga County Department of Planning and Development**
- SEQR: State Environmental Quality Review Act**
- SWCD: Cayuga County Soil and Water Conservation District**
- Tour: Cayuga County Department of Tourism**