

# Cayuga County Water Quality Management Agency

## **2006 Year End Report**

Approved 1/4/07

## 2006 WQMA Membership

**Chair:**

Bruce Natale

**Vice-Chair:**

Gary Duckett

**Cayuga County Legislature's Environmental Advisors:**

Director of Cayuga County Planning and Economic Development

Stephen Lynch

Director of Cayuga County Environmental Health

Eileen O'Connor

Park Maintenance Supervisor

Gary Duckett

Director of Cayuga County Soil & Water Conservation District

Jim Hotaling

Cayuga County Solid Waste Management Program Administrator

Bruce Natale

Cayuga County Cooperative Extension Executive Director

Doug Ververs

**Non-County, Local Officials**

Association of Towns

Vacant

Association of Villages

Vacant

City of Auburn Owasco Lake Watershed Inspector

Anthony DeCaro

**Representatives from Interested Regional, State and Federal Agencies:**

Institute for the Application of Geospatial Technology

Matt Starr

CNY Regional Planning

Kristy LaManche

Finger Lakes Institute

Sarah Meyer

NYS DEC Region 7 Forest Practice Board

Dick Fox

NYS DEC Region 7 Water Resources

Scott Cook

NYS DEC Region 7 Permits

Elizabeth Tracy

USDA Farm Service Agency

Jane Cabal

USDA NRCS

Katie Shor

**Representatives from Waterbody Associations in Cayuga County**

Owasco Watershed Lake Association

Al Kozlowski

Duck Lake

Dale Powell

Cayuga Lake Intermunicipal Organization

Darby Kiley

Lake Como Association

Barb Harvey

Tri-County Skaneateles Lake Pure Waters Association

Bill Hecht

Cayuga Lake Watershed Network

Sharon Anderson

**Acronyms and Abbreviations**

AEM: Agricultural Environmental Management  
CCE: Cayuga County Cornell Cooperative Extension  
Cayuga Lake RPP: Cayuga Lake Watershed Restoration and Protection Plan  
City: City of Auburn  
CEMO: Cayuga County Emergency Management Office  
CLWN: Cayuga Lake Watershed Network  
CNYRPDB: Central New York Regional Planning and Development Board  
CPESC: Certified Professional in Erosion and Sediment Control  
DEC: New York State Department of Environmental Conservation  
Duck: Duck Lake Association  
FLI: Finger Lakes Institute  
FOLLOWPA: Finger Lakes Lake Ontario Watershed Protection Alliance  
FSA: Farm Service Agency  
Health: Cayuga County Department of Health and Human Services Environmental Health Division  
HHW: Household Hazardous Waste  
Highway: Cayuga County Highway Department  
IAGT: The Institute for the Application of Geospatial Technology  
IO: Cayuga Lake Watershed Intermunicipal Organization  
NRCS: Natural Resources Conservation Service  
NYSDEC: New York State Department of Environmental Conservation  
NYSDOH: New York State Department of Health  
OWLA: Owasco Watershed Lake Association  
Parks: Cayuga County Parks and Trails Commission  
PDR: Purchase of Development Rights  
Planning: Cayuga County Department of Planning and Economic Development  
SWCD: Cayuga County Soil and Water Conservation District  
Tour: Cayuga County Department of Tourism  
WQMA: Cayuga County Water Quality Management Agency

**Agriculture**

Action	Responsible Organizations	Work Conducted in 2006
Develop Comprehensive Nutrient Management Plans for farms	SWCD	Three farm plans were completed in 2006. Eight farms were added to the Cayuga County's New York State Agricultural Non-point Source Abatement and Control Program grant to have best management practices (BMPs) completed. Three plans are currently being worked on for 2006; two in the Town of Mentz and one in the Town of Cato.
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	SWCD	SWCD staff member still working on obtaining certification.
Complete Agricultural Environmental Management (AEM) Plans for farms.	SWCD	In 2006, eight farms were on Tier 1 and nine farms were on Tier 2. One farm is on Tier 3, which is the stage at which a plan is developed. Three are at Tier 4, where the BMPs outlined in the plan developed in Tier 3 are implemented.  60 farms in Cayuga County have participated in the AEM program.
Identify best management practices (BMPs) from AEMs and other plans. Look for assistance to install these BMPs and measure their effectiveness.	SWCD	BMPs identified from three farm plans were installed under the AEM program in 2006. The BMPs installed were two manure storage pits and a six acre wetland area.
Provide hazardous waste and pesticide collection days for farms as funding is available.	Planning, CCE, SWCD	One farm participated in the Cayuga County's household hazardous waste collection event.
Take advantage of new technologies to deal with agricultural waste.	SWCD, Planning	Planning met with local business and State agency staff to discuss large-scale methane digester development in Southern Cayuga County  Planning gathered information required for the Cayuga County Industrial Development Agency contract with Empire State Development for Agricultural Waste Solutions.  SWCD assisted three farms in the Towns of Mentz, Brutus and Conquest with liquid manure composting by implementing Bio-stimulant to manure storage pits.

<p>Take advantage of new technologies to deal with agricultural waste (continued).</p>		<p>SWCD with Planning’s assistance secured all the necessary environmental permits for the Regional Methane Digester in order to begin the construction phase of the project. The survey site plan was completed. Also, the stormwater pollution prevention plan (SWPPP) and notice of intent (NOI) were completed and sent to NYSDEC. The construction of the access road and the digester building has begun, and the wildlife marsh has been drawn down for mitigation.</p> <p>SWCD secured \$300,000 from U.S. Rep. Sherwood Boehlert for a portion of the construction and operation of the Regional Methane Digester. The funds are part of the fiscal year 2007 Energy and Water Appropriations bill. Boehlert was also successful in helping secure a \$500,000 energy efficiency grant for the project through the U.S. Department of Agriculture.</p> <p>SWCD received a 2006 Conservation Innovation Grants (CIG) Award of \$500,000 from the NRCS and a \$60,000 award from the Grow New York Food and Agriculture Industry Development Program for the Regional Methane Digester.</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>SWCD technicians promoted Graze NY for farmers located near waterbodies. Farmers that are next to waterbodies can only receive monies through GRAZE NY if they maintain a 30 foot buffer from the fence to the waterbody.</p> <p>SWCD technicians promoted the Conservation Reserve Enhancement Program (CREP) for farmers located near waterbodies. Farmers can receive payments from the Farm Service Agency (FSA) after site approval from NRCS for putting in buffers near streams adjacent to pasture or croplands through CREP. Interest in this program has steadily increased over the past year. Seven applications were submitted in 2006, all of which have been approved at the state and local FSA offices. SWCD has recently received 14 additional inquiries from FSA. Site visits are being completed by NRCS and SWCD field staff which should result in more contracts in the near future. To date, 16,500 feet of fence, 6,500 feet of pipeline, 7.2 acres of filter strip, 300 feet of Riparian forest buffer, one stream crossing and one water facility have been installed in 2006.</p> <p>All stream projects conducted by SWCD in 2006 include a vegetated buffer area of at least 12 to 15 feet. The farmer/landowner is required to maintain this buffer in order to receive funding and/or remediation.</p>

<p>Assist farmers with PDR (purchase of development rights) applications where applicable. CCE will provide educational materials on PDR.</p>	<p>CCE, Planning, OWLA</p>	<p>Planning advertised and hosted a Farmland Protection Program/PDR informational workshop in conjunction with CCE and American Farmland Trust.</p> <p>Planning developed and administered the 2006 pre-application for Cayuga County’s PDR program.</p> <p>Planning in conjunction with American Farmland Trust held a meeting in the Town of Owasco with Town elected officials and local farmers to discuss farmland protection and the Cayuga County’s PDR program.</p> <p>Planning assisted American Farmland Trust with the preparation and submission of State Farmland Protection grant proposals through NYS Department of Agriculture and Markets for PDR on three farms in Fleming. These three farms in the Owasco Lake Watershed were approved by the NYS Department of Agriculture and Markets for PDR funds in 2006. The awards were \$477,657 to Janas Farm for 250.5 acres, \$316,836 to Fruithurst Farm for 119 acres and \$122,524 to Fisher Farm for 58 acres.</p> <p>Planning assisted American Farmland Trust with the preparation and submission of a State Farmland Protection grant proposal through NYS Department of Agriculture and Markets for purchase of development rights on the Doody Farm located in the Cayuga Lake and Seneca River Watersheds. The Doody Farm, which was awarded \$2,213,627, is a 1,065-acre dairy farm comprised of 74% prime soils that fronts various small streams and adjoins previously protected farmland.</p>
<p>Provide public education and news articles/columns on agriculture and the environment.</p>	<p>CCE, SWCD, City, CLWN</p>	<p>Cornell Cooperative Extension produces and distributes <u>Ag Alert</u>, a local update on agricultural hot topics. In addition CCE Ag Educator, Brain Aldrich, submitted a guest column to <u>The Citizen</u> titled “New York’s Agricultural Environmental Management Program Helps Farmers Protect Natural Resources”</p> <p>SWCD distributes a quarterly news article (spring, summer, fall, and winter), the <u>Conservation Highlights</u>, to outline the environmental projects and programs, and the agricultural projects the district has completed or that is currently being implemented.</p>
<p>Present farm, conservationist, and educator of the year awards.</p>	<p>SWCD</p>	<p>None awarded for 2006.</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, CCE</p>	<p>The Cayuga Lake Watershed Lake Friendly Farms program was implemented by the CLWN. The Joint IO/CLWN Committee reviewed applications for the program. Thirteen farms were chosen as Lake Friendly farms. Three of these farms are in Cayuga County: Fessenden Dairy, Oakwood Dairy and Patterson Farm. Signs were presented to them at the Cayuga Lakefest.</p>
<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 was awarded two NYS Agriculture Non-Point Source Abatement and Control Program Round XII Project grants in 2006. The first was \$394,400 for waste storage facilities on two farms in the Seneca River Watershed, which will reduce nutrient and pathogen loading through proper nutrient management. The other was \$24,500 for a silage leachate management system on one farm in the Cayuga Lake Watershed, which will reduce nutrient and biological oxygen demanding waste loading.</p> <p>Tompkins County SWCD was awarded two NYS Agriculture Non-Point Source Abatement and Control Program Round XII Project grants in 2006 that effect Cayuga County waterbodies. The first was \$86,983 for two barnyard water management systems and two milkhouse waste treatment systems on three farms in the Owasco Lake Watershed to address nutrient, pathogen and sediment loading. The second was \$117,130 for pasture management systems on 22 farms located in the Cayuga and Owasco Lake Watersheds, which will reduce the flow of nutrients, pathogens, and sediments into the watersheds.</p> <p>SWCD promotes the NRCS Agricultural Management Assistance (AMA) program. Structural practices on nine prescribed grazing contracts have been completed. Practices include 25,000 feet of perimeter fence; 133 acres prescribed grazing; and 30 acres of pasture and hay land seeding. This represented a total of \$22,243 in cost share assistance. Practices were also installed on an erosion control contract totaling \$2,628 in earned cost share. Practices included one grassed waterway, one water and sediment control basin and 650 feet of underground outlet. No new contracts were submitted in 2006 due to lack of funding at the state level.</p> <p>SWCD promotes the NRCS Wildlife Habitat Incentives Program (WHIP). Implementation of prior year contracts has been a priority for 2006. 21.8 acres of warm season grasses have been established on 3 sites, as well as 16 acres of cool season grasses on an another site. Cost-share dollars earned in 2006 totaled \$8300.</p>

<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 (cont).</p>		<p>SWCD promotes the NRCS Wetlands Reserve Program (WRP), which protects, restores and enhances wetlands on private property. Two permanent easements (51 acres total) were chosen for funding in FY 2006. Cost share assistance for these contracts totaled \$48,160.</p> <p>Seven of the 19 applications submitted to the NRCS Environmental Quality Incentives Program (EQIP) for FY 2006 were chosen for funding. These contracts represent a total cost share of \$484,307 to be earned by producers as practices are implemented in the future. Implementation has occurred on several prior year EQIP contracts. Installed practices include: three waste storage facilities, 14 acres of prescribed grazing and 2,500 feet of fencing, three silage leachate collection systems and filter areas, 2 grassed waterways, a nutrient management plan for 1,176 acres, eight Integrated Pest Management plans for a total of 11,657 acres, a water and sediment control basin, 341 acres of cover crop, and six acres of strip-cropping. Total cost-share earned was \$206,350. Surveys have been completed and designs are underway for an additional three waste storage facilities, a milk house wastewater treatment system, a silage leachate collection system and filter area, and two nutrient management plans.</p>
<p>Search for funding for and implement grazing best management practices.</p>	<p>SWCD</p>	<p>SWCD applied for funding in 2006 from the Environmental Protection Agency, New York State Agriculture Non-Point Source Abatement and Control Program, and the Great Lakes Basin Grant Program to implement grazing practices in Cayuga County. Twelve new farms were submitted for grant funding to implement grazing for 2006 throughout Cayuga County.</p> <p>SWCD implemented the following grazing practices in 2006: 199,349 feet of fence, 1,110 feet of laneway, 503 acres of pasture, and three watering systems.</p> <p>SWCD promotes Graze NY for farmers located near waterbodies. In Cayuga County, there are a total of 150 Graze NY members.</p>
<p>Encourage farmers to join the Conservation Reserve Program.</p>	<p>SWCD</p>	<p>SWCD technicians promoted the NRCS Conservation Reserve Program (CRP). Contracts and plans were written for three landowners who were accepted into the program during Sign-up 33. Cost-share for these contracts totals \$17,572. In addition, 37 plans and contracts were updated and rewritten for reenrollment in 2007-2010. (Land within these contracts has already been in the program for 10+ years and owners have opted to reenroll the eligible acreage for an additional 10 years)</p>

2006 WQMA Year End Report

Encourage agritourism.	Planning, CCE	Ongoing.
Encourage towns to change local laws to allow additional business enterprises on farms.	Planning, IO, SWCD	Ongoing.
<b>Additional Work</b>		
Education	SWCD, CLWN, CCE	<p>CCE collaborated with other counties and other organizations within Cayuga County to provide educational programming about managed grazing. The programming covered a broad range of timely and relevant topics, from the basics of managed grazing to management of a diversified grazing farm.</p> <p>SWCD held the 2006 Grazing Tour on September 20<sup>th</sup>. The tour consisted of three grazing sites offering education to the public and grazers on the importance in keeping clean water clean. These sites showed Best Management Practices (BMPs) and all around prescribed grazing techniques and practices. Each site emphasized local, state and federal funding that farms can get. 20 people were in attendance.</p> <p>The CLWN sponsored a program, “Grasses for Conservation, Agriculture and Energy,” at the Cayuga County SWCD offices on November 11<sup>th</sup>.</p>

**Biosolids**

Action	Responsible Organizations	Work Conducted in 2006
Continue to enforce the Owasco Lake 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.”	City, Health	WQMA is working on the implementation of a watershed inspector for the Owasco Lake watershed to enhance the enforcement of the Owasco Lake Watershed Rules and Regulations. Informational meetings were held with the public as well as representatives of water suppliers who obtain their drinking water from Owasco Lake. There is widespread support for the need of a watershed inspector; however funding the inspector is still in discussion.

**Boating**

Action	Responsible Organizations	Work Conducted in 2006
Provide information on the safe and proper fuel storage of boats, slips, etc. Include information on what to do in a spill.	Planning, CCE	CCE wrote an Eco-talk Article in <u>The Citizen</u> : “Boaters need to fuel carefully” 7/17/06.

2006 WQMA Year End Report

Provide information on speed limits, boating setbacks and other issues on Cayuga County waterbodies.	Planning	Available at Planning.
Search for funding to conduct research on boating and to provide education to boaters.	Planning, Duck	“The 2006 Water Safety Guidelines” was in the Duck Lake Association summer newsletter.

**Collaboration**

Action	Responsible Organizations	Work Conducted in 2006
Work to implement the Cayuga Lake Restoration and Protection Plan, Duck Lake Watershed Management Plan, Owasco Lake Watershed Management Plan and the Skaneateles Lake Watershed Management Plan.	WQMA	On-going.
Examine developing state of the lake reports and watershed management plans for other waterbodies in Cayuga County.	SWCD, Planning	Planning met with the Lake Como Association during their lake meetings over the summer to begin the development of the Lake Como State of the Lake Report and Watershed Management Plan. SWCD is funding this project.
Support other complimentary efforts in Cayuga County by, for example, letters of support or in-kind contributions.	WQMA	WQMA provided a letter of support for the Cayuga County - Town of Sempronius Shared Salt Shed application to the Shared Municipal Services Incentive Grant Program.
Assist the Center for Environmental Information, Inc. as they work on developing the Lake Ontario Coastal Initiative.	Planning	Planning provided information upon request.
Continue to provide the Regional Non-point Source Strategy meeting series.	CNYRPDB	CNYRPDB continues 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. One meeting was held in 2006.

**Education**

Action	Responsible Organizations	Work Conducted in 2006
The Cayuga Co. WQMA should encourage and promote a coordinated approach to public education among its member organizations.	WQMA	Ongoing.

<p>Provide educational programs on watershed and related issues for schools and school aged children.</p>	<p>CCE, Planning, CLWN, OWLA</p>	<p>CLWN held its 9<sup>th</sup> Annual LakeFest in Union Springs in August. WQMA had a display.</p> <p>CCE presented information about water quality and water conservation and Planning presented information on watershed and stormwater to 235 6<sup>th</sup> grade students at Cayuga County’s Conservation Field Days.</p> <p>Planning presented information on watersheds, stormwater and recycling to ~120 fourth graders.</p> <p>OWLA and CCE began laying the groundwork to begin to implement Project WET in 2007.</p>
<p>Make watershed issues more accessible to citizens by utilizing the internet, direct mailings, and media releases.</p>	<p>CCE, Planning, CLWN, OWLA</p>	<p>CLWN published “Smart Steps for Clean Water” which contained easy actions to keep water clean at home, in the car, or while fishing and boating.</p> <p>CLWN published and distributed 1500 copies of <i>Network News</i>, which provides information on watershed issues. Between newsletters watershed citizens are kept informed on issues and events via a list serve.</p> <p>Planning and CCE updated webpages for the WQMA, P-Project, Weeds Watch Out, the Cayuga County Solid Waste Management Program Office, and SWCD.</p> <p>OWLA hosts and maintains a website <a href="http://www.owla.org">www.owla.org</a>.</p> <p>CCE has an environmental list serve that distributes environmental information to interested County residents. 232 people are currently registered.</p> <p>CCE mailed P-project information and exotic aquatic invasive species information to Legislators as well as Owasco Lake and Cross Lake residents. FLOWPA funded this mailing.</p> <p>46 Eco-Talk articles written by CCE staff on environmental education and water quality topics were published in <i>The Citizen</i>.</p>
<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.</p>	<p>Everyone</p>	<p>WQMA members utilized <i>The Citizen</i>, <i>Post Standard</i>, <i>Moravia Republican Register</i>, <i>Post Herald</i>, <i>Shopper</i>, and <i>Scotsman Press</i> newspapers to promote programs, highlight events and draw larger audiences.</p>

Develop promotional campaigns that will interest a larger variety of participants in education programs.	Everyone	WQMA members utilized The Citizen, Post Standard, Moravia Republican Register, Post Herald, Shopper, and Scotsman Press newspapers to promote programs, highlight events and draw larger audiences.
Provide displays at Emerson Park tied to watershed protection and information from USGS water monitoring station.	Parks	Parks provides signs at Emerson Park tied to watershed protection including signs for the WQMA, OWLA, invasive species, Dog Doody signs, and dog poop stations with signs.
Provide educational columns for the newspaper on Cayuga County waterbodies and watersheds.	OWLA, CCE	CCE has an Eco-Talk Column in Auburn's local newspaper <u>The Citizen</u> that focuses on environmental education and water quality. The column is featured in Monday's Lake Life edition.
Provide award for leadership and commitment to protect the Cayuga Lake Watershed	CLWN, IO	Morehouse Award, a joint award with the IO and CLWN, was awarded to Judy Pipher.
Provide an educational tour.	WQMA	SWCD held the 2006 Grazing Tour on September 20 <sup>th</sup> . The tour consisted of three grazing sites offering education to the public and grazers on the importance in keeping clean water clean. These sites demonstrated Best Management Practices (BM's) and all around prescribed grazing techniques and practices. Each site emphasized the local, state and federal funding that farms can get. Twenty people attended.  Tompkins County SWCD held a conservation tour which included a farm in the Owasco Lake Watershed and invited Cayuga County WQMA members.
<b>Additional Work</b>		
	CLWN	CLWN advertised Cornell University's demonstration of a baler for agricultural plastic recycling.  Cayuga Lake Scenic Byway, Inc. has been awarded \$21,700 to develop interpretive materials in partnership with CLWN for Cayuga Lake water resources.

***Exotic, Introduced and Invasive Species Management***

Action	Responsible Organizations	Work Conducted in 2006
Utilize expertise to monitor and control exotic, introduced and invasive species before they become established. For example, conduct hand pulling of water chestnut in Sterling Creek.	CCE, Parks, Planning, CLWN	A meeting was held with Planning, SWCD, Health and Cayuga County representatives to form the Cayuga Lake Weed Task Force to address weed, debris and fish kill issues in the northeast quadrant of Cayuga Lake.  Planning sent information to the Nature Conservancy Invasive Plant Council of NYS regarding locations of invasive plants in Cayuga County including giant hogweed, Japanese knotweed and water chestnut.

<p>Utilize expertise to monitor and control exotic, introduced and invasive species before they become established. For example, conduct hand pulling of water chestnut in Sterling Creek (cont).</p>		<p>CCE utilized Onondaga County’s FLOWPA Special Project Fund “Water Chestnut Control and Native Plant Restoration in the Seneca-Oneida-Oswego River Grant System” project to conduct a water chestnut hand pulling event on Cross Lake in August. This event had four participants and they pulled eleven 30-gallon trash bags of water chestnut.</p> <p>CCE, SWCD, Planning and Parks conducted a water chestnut hand pulling event on Sterling Creek. On August 8<sup>th</sup>, thirteen people collected about thirty 30-gallon trash bags full of water chestnut from the Sterling Nature Center’s canoe launch to the McIntyre Rd culvert on Sterling Creek.</p> <p>CCE and Planning checked weed patches near Union Springs on August 22 which were suspected to be water chestnut. No water chestnut was found.</p> <p>CCE and Planning continued the Weeds Watch Out! monitoring program and updated the website. CLWN continues to educate about invasive weeds as part of public programs such as a presentation to Union Springs Lions club.</p> <p>The Owasco Flats Reserve received a Federal Five Star Restoration Challenge Grant Program grant. Project partners include the SWCD, U.S. Fish and Wildlife Service, Owasco Flats Nature Reserve, Inc., and Cayuga County Parks and Trails. Funds are included for invasive plant control for purple loosestrife, common reed and garlic mustard.</p>
<p>Continue existing County aquatic vegetation control program.</p>	<p>SWCD, CLWN</p>	<p>SWCD continued aquatic vegetation control during the summer of 2006. SWCD harvested 418 tons from Owasco Lake, 40 tons from Lake Como, 712 tons from Little Sodus Bay, 104 tons from Otter Lake, and 800 tons from Cayuga Lake. They also harvested the Hoopes Park pond in Auburn. FLOWPA provides some funds for this program.</p> <p>SWCD received \$100,000 from a state grant from Senator Nozzolio to purchase a transport vessel and shoreline conveyor to improve Cayuga County’s harvesting program.</p> <p>CLWN gave a presentation to the Town of Springport on aquatic weeds including an overview of the economic impacts of excessive weeds.</p> <p>CLWN gave a presentation to the Union Springs Lions club on the managing aquatic weeds with a watershed approach.</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 received a permit to treat 49 acres with an aquatic herbicide to control Eurasian watermilfoil. However, they did not use this in 2006 because the Eurasian watermilfoil was not too abundant in the beginning of the year.</p> <p>The Duck Lake Association is looking at expanding their permit beyond Eurasian watermilfoil for 2007.</p> <p>The Duck Lake Association is working on getting another member a commercial applicator license.</p>
<p>Continue to participate on CNY Water Chestnut Task Force to assist region in formulating strategies and solutions to water chestnut problems.</p>	<p>CNYRPDB, CCE, CLWN</p>	<p>CCE educator attended the CNY Water Chestnut Task Force meetings.</p> <p>CNYRPDB is reviewing and summarizing current aquatic invasive species concerns and technical information in order to develop a “Current State of Aquatic Invasive Species in Central New York” report. The report will incorporate identification of current infestations, problem species, susceptible areas, current research, potential control and eradication options, long and short term feasibility of current control and eradication options, economic impacts associated with the continued spread of aquatic infestations in Central New York (CNY) waterways and resources needed to control aquatic species infestations in the five-county CNY region.</p>
<p>Continue educational programs to prevent the spread of exotic, introduced and invasive species into Cayuga County waterbodies.</p>	<p>CCE, Planning</p>	<p>Sterling Nature Center had an educational exhibit on water chestnut that was displayed throughout the spring and summer in the interpretive building.</p> <p>CCE mailed information on exotic aquatic invasive species to Cayuga County Legislators as well as Owasco and Cross Lakes’ residents utilizing FLOWPA funding.</p> <p>CCE educator presented at the NY Sea Grant/Vt. Water Chestnut Summit on water chestnut and aquatic invasive species education.</p> <p>CCE provided a display at Frontac Park for the Cayuga Lake LakeFest. CCE distributed aquatic plant information including the Weeds Watch Out! Identification booklet.</p> <p>CCE wrote an Eco-Talk article in <u>The Citizen</u>: “Plant is a Threat to Cross Lake” 8/20/06.</p> <p>CCE wrote an Eco-Talk article in <u>The Citizen</u>: “Beware of Water Chestnut Plants” 7/31/06.</p>

<p>Continue educational programs to prevent the spread of exotic, introduced and invasive species into Cayuga County waterbodies (cont).</p>		<p>CLWN 2006 Newsletter Articles: “Spiny Water Fleas Mar Fishing Experience,” “Barriers Block Water Weeds,” “Water Chestnut Watch,” and “Deadly Fish Virus Found In Upstate NY.”</p>
<p>Develop and continue educational programs to inform lake users and homeowners about the spread and characteristics of exotic, introduced and invasive species.</p>	<p>Planning</p>	<p>Planning provided the Duck Lake Association with a Water Chestnut Alert, which they placed in their 2006 summer newsletter.</p> <p>The Duck Lake Association provided information on water chestnut, Nitellopsis obtusa, and the Asian Longhorn beetle in their 2006 summer newsletter.</p>
<p>Provide educational materials to landowners about how to put in intake pipes and treatment methods for dealing with zebra mussels in intake pipes.</p>	<p>Health</p>	<p>Health will provide educational materials at the request of landowners about how to put in intake pipes and treatment methods for dealing with zebra mussels in intake pipes.</p>
<p>Search for funding to conduct inventory, monitoring and control programs for exotic, introduced and invasive species in Cayuga County lakes and watersheds.</p>	<p>CCE, Planning</p>	<p>Cayuga County CCE, Onondaga County Health Department and Oswego County SWCD shared grant funds from Onondaga County’s FL-LOWPA 2006 Special Project: “Water Chestnut Control and Native Plant Restoration in the Seneca-Oneida-Oswego River System.” With these funds, Cayuga County CCE was able to conduct a water chestnut hand pulling event on Cross Lake in August.</p>
<p>Search for funding to conduct education on exotic, introduced and invasive species.</p>	<p>CCE, Planning</p>	<p>Cayuga County CCE, Onondaga County Health Department and Oswego County SWCD shared grant funds from Onondaga County’s FL-LOWPA 2006 Special Project: “Water Chestnut Control and Native Plant Restoration in the Seneca-Oneida-Oswego River System.” With these funds, Cayuga County CCE was able to educate the public with mailings, brochures, flyers, and interactive placemats that identified and explained about the exotic invasive plant water chestnut.</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 is part of the Weeds Watch Out! Program.</p>

<p>Search for funding to determine water quality, including phosphorus level, in Cayuga County lakes and the tributaries, and the effect it has on aquatic vegetation.</p>	<p>Planning, OWLA, CCE</p>	<p>FLLOWPA funds were utilized to determine water quality including phosphorus in the tributaries to Owasco Lake.</p> <p>FLI found funding from the Emerson Foundation to monitor eleven sites on Owasco Lake and the Owasco Inlet.</p> <p>Senator Nozzolio secured \$325,000 in state funding for The Finger Lakes Institute to oversee the clean-up of Owasco Lake and continue monitoring the biological condition of the Lake.</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

***Fish and Wildlife Management***

Action	Responsible Organizations	Work Conducted in 2006
<p>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.</p>	<p>CCE, Planning, OWLA, FLI</p>	<p>Planning utilizes FLLOWPA funds to continue the monitoring program of Dutch Hollow Brook and the Owasco Inlet. This program monitors level, rainfall, and flow. Samples are also taken for lab analysis of total and soluble reactive phosphorus and total solids.</p> <p>CCE received FLLOWPA funds to conduct phosphorus testing of tributaries in the Owasco Lake watershed as part of the P-Project.</p> <p>OWLA works with IAGT to run a monitoring buoy in Owasco Lake. Data collected can be found at <a href="http://www.ourlake.org">www.ourlake.org</a>.</p> <p>John Halfman from the Finger Lakes Institute monitored 11 sites on Owasco Lake and the Owasco Inlet utilizing a \$25,000 grant from the Emerson Foundation. Additional FLLOWPA funds were utilized to take additional samples to test for chlorophyll a, nitrate, and phosphorus. Senator Nozzolio secured \$325,000 in state funding for The Finger Lakes Institute to oversee the clean-up of Owasco Lake and continue monitoring the biological condition of the Lake.</p>
<p>Request that the NYSDEC contact the Duck Lake Association before any stocking is conducted to discuss why stocking is being conducted and to get their input.</p>	<p>Planning, Duck</p>	<p>Planning spoke to NYSDEC Fisheries representative.</p>

**Forestry: (Includes Community and Urban Forestry)**

Action	Responsible Organizations	Work Conducted in 2006
Coordinate information and technical services with landowners.	CCE	CCE educator assists in coordinating Cayuga County Master Forest Owner Volunteer landowner visits and keeps volunteers current with on-going forestry information.  Short article in CCE Ag Alert on the Cornell Master Forest Owner Volunteer Program and the services they provide.
Provide forest landowners with information about available resources & services are available for forest management; information & training on proper forest management practices; and information on such topics such as highgrading to encourage landowners to retain existing well managed woodlots.	CCE	CCE educator wrote and distributed the following newspaper articles: "Improve Your Woodlot for Wildlife" 3/31/2006 and "Support Your Stream" 5/16/2006.
Encourage development of forest plans.	CCE	CCE encouraged development of forest plans in the newspaper articles: "Improve Your Woodlot for Wildlife" 3/31/2006 and "Support Your Stream" 5/16/2006.
Encourage owners to apply for cost-sharing forest management programs.	CCE	On-going
Encourage towns and villages to apply to grant programs for tree planting.	Planning	On-going
Provide a model town or village tree ordinance.	Planning	Available at Planning.
Work with Grow Auburn's Trees to implement an urban forestry education program for City residents and City of Auburn staff.	CCE	CCE educator and Grow Auburn's Trees coordinated an informational workshop with Nina Bassuk, professor of the Urban Horticulture Institute at Cornell University. Dr. Bassuk presented on soil structure and how to grow trees in difficult urban sites for City of Auburn employees.  CCE teamed up with Grow Auburn's Trees and conducted a pruning workshop for Cayuga County residents.
<b>Additional Work</b>		
Trade-A-Tree Program	SWCD, CCE, Planning	SWCD allows Cayuga County residents bring their Christmas trees to the Natural Resources Center to be chipped into mulch, which is used in public works projects and is available to the public. In return, residents receive a voucher for a Norway spruce transplant. Event is funded by Planning and promoted by CCE.

**Funding Options**

Action	Responsible Organizations	Work Conducted in 2006
Explore full range of funding alternatives; examples include surcharge to users, franchise fees, grants, loans, etc.	Everyone	On-going. See other topics for specific funding options.

**Hazardous Materials**

**Fuel and Chemical Storage**

Action	Responsible Organizations	Work Conducted in 2006
Update the County’s watershed database with the updated NYSDEC database on bulk petroleum storage facilities.	Planning	Information requested from the NYSDEC.  SWCD identified 22 farms with petroleum storage tanks and reported (through the AEM program) the manner in which the tanks were being stored, maintenance on the tanks, etc.

**Hazardous Material Spills and Spill Response**

Action	Responsible Organizations	Work Conducted in 2006
Update the water quality contact list yearly.	Planning, CCE	Completed.
Provide education on petroleum spill prevention and what to do in the event of a spill or a leak.	Planning, CCE	Planning and CCE provide information upon request.
Educate boaters on proper fueling and what to do in the event of a spill.	Planning, CCE	CCE wrote an Eco-talk article in <u>The Citizen</u> , “Boaters Need to Fuel Carefully” 7/17/06.

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

Action	Responsible Organizations	Work Conducted in 2006
Continue household hazardous waste collection event offerings.	Planning, SWCD, CCE	Successfully held Cayuga County’s largest fall household hazardous waste event ever. 497 households participated in the Household Hazardous Waste Collection Event that was held on October 14, 2006 at SWCD. Approximately 46,700 lbs of household hazardous waste including 1760 gallons of oil-based paint, 220 gallons of antifreeze, 620 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.
Continue to search for other ways to reduce hazardous material in the County.	Planning, CCE, SWCD	A tire collection day was held at the Natural Resources Building on June 3, 2006 and which collected approximately 8,300 tires and 140 pounds of lead tire weights.

<p>Continue to search for other ways to reduce hazardous material in the County (cont).</p>		<p>An Electronics and Propane Tank Collection Event was held on April 29, 2006 at the Natural Resource Building. Over 200 carloads brought in over 200 propane tanks, 101 televisions &amp; 115 monitors.</p> <p>Cellular phone recycling program with RecycleFirst are located at CCE and Planning. RecycleFirst provides free recycling plus CCE gets a small deposit for solid waste and watershed protection.</p> <p>The 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>CCE wrote Eco-Talk articles in <u>The Citizen</u>: “Earth week, a call to recycle” 4/10/06, “Printer cartridges can be recycled” 4/24/06, and “Time to round up tires for recycling” 5/8/06.</p> <p>Planning and CCE updated information on HHW on the Cayuga County Solid Waste Management Office website.</p> <p>SWCD identified 22 farms with petroleum storage tanks and reported (through the AEM program) the manner in which the tanks were being stored, maintenance on the tanks, etc.</p>
<p>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.</p>	<p>Planning, CCE, City</p>	<p>CCE Eco-Talk articles by Tom Babiarz in <u>The Citizen</u> “Finding a Deadly Chemical at Home” 9/18/06 and “County Recycling Marks Milestone” 11/13/06</p> <p>CCE and Planning updated the Cayuga County Solid Waste Management Program Office webpage which includes information on Household Hazardous Waste (HHW) events (current and past), and use and disposal of HHW.</p> <p>CCE mailings to environmental listserve and to residents on HHW.</p> <p>CCE and Planning distributed information in litterbags during the HHW event</p> <p>WQMA display at Tomato Fest provided information.</p> <p>Display at CCE provided information.</p> <p>Planning provided information to a homeowner on what to do regarding dumped batteries on their property.</p>

<p>Promote pest management practices that reduce pesticide use in the watershed, including integrated pest management and non-toxic pest management.</p>	<p>Planning, CCE</p>	<p>CCE Master Gardener Volunteers promote Integrated Pest Management through their gardening hotline.</p> <p>CCE wrote Eco-Talk articles in <u>The Citizen</u>: “Keeping House Pests in Check” 5/1/06, “Tent Caterpillar Unwelcome in Yards”6/12/06, “This Pest is Drawn to the Light” 10/30/06, and “Know Your House Pest” 12/4/06.</p>
<p>Examine ways to change people’s attitudes about the “perfect lawn” through education.</p>	<p>Planning, CCE</p>	<p>CCE wrote Eco-Talk articles in <u>The Citizen</u> “Lawn Care Needs Spring Cleaning” 4/3/06 and “Great Lawn, Healthy Water” 10/23/06.</p> <p>CCE sent “P-Project: Reducing Phosphorus in the Finger Lakes” mailing to the Cayuga County Legislators, Owasco Lake residents and Cross Lake residents utilizing FLOWPA funds.</p> <p>CCE held a P-Project lawn care seminar on October 30, 2006 utilizing FLOWPA funds. Ten people attended the workshop which focused on healthy lawns and phosphorus. This workshop included free soil sample bags and a lawn quality almanac.</p> <p>CCE promoted the “Watershed Friendly Fertilizer” also known as zero-phosphorus fertilizer which was produced and available at the SWCD.</p> <p>Planning and CCE updates and hosts webpages on the P-Project, Green Thumbs for Blue Water Project and the WQMA.</p>
<p>Conduct education programs to help homeowners prevent groundwater contamination; include wells, well maintenance, septic system use, yard waste, composting, etc.</p>	<p>CCE</p>	<p>CCE wrote Eco-Talk articles in <u>The Citizen</u> “Lawn Care Needs Spring Cleaning” 4/3/06, “Great Lawn, Healthy Water” 10/23/06 and “Test Well Water Yearly” 11/20/06</p> <p>CCE held a P-Project lawn care seminar on October 30, 2006 utilizing FLOWPA funds. Ten people attended the workshop which focused on healthy lawns and phosphorus. This workshop included free soil sample bags and a lawn quality almanac.</p>
<p>Search for funding for educational programs on yard, garden and household chemicals.</p>	<p>Planning, CCE</p>	<p>FLOWPA funds were utilized to conduct P-Project work. Future FLOWPA funds will continue the program.</p>
<p>Search for funding to provide household hazardous waste and pesticide collection days.</p>	<p>Planning, CCE</p>	<p>The electronics and propane tank collection event in April and the tire collection event in June were funded by Cayuga County.</p> <p>The October 14<sup>th</sup> household hazardous waste collection and electronics and propane tank collection event was sponsored by the Cayuga County Legislature, Solid Waste Management Program Office, CCE, SWCD, and Planning, &amp; the NYSDEC.</p>

**Highway Deicing**

Action	Responsible Organizations	Work Conducted in 2006
Explore funding options for those that need salt storage structures and contained mixing areas.	Planning, IO	<p>Municipalities received information on Shared Municipal Services Incentives Grant Program. Several municipalities used the opportunity to apply for funding for salt storage buildings.</p> <p>The WQMA provided a letter of support for the Cayuga County - Town of Sempronius Shared Salt Shed application to the Shared Municipal Services Incentive Grant Program. Current uncovered pile is in the Owasco Lake Watershed.</p>

**Highway Maintenance**

Action	Responsible Organizations	Work Conducted in 2006
<p>Continue hydroseeding assistance programs for local governments in critical areas, such as road ditches and promote the program to increase use throughout the County.</p> <p>Continue hydroseeding assistance programs for local governments in critical areas, such as road ditches and promote the program to increase use throughout the County (cont).</p>	SWCD	<p>The IO, sponsored by the Town of Lansing, was awarded a \$75,000 Environmental Protection Fund grant to undertake a hydroseeding program to decrease exposed soils and sediment loading to Cayuga lake, stabilize roads and streambanks, increase awareness among local highway crews, and reduce maintenance costs for small municipalities. Grant funding will cover materials for hydroseeding projects throughout the Cayuga Lake Watershed in Tompkins, Cortland, Cayuga and Seneca Counties.</p> <p>SWCD provided road ditch hydroseeding for the Cayuga County Highway Department throughout the Towns of Brutus, Fleming, Locke, Moravia, Owasco, Sempronius, and Sennett.</p> <p>SWCD implemented hydroseeding for proper road ditch maintenance for 17 1/3 acres in 2006.</p> <p>SWCD provide road ditch hydroseeding for the NYS DOT for portions of Routes 5 &amp; 20, Route 34, Route 38, and Route 41A.</p>
Encourage use of, provide information and assist with the installation of best management practices (BMPs) to reduce roadbank erosion.	SWCD, IO	<p>SWCD works with towns and gives engineering expertise upon request.</p> <p>Rebecca Schneider from Cornell University presented recent research on road ditches to highway departments and other audiences around the state.</p> <p>SWCD implemented two acres of maintenance of vegetative cover and five acres of critical area seeding for permanent vegetative cover.</p>

2006 WQMA Year End Report

<p>Encourage use of, provide information and assist with the installation of best management practices (BMPs) to reduce roadbank erosion (cont).</p>		<p>SWCD implemented hydroseeding for proper road ditch maintenance for 17 1/3 acres in 2006.</p>
<p>Encourage and provide information on timely revegetation of road ditches and banks.</p>	<p>SWCD, IO</p>	<p>Municipalities are encouraged to contact SWCD to hydroseed ditches. SWCD provides hydroseeding to towns, county and state. Worked with NYSDOT to conduct hydro-seeding of ditches and road areas.</p> <p>The IO, sponsored by the Town of Lansing, was awarded a \$75,000 Environmental Protection Fund grant to undertake a hydroseeding program which includes increasing awareness among local highway crews.</p>
<p>Encourage use of structural controls of sediments on steep roads, roadbanks and in high flow ditches.</p>	<p>SWCD</p>	<p>SWCD works with towns and gives engineering expertise upon request.</p>
<p>Provide an annual informational report for highway superintendents and workers.</p>	<p>SWCD</p>	<p>Encourage participation through contacts with highway officials. Three SWCD staff people are members of the Highway Superintendents Association.</p> <p>Attended Cayuga County Highway Meetings and gave verbal reports to Highway Superintendents.</p>
<p>Organize local training programs through SWCD and Highway Superintendents Association.</p>	<p>SWCD</p>	<p>Three staff persons are members of the Highway Superintendents Association. One staff member from SWCD attends an annual highway meeting to report new laws to highway staff.</p>
<p>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.</p>	<p>SWCD</p>	<p>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.</p> <p>SWCD implemented two acres of maintenance of vegetative cover and five acres of critical area seeding for permanent vegetative cover.</p>
<p>Examine ways to prevent roadside ditches from deepening and eroding.</p>	<p>SWCD, IO</p>	<p>Rebecca Schneider from Cornell University presented recent research on road ditches to highway departments and other audiences around the state.</p> <p>SWCD provides hydroseeding to towns, county and state. Worked with NYSDOT to conduct hydroseeding of ditches and road areas.</p>

**Lakeshore Erosion**

Action	Responsible Organizations	Work Conducted in 2006
Assist communities with lakeshore erosion issues.	Planning, SWCD, CNYRPDB	<p>Planning hosts a website “Green Thumbs for Blue Water” which is educational program for riparian and lakeshore residents who are concerned about erosion and water quality.</p> <p>SWCD replaced 180 feet of the concrete wall at Emerson Park on the Old Owasco Outlet with rock rip rap. The concrete wall had fallen into the lake. The bank was re-sloped and seeded.</p> <p>SWCD repaired the old retaining wall in front of the Owasco Country Club on Owasco Lake. The area behind the wall was backfilled with stone and geotextile fabric to prevent further erosion behind the wall and so the wall would not fall into the lake. The repair was approximately 200 feet.</p> <p>CNYRPDB wrote a grant application to the Great Lakes Basin to conduct shoreline erosion education to the towns of Sterling, Oswego, Wolcott and Huron. These towns are all on Lake Ontario.</p>

**Lake Level**

Action	Responsible Organizations	Work Conducted in 2006
Continue to work with the Army Corps of Engineers at revisiting the Owasco Lake “rule curve.”	WQMA	None to date.
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	Information available on WQMA website.
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	Due to weather conditions, the dredging at the south end of Owasco Lake was postponed. The southwest side of Owasco Lake is scheduled to be dredged in January 2007.
Search for funding to conduct a hydrologic study of Duck Lake, to confirm the Duck Lake Watershed, and to install an official gauge on Duck Lake.	Duck, Planning	Cost information was received from the USGS to place an official gage at Duck Lake.

Additional		
Lake Como lake level.	Como, Highway, Planning	<p>The Lake Como Association worked with the Finger Lakes Land Trust to install water levelers in beaver dams to help with their high water problems.</p> <p>A meeting was held between Lake Como Association members, NYSDEC, Cayuga County Planning and Highway to discuss flooding problems on Lake Como.</p>

**Lake Water Diversions**

Action	Responsible Organizations	Work Conducted in 2006
Request that any water diversions in, near or upstream of the Duck Lake Watershed be subject to formal public comment process, especially those that require local, state and federal permits.	Duck, Planning	None to date.

**Land Use**

Action	Responsible Organizations	Work Conducted in 2006
<p>Educate planning boards about land use issues such as drainage, buffer zones, stormwater runoff, etc.</p> <p>Educate planning boards about land use issues such as drainage, buffer zones, stormwater runoff, etc (cont).</p>	Planning, IO, OWLA	<p>Stormwater information packets were distributed to the Cayuga County Planning Board in April.</p> <p>Planning presented information on the new FEMA flood maps at the April Cayuga County Planning Board meeting. Planning presented information on improper subdivisions to the Cayuga County Planning Board in October.</p> <p>OWLA met with planning board of Owasco, town board of Niles, and town board of Fleming to discuss planning, zoning, etc.</p>
Provide assistance to towns and villages to design, adopt and/or implement standards and guidelines; provide model ordinances, regulations, standards, and guidelines.	Planning, IO	Planning and CNYRPDB have provided assistance to following towns and villages as they have developed or are developing their comprehensive plans: Throop, Union Springs, Sterling/Fair Haven, Ledyard, Niles and Victory.
Explore opportunities to protect streambank areas. Use data from streambank assessments and management plans to search for funding.	Planning, IO	SWCD technicians promoted Graze NY for farmers located near waterbodies. Farmers that are next to waterbodies can only receive monies through GRAZE NY if they maintain a 30 foot buffer from the fence to the waterbody.

<p>Explore opportunities to protect streambank areas. Use data from streambank assessments and management plans to search for funding (cont).</p>		<p>SWCD technicians promoted the Conservation Reserve Enhancement Program (CREP) for farmers located near waterbodies. Farmers can receive payments from the FSA after site approval from NRCS for putting in buffers near streams adjacent to pasture or croplands through CREP. Interest in this program has steadily increased over the past year. SWCD submitted seven applications in 2006, all of which have been approved at the state and local FSA offices. SWCD has recently received 14 additional inquiries from FSA. Site visits are being completed by NRCS and SWCD field staff which should result in more contracts in the near future. To date, 16,500 feet of fence, 6,500 feet of pipeline, 7.2 acres of filter strip, 300 feet of Riparian forest buffer, one stream crossing and one water facility have been installed in 2006.</p> <p>All stream projects conducted by SWCD in 2006 include a vegetated buffer area of at least 12 to 15 feet. The farmer/landowner is required to maintain this buffer in order to receive funding and/or remediation.</p>
<p>Conduct a survey of wetlands and open spaces countywide.</p>	<p>Planning</p>	<p>Zach Odell from The Nature Conservancy (Western NY chapter) met with Planning to discuss open space protection initiatives in Cayuga County primarily within the Lake Ontario watershed.</p> <p>CNYRPDB and Planning are working on the Open Space Conservation Suitability Analysis for Cayuga County. Cayuga County staff worked with staff of CNYRPDB to create a GIS based model useful in evaluating the relative suitability of parcels throughout Cayuga County for open space conservation.</p> <p>Planning participated as a member of the NYSDEC Region 7 Open Space Committee in the development of the State's 2006 Open Space Conservation Plan that identifies priority and supplemental projects for conservation in the region. Conservation of Finger Lakes shorelines and wetlands including Owasco Flats was added as a priority project, as was the Summerhill Fen, a forest complex.</p>

<p>CNYRPDB &amp; Planning, in conjunction with the IAGT 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 &amp; changing land uses.</p>	<p>CNYRPDB, Planning</p>	<p>CNYRPDB worked with Finger Lakes Land Trust and Planning to develop a proposal to undertake a conservation plan for Owasco Flats. CNYRPDB funded this proposal. Under this project, the Finger Lakes Land Trust is assessing the natural resources within the Owasco Flats through the compilation and synthesis of existing data, gathering of additional data through field surveys, determining the goals and objectives of landowners and other stakeholders, providing information about land conservation options and tax incentives associated with conservation easements and providing options and recommendations for the future management and conservation of significant resources on publicly and privately owned land within this area.</p> <p>Planning and CNYRPDB are assisting the Town of Niles with their comprehensive planning.</p>
<p>Review and update the webpage directory of zoning provisions and other development regulations of towns and villages.</p>	<p>Planning</p>	<p>Completed. On the WQMA website.</p>
<p>Additional</p>		
<p>Additional land use work.</p>	<p>CNYRPDB, Planning, OWLA</p>	<p>CNYRPDB conducted a research inventory and historical report for Cayuga County.</p> <p>CNYRPDB and Planning held the Finger Lakes Water Resources, Agriculture and Open Lands Conservation Project kickoff meeting for northern Cayuga municipalities on February 14<sup>th</sup> in the Ira Municipal Building.</p> <p>OWLA met with landowners to promote the purchase of development rights.</p>
<p>Owasco Flats</p>	<p>Finger Lakes Land Trust</p>	<p>Finger Lakes Land Trust purchased acres in Owasco Flats that links the County and City of Auburn owned parcels. The FLLT will assign the land to the Owasco Flats Nature Reserve, Inc.</p>

**Monitoring**

Action	Responsible Organizations	Work Conducted in 2006
<p>Continue water sampling of Cayuga, Duck and Owasco Lakes under Citizens Lake Assessment Program (CSLAP) through FLOWPA funding.</p>	<p>CLWN, OWLA, Duck WQMA</p>	<p>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.</p>

Continue water sampling of Cayuga, Duck and Owasco Lakes under Citizens Lake Assessment Program (CSLAP) through FLOWPA funding (cont).		<p>Provided FL-LOWPA funds for water sampling through the CSLAP program for one site on Duck Lake.</p> <p>OWLA did not participate in the CSLAP program. Their FLOWPA funds were given to the Lake Como Association to sample water through the CSLAP program for one site on Lake Como.</p>
Continue monitoring of Dutch Hollow Brook and Owasco Inlet utilizing FLOWPA funds.	Planning	Monitoring continued at the Dutch Hollow Brook and Owasco Inlet utilizing FLOWPA funds. Stations at these two sites monitor level, rainfall and flow. Samples were taken and analyzed for total phosphorus, soluble reactive phosphorus and total suspended solids.
Continue tributary phosphorus monitoring utilizing FLOWPA funding.	CCE	CCE utilized FLOWPA funds to conduct phosphorus testing of the tributaries to Owasco Lake. Results from this testing were by a Planning GIS Analyst to begin to calibrate the non-point source loading analysis for Owasco Lake he created.
Continue work on the monitoring buoy for Owasco Lake with IAGT.	OWLA	OWLA works with IAGT to run a monitoring buoy on Owasco Lake. Data can be found at <a href="http://www.ourlake.org">www.ourlake.org</a> .
Continue coliform monitoring of Owasco Lake.	OWLA, Health	Health continued coliform monitoring of bathing beaches located on Owasco Lake. Numerous samples were collected from the bathing beaches in 2006.
Conduct phosphorus monitoring in Duck Lake.	Duck	The Duck Lake Association still looking for an accurate hand held monitor to monitor phosphorus levels in the lake.
Conduct coliform monitoring in Duck Lake.	Duck	Duck sampled eight sites for E. Coli and fecal coliform in July, and all the sites had low readings.
Search for funding for nutrient education.	Planning	FLOWPA funds were utilized to provide the P-Project education on phosphorus. Future FLOWPA funds will continue this education.
<b>Additional Work</b>		
Additional Owasco Lake Monitoring.	Health, Planning, FLI.	<p>Health and the City of Syracuse Water Department tentatively identified the algae at Emerson Park and along the west side of Owasco Lake in June as two types of Green algae: Spirogyra rhizobranchialis and Spirogyra scrobiculata.</p> <p>FLI received funds from the Emerson Foundation to fund the Finger Lakes Institute's Owasco Lake work in 2006 and 2007. Senator Nozzolio secured \$325,000 in state funding for The FLI to oversee the clean-up of Owasco Lake and continue monitoring the biological condition of the Lake. In addition, Health provided additional funds through FLOWPA to have Dr. John Halfman of the FLI to collect additional lake samples, including total organic carbon, dissolved organic carbon, and THM formation potential to help determine the level of organic material in the water and its relationship to THM levels.</p>

Additional Owasco Lake Monitoring (cont).		OWLA sent algae samples to Cliff Callinan of the NYSDEC for identification.
Additional Cayuga Lake Monitoring	CLWN, IO	<p>The IO technical advisory committee and the CLWN are working on a monitoring framework for Cayuga Lake.</p> <p>Roxy Johnston, an Environmental Analyst with the City of Ithaca Water Treatment Plant, presented a PowerPoint presentation entitled "Year 1 and 2 Results-Phosphorus and Sediment Concentrations from Select Tributaries and Water Quality Monitoring in Cayuga Lake."</p>

***Nutrient Management***

Action	Responsible Organizations	Work Conducted in 2006
Encourage the use of nutrient management plans for golf courses, developments, parks, etc.	SWCD	SWCD hired Agricultural Consulting Services, Inc. in July 2006 to develop a nutrient management plan for the Fillmore Glen Golf course in Moravia, NY.
Educate the public and developers on how to reduce nutrient introduction to waterbodies.	OWLA, CCE, City, SWCD, CNYRPDB	CCE mailed P-Project information to Legislators and to residents of Owasco and Cross Lakes. CCE held a P-Project lawn care seminar on October 30, 2006 utilizing FLOWPA funds. Ten people attended the workshop which focused on healthy lawns and phosphorus. This workshop included free soil sample bags and a lawn quality almanac.
Continue the phosphorus monitoring of tributaries through FLOWPA funding. Identify areas that contribute high external loadings of phosphorus and target areas for education and protection efforts.	CCE, Planning	<p>Monitoring continued at the Dutch Hollow Brook and Owasco Inlet utilizing FLOWPA funds. Stations at these two sites monitor level, rainfall and flow. Samples were taken and analyzed for total phosphorus, soluble reactive phosphorus and total suspended solids.</p> <p>CCE worked with a Planning GIS analyst on a preliminary spatial analysis of non-point source pollutant loading in the Cayuga County portion of the Owasco Lake Watershed. To further define the data and determine high external loadings of phosphorus, CCE conducted total phosphorus testing in the Owasco Lake Watershed. This work was funded by FLOWPA.</p>
Continue work needed to dredge the South end of Owasco Lake.	SWCD	Due to weather conditions, the dredging at the south end of Owasco Lake was postponed. The southwest side of Owasco Lake is scheduled to be dredged in January 2007.
Search for funding for nutrient education.	CCE, Planning	FLOWPA funds were utilized to provide the P-Project which provides education on phosphorus. Future FLOWPA funds will continue this education.

***Private and Municipal Wastewater Treatment***

Action	Responsible Organizations	Work Conducted in 2006
Continue to implement the Cayuga County Sanitary Code and provide information to others as needed.	Health	In 2006 properties fronting Owasco Lake and within the Owasco Lake Watershed and the Towns of Owasco, Niles, Moravia, Scipio and Fleming as well as properties fronting Little Sodus Bay and within the Little Sodus Bay watershed and the Town of Sterling were due for routine inspection. In addition, properties located within the Towns of Ira, Venice, and Montezuma were due. FLOWPA funds part of this program.
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, CNYRPDB	Planning and CNYRPBD has provided assistance to following towns and villages as they have developed or are developing their comprehensive plans: Throop, Union Springs, Sterling/Fair Haven, Ledyard, Niles and Victory.
Explore what grants & loans are available for water & waste disposal systems for rural communities.	Planning	Planning wrote a Water Quality Improvement Projects (WQIP) Application For State Assistance Payments For SFY 2006/07 for Phase 1B of the Cayuga County Sewer District No. 2 Project in Fair Haven.
Explore the possibility of upgrading the Groton Wastewater Treatment Facility. Permit was due for renewal in 2006.	Health, Planning	Significant work was done in 2006 in quantifying the amount of phosphorus entering Owasco Lake from the Groton Waste Water Treatment Facility and in holding meetings with various groups including NYSDEC Region 7, NYSDEC Central Office, and NYSDOH to discuss the impact of this phosphorus discharge. In 2006, after first resisting, NYSDEC agreed to require the Village of Groton to implement phosphorus reduction. Phosphorus reduction went on line in August, 2006. In addition, NYSDEC required that the Village of Groton submit plans on a total upgrade of the wastewater treatment plant.
Fair Haven Sewer Project, Village of Fair Haven. Provide requested technical assistance.	Planning	<p>Planning wrote a Water Quality Improvement Projects (WQIP) Application For State Assistance Payments For SFY 2006/07 for Phase 1B of the Cayuga County Sewer District No. 2 Project which is in Fair Haven.</p> <p>Planning continues to administer the CDBG grant for Phase 1A of the Sterling/Fair Haven sewer project.</p>

2006 WQMA Year End Report

Provide educational literature that provides examples of good septic system and holding tank use and maintenance.	Planning, CCE	CCE's "Maintaining your Septic System" article in Duck Lake Association summer newsletter.  Planning provided literature at Lake Como Association meetings.
Distribute a septic maintenance log sheet for homeowners.	Duck, Planning	Provided to the Duck Lake Association to distribute at their summer meeting.  Planning provided at meetings of the Lake Como Association.

**Public Access**

Action	Responsible Organizations	Work Conducted in 2006
Encourage low impact activities like hiking, canoeing and fishing instead of motorized use.	Parks, Planning, OWLA	<p>Planning is working on the development of a plan for the Seneca River Water Trail Project which is a proposed 46 mile recreational water trail for non-motorized boaters from Cayuga Lake to Onondaga Lake.</p> <p>Planning assisted the Town of Mentz and Thoma Development Consultants in the preparation of a grant application to expand the Erie Canal Trail network and study the feasibility of rewatering the abandoned enlarged Erie Canal from Aqueduct Park to Schassel Park for low impact water sports.</p> <p>Planning and Parks secured funding to complete the Cato-Brutus Trail including construction of two new bridges and one bridge replacement over Muskrat Creek. The trail, when opened, will connect the Seaway Trail with the NYS Canalway Trail.</p> <p>Parks conducted improvements the Owasco Flats access.</p> <p>Parks trails are non-motorized except for snowmobiles.</p>

**Spring Quality**

Action	Responsible Organizations	Work Conducted in 2006
Search for funding for groundwater studies for Duck Lake.	Duck, Planning	Ongoing.
Educate people in the Duck Lake Watershed on how to protect groundwater.	Duck, Planning, CCE	Ongoing.

***Stormwater and Sediment Control***

Action	Responsible Organizations	Work Conducted in 2006
<p>Continue to work closely with the DEC on the Phase II Stormwater Rules &amp; Regulations. Provide assistance for towns and villages to comply with the Phase II Stormwater Rules and Regulations.</p>	<p>SWCD, Planning, CNYRPDB</p>	<p>SWCD contracted with NYSDEC to help enforce the Phase II Stormwater Rules and Regulations. SWCD Certified Professional Erosion and Sediment Control (CPESC) conducted 18 site inspections at the request of NYS DEC, completed seven SWPPP reviews, and developed three plans for two towns and one school district in Cayuga County.</p> <p>SWCD CPESC staff member worked with the Towns of Sennett, Aurelius, Owasco, and the City of Auburn to provide technical assistance, site plan review, and general information regarding the Phase II Stormwater requirements.</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 &amp; Regulations &amp; the use of recognized development BMPs to protect water quality.</p>	<p>SWCD, Planning, CNYRPDB</p>	<p>Michele Wunderlich distributed copies of a new informational sheet on permits needed for construction activities that was developed for NYSDEC Region 7 to the WQMA.</p> <p>SWCD CPESC staff member provided on-going technical and general assistance, as well as education to several residences, towns, and villages within Cayuga County. Planning and SWCD staff attended the Central and Western New York Stormwater Conference and Tradeshow. Planning sent notices of this conference to all town supervisor, village mayors and code enforcement officers. Planning also sent a “save the date” notice to the towns and villages for the 2007 Central and Western New York Stormwater Conference and Tradeshow.</p> <p>Planning updated the WQMA website to include a revised section on the Phase II Stormwater Rules and Regulations.</p> <p>Planning sent an informational mailing on Stormwater Phase II Rules and Regulations to all Towns and Villages in Cayuga County utilizing FL-LOWPA grant program funds.</p> <p>SWCD CPESC staff member provided reports and updates to the WQMA, the General Municipal Law 239 Committee, the SWCD Board of Directors, Cayuga County Legislature, and the Cayuga County Code Enforcement Officers. Information and material was provided by SWCD CPESC and distributed through on-site meetings, mailings, pick-up at the district office and public forums.</p> <p>The Stormwater Coalition of Tompkins County sponsored a stormwater construction site inspection workshop.</p>

<p>As further guidance is provided by the regulatory agencies, examine and/or encourage local governments to create &amp; enforce their own stormwater management and erosion control ordinances.</p>	<p>SWCD, Planning, CNYRPDB</p>	<p>CPESC staff member worked with all Towns within Cayuga County, however, most work was with the Towns of Sennett, Owasco, and Aurelius to encourage them to create and enforce own stormwater and erosion control ordinances.</p> <p>Planning provided model stormwater ordinance to the Town of Niles.</p>
<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.</p>	<p>CNYRPDB, Planning</p>	<p>Planning sent an informational mailing on Stormwater Phase II Rules and Regulations to all Towns and Villages in Cayuga County utilizing FL-LOWPA grant program funds.</p> <p>Planning updated WQMA website to include a revised section on the Phase II Stormwater Rules and Regulations.</p>
<p>Continue to conduct stormwater control projects.</p>	<p>SWCD</p>	<p>Planning and SWCD CPESC staff member worked on the improved stormwater management project at Emerson Park, upstream of the bathing beach.</p>
<p>Continue hydroseeding assistance programs for local governments in critical areas, such as road ditches, and promote the program to increase use throughout the watershed.</p>	<p>SWCD</p>	<p>The IO, sponsored by the Town of Lansing, was awarded a \$75,000 Environmental Protection Fund grant to undertake a hydroseeding program to decrease exposed soils and sediment loading to the lake, stabilize roads and streambanks, increase awareness among local highway crews, and reduce maintenance costs for small municipalities. Grant funding will cover materials for hydroseeding projects throughout the Cayuga Lake Watershed in Tompkins, Cortland, Cayuga and Seneca Counties.</p> <p>SWCD provide road ditch hydroseeding for the NYS DOT for portions of Routes 5 &amp; 20, Route 34, Route 38, and Route 41A.</p> <p>SWCD implemented hydroseeding for proper road ditch maintenance for 17 1/3 acres in 2006.</p> <p>Municipalities are encouraged to contact SWCD to hydroseed ditches. SWCD provides hydroseeding to towns, county and state. SWCD worked with NYSDOT to conduct hydro-seeding of ditches and road areas.</p> <p>SWCD provided road ditch hydroseeding for the Cayuga County Highway Department throughout the Towns of Brutus, Fleming, Locke, Moravia, Owasco, Sempronius, and Sennett.</p>

Provide model site design guidelines for contractors.	SWCD	CPESC staff member provided technical assistance for pre-construction site review for several contractors in Cayuga County. CPESC conducted 18 site inspections at the request of NYS DEC, completed seven SWPPP reviews, and developed 3 plans for two towns and one school district in Cayuga County.
Encourage use and provide information on structural measures to control sediments and other pollutants from stormwater runoff.	SWCD	<p>SWCD CPESC staff member provided technical assistance to local Towns, Villages, and residents for bio-technical, structural, and temporary stormwater BMPs to control runoff.</p> <p>SWCD considered stormwater practices to be used as demonstration sites and training tools for several stakeholders within Cayuga County.</p> <p>Planning received FLOWPA Special Project Fund Grant money to allow SWCD to purchase a Hydro-Lab to test water quality from existing swales, filter strips and wet basins for technical and educational purposes. SWCD is in the process of developing a Cayuga County Stormwater Management Projects Inspection and Maintenance Program.</p>
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 implemented three stormwater basins, four grassed swales for stormwater, and two dry basins.

***Streambanks and Stream Corridor Management***

Action	Responsible Organizations	Work Conducted in 2006
Reevaluate streambank erosion assessments and search for funding for implementation.	SWCD, Planning, IO	The IO was awarded grant funding to perform an extensive stream evaluation in the Salmon Creek watershed. The analysis will include problem areas related to erosion.
Search for funding and implement streambank stabilization on severely eroding streams using fluvial geomorphology and other bioengineering methods where feasible.	SWCD, Planning	<p>SWCD has received money from the New York State Bond Act to install erosion control on 15 sites on Yawgers Creek. It is estimated that the work will reduce sediment loading to Cayuga Lake by 70 tons of sediment per stream mile per year. Stone toes, rip rap, bioengineering and buffers will be utilized.</p> <p>SWCD submitted five NYSDEC Round 9 Non-Agricultural Non-point Source Abatement and Control Projects grants to implement streambank stabilization on Dutch Hollow Brook, Owasco Inlet and Putnam Brook.</p>

<p>Search for funding and implement streambank stabilization on severely eroding streams using fluvial geomorphology and other bioengineering methods where feasible (cont).</p>		<p>SWCD implemented bank stabilization on several tributaries for 2006: 120 feet of rock rip rap was installed on three sites on Veness Brook; 240 feet of rock rip rap was installed on two sites on Sucker Brook; 75 feet of rock rip rap was installed on an unnamed tributary to Skaneateles Creek in the Town of Niles; 200 feet of rock rip rap was installed on two sites on Yawgers Creek; and five rock vanes and a 12 foot buffer area planted with native dogwoods and willows were implemented on the Owasco Inlet in the Town of Locke to stabilize approximately 135 feet of streambank.</p> <p>Federal Emergency Management Agency (FEMA) funding was approved to address sites on the Owasco Inlet, Dutch Hollow Brook and Owasco Lake caused by the severe floods in April 2005. Projects funded under FEMA 1589 include 20 feet of streambank on the Owasco Inlet repaired with rock rip rap in the Town of Locke; 40 feet of Mill Creek repaired with a rock rip rap wall in the Town of Moravia; and 50 feet of the Owasco Inlet repaired with rock rip rap on the Owasco Inlet in the Town of Moravia. Also, 30 feet of streambank on an unnamed tributary to Owasco Lake was stabilized in the Town of Owasco with FEMA funds and SWCD stabilized an additional 60 feet on each side of the tributary with rock rip rap that was <i>not</i> covered under FEMA..</p> <p>SWCD submitted a grant application to NYSDEC to implement a vegetated rock buttress on Dutch Hollow Brook in the Town of Niles.</p>
<p>Identify funding sources for comprehensive streambank restoration &amp; management programs.</p>	<p>SWCD</p>	<p>SWCD submitted grant applications to the NYSDEC.</p> <p>FEMA provided funds to address streambank damage due to flooding.</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>SWCD technicians promoted the Conservation Reserve Enhancement Program (CREP) for farmers located near waterbodies. Farmers can receive payments from the FSA after site approval from NRCS for putting in buffers near a stream adjacent to pasture or croplands through CREP. Interest in this program has steadily increased over the past year. Seven applications were submitted in 2006, all of which have been approved at the state and local FSA offices. SWCD has recently received 14 additional inquiries from FSA. Site visits are being completed by NRCS and SWCD field staff which should result in more contracts in the near future. To date, 16,500 feet of fence, 6,500 feet of pipeline, 7.2 acres of filter strip, 300 feet of Riparian forest buffer, one stream crossing and one water facility have been installed in 2006.</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 (cont).</p>		<p>SWCD technicians promoted Graze NY for farmers located near waterbodies. Farmers that are next to waterbodies can only receive monies through GRAZE NY if they maintain a 30 foot buffer from the fence to the waterbody.</p> <p>All stream projects conducted by SWCD in 2006 include a vegetated buffer area of at least 12 to 15 feet. The farmer/landowner is required to maintain this buffer in order to receive funding and/or remediation.</p>
<p>Promote the use of Best Management Practices (BMPs) such as livestock exclusion from streams and vegetative filter strips.</p>	<p>SWCD</p>	<p>Tompkins County SWCD received an Agriculture Non-Point Source Abatement and Control Program Round XII Projects grant of \$117,130 to install pasture management systems on 22 farms located in the Cayuga and Owasco Lake Watersheds, which will reduce the flow of nutrients, pathogens, and sediments into the watersheds.</p> <p>SWCD technicians promoted Graze NY for farmers located near waterbodies. Farmers that are next to waterbodies can only receive monies through GRAZE NY if they maintain a 30 foot buffer from the fence to the waterbody.</p>
<p>Continue having staff members of the SWCD assist in the preparation of grant and cost share applications to reduce streambank erosion and implement buffering.</p>	<p>SWCD</p>	<p>SWCD submitted five NYSDEC Round 9 Non-Agricultural Non-point Source Abatement &amp; Control Projects grant applications to implement streambank stabilization on Dutch Hollow Brook, Owasco Inlet, and Putnam Brook.</p> <p>SWCD technicians promote the Conservation Reserve Enhancement Program (CREP) and Graze NY for farmers located near waterbodies.</p>
<p>Provide model buffer and stream corridor protection ordinances to the municipalities.</p>	<p>Planning</p>	<p>None to date.</p>
<p>Examine debris accumulation in streams and determine whose jurisdiction it is to remove it and have it removed.</p>	<p>Planning, SWCD</p>	<p>SWCD removed debris from a few streams in Cayuga County. The debris was causing a blockage in the tributary and flooding the adjacent properties causing erosion and sediment loading.</p> <p>SWCD cleaned 2,581 feet of an unnamed tributary to Skaneateles Creek in the Town of Sennett to maintain a depth of 3 to 3.5 feet in order to prevent further flooding and erosion to the adjacent farm field. All trees, limbs, and loose woody debris located in the tributary were removed.</p> <p>Using FEMA 1589 funds, SWCD cleaned approximately 900 feet of Morse Creek in the Town of Moravia to prevent flooding to the adjacent field.</p>

<p>Examine debris accumulation in streams and determine whose jurisdiction it is to remove it and have it removed (cont).</p>		<p>SWCD cleaned out the channel of the Owasco Inlet in the Town of Locke by removing the woody debris that was caught on an old abandoned railroad bridge. The district also removed the old railroad bridge to prevent future blockage of the channel.</p> <p>SWCD cleaned out approximately 6,500 feet of Yawgers creek. Tree removal and loose woody debris were removed that were blocking the channel. Also, several beaver dams were removed to prevent further flooding.</p>
<p>Educate landowners on what debris can be removed from streams and how to remove it properly.</p>	<p>Planning, OWLA</p>	<p>Information available at Planning.</p>
<p>Conduct tours, put up signs and provide information on demonstration projects for streambank erosion and stream buffering.</p>	<p>SWCD, OWLA</p>	<p>Signs were put up on the Owasco Inlet at the fluvial geomorphology (FGM) site for the Great Lakes Coastal Restoration Program. The site demonstrates a constructed Riffle/Pool Scheme to mimic a natural stream channel. No tours were conducted for stream projects in 2006.</p>
<p>Conduct streambank stabilization projects on tributaries to Owasco Lake.</p>	<p>SWCD, Planning</p>	<p>SWCD implemented bank stabilization on several tributaries for 2006: 120 feet of rock rip rap was installed on three sites on Veness Brook; 240 feet of rock rip rap was installed on two sites on Sucker Brook; and five rock vanes and a 12 foot buffer area planted with native dogwoods and willows were implemented on the Owasco Inlet in the Town of Locke to stabilize approximately 135 feet of streambank.</p> <p>FEMA funding was approved to address sites on the Owasco Inlet, Dutch Hollow Brook and Owasco Lake caused by severe floods in April 2005. Projects funded under FEMA 1589 include 20 feet of streambank on the Owasco Inlet repaired with rock rip rap in the Town of Locke; 40 feet of Mill Creek repaired with a rock rip rap wall in the Town of Moravia; and 50 feet of the Owasco Inlet repaired with rock rip rap on the Owasco Inlet in the Town of Moravia. Also, 30 feet of streambank on an unnamed tributary to Owasco Lake was stabilized in the Town of Owasco with FEMA funds and SWCD stabilized an additional 60 feet on each side of the tributary with rock rip rap that was <i>not</i> covered under FEMA.</p>
<p>Train staff in remedial fluvial geomorphology and conduct pilot projects on tributaries to Owasco Lake, particularly Dutch Hollow Brook and the Inlet.</p>	<p>SWCD</p>	<p>Signs were put up on the Owasco Inlet at the fluvial geomorphology (FGM) site for the Great Lakes Coastal Restoration Program. The site demonstrates a constructed Riffle/Pool Scheme to mimic a natural stream channel.</p> <p>SWCD submitted a grant application to NYSDEC to implement a vegetated rock buttress on Dutch Hollow Brook in the Town of Niles.</p>

**Waste Sites**

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

Action	Responsible Organizations	Work Conducted in 2006
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.

**Waste Sites**

**Roadside and Illegal Dumping**

Action	Responsible Organizations	Watershed (s)
List all municipal codes and ordinances for roadside and/or illegal dumping.	Planning	None to date.
Conduct cleanup of Fall Creek.	CLWN	Cleanup of Fall Creek was held on May 13, 2006.

**Waterborne Illness**

Action	Responsible Organizations	Work Conducted in 2006
Continue to monitor bathing beaches.	Health	Ongoing during the 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	Health continues to provide information at the request of 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.
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>SWCD technicians promoted Graze NY for farmers located near waterbodies. Farmers that are next to waterbodies can only receive monies through GRAZE NY if they maintain a 30 foot buffer from the fence to the waterbody.</p> <p>Cayuga County SWCD was awarded two New York State Agriculture Non-Point Source Abatement and Control Program Round XII Project grants in 2006. The first was \$394,400 for waste storage facilities on two farms in the Seneca River Watershed, which will reduce nutrient and pathogen loading into the watershed through proper nutrient management. The other was \$24,500 for a silage leachate management system on one farm in the Cayuga Lake Watershed, which will reduce nutrient and biological oxygen demanding waste loading.</p>

<p>Use Best Management Practices (BMPs) and Environmental Protection Agency Regulations to reduce contamination from pastures (cont).</p>		<p>Tompkins County SWCD was awarded two New York State Agriculture Non-Point Source Abatement and Control Program Round XII Project grants in 2006 that effect Cayuga County waterbodies. The first was \$86,983 for two barnyard water management systems and two milkhouse waste treatment systems on three farms in the Owasco Lake Watershed to address nutrient, pathogen and sediment loading. The second was \$117,130 for pasture management systems on 22 farms located in the Cayuga and Owasco Lake Watersheds, which will reduce the flow of nutrients, pathogens, and sediments into the watersheds.</p>
<p>Continue to work on the Emerson Park swale and pond coliform issue.</p>	<p>Health, SWCD, Planning, Park</p>	<p>The Health Department sampled the swale periodically throughout the summer of 2006.</p> <p>SWCD re-shaped and armored the inlet to the Emerson Park swale and re-seeded the entire project area.</p> <p>Parks cleaned leaves and debris from pond drainage system.</p>
<p>Continue to address the bird problem in Emerson Park and Owasco Lake by trying realistic methods.</p>	<p>Parks, SWCD</p>	<p>SWCD hired Take Flight Goose Management in April 2006 for 6 weeks during Canada Goose nesting periods to locate nests, addle eggs, and harass the geese using trained border collies. No nests were found, therefore, no eggs were addled. SWCD compiled data from the 3 year program and put together report that will be available at the end of 2006. This program is partially funded by FLOWPA.</p> <p>Parks security personnel continued the geese harassment program after Take Flight Goose Management finished.</p>
<p>Implement a continuous coliform monitoring program in Owasco Lake and the major tributaries.</p>	<p>OWLA, City</p>	<p>OWLA continued their summer coliform sampling program.</p>
<p>Continue to create awareness of dangers of spreading unwanted weeds and zebra mussels as well as feeding ducks and geese.</p>	<p>Duck</p>	<p>“Please Don’t Feed the Geese! Four Reasons Not to Feed Ducks and Geese Around the Lake” in Duck Lake Association 2006 summer newsletter.</p>

**Additional Work**

Owasco Lake

Action	Responsible Organizations	Work Conducted in 2006
Owasco Lake Water Quality	WQMA	<p>WQMA’s Owasco Lake priority letter that was sent to Senator Nozzolio in August.</p> <p>WQMA formed an Owasco Lake Standing Committee which met immediately after the regularly scheduled WQMA meetings starting in October.</p> <p>OWLA spoke to the Cayuga County Legislature and City of Auburn about the Owasco Lake Initiative and the watershed steward.</p> <p>OWLA, IAGT, FLI, SWCD, and Senator Nozzolio’s Office submitted a grant application to the Environmental Protection Agency to fund the OWALIS (Owasco Watershed and Lake Information System).</p> <p>Leadership Cayuga group examined the Lake Steward position as their project for Leadership Cayuga.</p> <p>Owasco Lake Standing Committee began the process to update the Owasco Lake watershed rules and regulations.</p> <p>WQMA sent a letter to NYSDEC asking them not to renew the SPDES permit for a failing three trailer septic system in Locke. To date the permit has not been renewed and Health continues efforts to upgrade/replace the system.</p> <p>The Owasco Flats Reserve received a Federal Five Star Restoration Challenge Grant Program grant. Project partners include the Soil and Water Conservation District, U.S. Fish and Wildlife Service, Owasco Flats Nature Reserve, Inc., and Cayuga County Parks and Trails. Funds are included for SWCD to install a water control structure to reduce water, sediment and phosphorus flow from the Flats into Owasco Lake.</p>

Cayuga Lake

Action	Responsible Organizations	Work Conducted in 2006
Cayuga Lake Tributaries	WQMA, CLWN	<p>WQMA discussed the water quality of Big Salmon, Salmon and Little Salmon Creeks.</p> <p>Sharon Anderson reported that there will be a new USGS gage with an autosampler for phosphorus and sediment sampling in the Ludlowville area on Salmon Creek. She reported that the CLWN and IO are looking at bringing together people to discuss this issue.</p>