

2007 STATE OF THE Oswego County ENVIRONMENT

AND



Oswego County
Environmental
Management Council

ANNUAL REPORT

**Submitted by the Oswego County Environmental Management
Council**
May 30, 2007

**Oswego County Environmental Management Council
2006 State of the Environment Report**

INTRODUCTION

The Oswego County Environmental Management Council is a volunteer board, authorized for up to 15 members, established in 1971 by New York State Environmental Conservation Law and Resolution 86 of the Oswego County Legislature. Members are appointed by the Chairperson of the County Legislature. By resolution, the council was created “for the purpose of study and recommendations to this Body of procedures and programs which are deemed advisable and in the best public interest, for reviewing and advising local and state governments on matters pertaining to the use and conserving the environment for the protection of all the people...” As such, the EMC seeks to understand and promote the wise use and development of Oswego County’s natural resources.

Article 47 of the New York State Environmental Conservation Law defines the EMC’s primary mission as a review and advisory board to local and state government on matters affecting the protection, conservation, preservation and proper management of the natural resources of Oswego County. Section 47-0107 Paragraph 2 states, *“The council shall review the state of the county environment as a whole, and shall prepare and submit an annual report of its findings to the county’s governing body. This report also shall include an account of the council’s activities and accomplishments which shall be based on accurate records of its meetings and other works.”*

STATE OF THE OSWEGO COUNTY ENVIRONMENT

1. General

Nuisance aquatic vegetation and invasive species: Nuisance aquatic vegetation and invasive species continue to be a problem in Oswego County. Species such as Eurasian water milfoil (*Myriophyllum spicatum*), water chestnut (*Trapa natans*), purple loosestrife (*Lythrum salicaria*), giant hogweed (*Heracleum mantegazzianum*), Japanese knotweed (*Polygonum cuspidatum*), zebra mussel (*Dreissena polymorpha*), and round goby (*Neogobius melanstomus*) continue spread unchecked in many areas, impacting native organism habitats and food chains, recreational activities, and aesthetics. Control costs, including educational campaigns and eradication will continue to require major planning and economic consideration at both Town and County levels.

Wetlands Legislation: Oswego County is home to many agricultural wetlands (particularly mucks) and isolated wetlands (many of which are vernal pools too small to come under the protection of the 1975 NYS Freshwater Wetlands Act, and which are essential breeding habitats for local amphibian populations). State and Federal actions in this arena will bear monitoring in the upcoming years.

Hazardous waste sites: Several inactive or delisted hazardous waste sites currently exist in the County. Among them are the PAS site in Oswego, the Fulton Terminals site

in Fulton, and the Clothier site in Granby. These sites are a result of activities at the former Pollution Abatement Services (PAS) property in Oswego in the 1970's and 1980's. The EPA remediation plan for the sites includes regular monitoring to ensure hazardous materials are not leaching from the sites. The zoning and location of some of these sites as industrial areas may make them favorable for future re-development. Any such re-development will need to be assessed in relation to the previous presence of hazardous materials at these locations.

The County Department of Planning and Community Development recently received U.S. Environmental Protection Agency grant money to evaluate brownfield sites along the Oswego River Corridor for re-development and possible return to the tax base as viable properties. In 2004, several sites were identified and investigated. A final list of 14 sites (7 with petroleum based contamination and 7 with other chemical contamination) was established. The sites will eventually be remediated and released for development. Parameters considered in choosing the sites include distribution in the project area, site size, marketability, public versus private ownership and historic significance.

In 2005, Brownfield/EPA Phase 1 studies were completed for seven sites in the Oswego River Corridor, including Dix Sunoco (Phoenix), Fulton Mall (two sites), SOFCO (Fulton), Flex-o Wire (Oswego), Fitzgibbons Boilerworks (Oswego) and Oswego Stevedoring. Phase 1 studies in progress include 62 N 5th Street (Fulton), Building 80 (A.L. Lee Memorial Hospital, Fulton), Leto Island (Oswego), and Oneida Street (Fulton – four sites). In 2006 eight Phase II ESAs were recommended to the US EPA for approval.

Household hazardous wastes: In the past, the EMC has promoted and participated in the establishment and implementation of an annual Household Hazardous Waste (HHW) collection day at local landfills and transfer stations. According to Division of Solid Waste data, Oswego County has held 26 successful HHW collection programs since 1990. This event routinely attracted long lines of local residents desiring to dispose of hazardous consumer products in an environmentally suitable manner. County officials decided to no longer fund this event in 2002. As a result, the potential for illegal disposal (roadside dumping, household trash, discharge into streams, wetlands, storm sewers or household drains) and open burning will increase significantly. This poses a serious threat to the health of individuals and the environment due to the extreme toxicity of many of these products. In response to concerns expressed by the EMC and other county groups, the county legislature has approved funding to reestablish the household hazardous waste collection days in 2007.

Oil and gas drilling: As of 2005, approximately 25,000 acres of land in the County have been leased for their oil and gas mineral rights by outside interests. While very few sites have undergone any development at this time, there is potential for environmental impacts (habitat destruction, aesthetic degradation, fire, and chemical spills among others) from access road construction and drilling activities should any of these sites be

developed. Review of applications to DEC for the development of such leases will be needed to help limit mitigate possible impacts.

Wildlife corridors: Current definitions emphasize that a wildlife corridor is a linear landscape element which serves as a linkage between historically connected habitat/natural areas, and is meant to facilitate movement between these natural areas. As open spaces have become divided up and isolated from each other, wildlife corridors have become increasingly important in allowing movement of plant and animal species from one place to another. Several recent studies have confirmed that such corridors have been successfully used by many species. The continued pursuit of additional development in the County (particularly along the Lake Ontario shoreline) needs to be managed in relation to the preservation of open space and wildlife corridors, with development planned to mitigate impacts to these valuable habitats and improve the quality of life for County residents.

2. Salmon River Corridor and Tug Hill

A. Salmon River Bio-Inventory

According to the Salmon River Greenway Corridor Bio-Inventory Final Report, prepared for the EMC by Dru Associates, "The Salmon River corridor is among the State's most physically unique and biologically diverse ecosystems. It is distinguished by its geological origin, hydrological functioning and ecological richness."

Within the corridor, whenever a major development activity occurs, there is potential for several problems, including erosion and sedimentation, habitat loss and degradation, physical and hydrological changes, nutrient loading, introduction of toxic substances, increased water temperature, and increased or uncontrolled flooding. As the report noted, such physical changes could in turn trigger other ecological impacts such as algal blooms, changes to water chemistry and dissolved oxygen levels, and changes in species composition. These impacts are potentially devastating to cold water systems like the Salmon River. The report states, "These changes are not noticeable at the start, but once a decline in species begins, it can be irreversible."

The report identified many land use activities that would represent problem sources in the corridor in both riverine and upland habitats. These include unchecked construction and development, density of development, logging and forest clearing, industrial and storm water discharge, roadway runoff and deicing activities, mining, agriculture and recreational activities. The report states, "In the case of habitats which are directly linked to the River's water quality, it is not only the impacts of lost habitat (and the species which live in those patches) that are affected, but there is also the potential for direct impacts to the fishery and avifauna associated with it."

The report outlines several protection strategies, including ecologically sound regional planning. This should be used to "preserve large, central tracts for forested and wetland habitat to prevent the loss of species which are sensitive, and maintain the species richness and diversity of the River ecosystem." Other management strategies identified are sound fisheries management, enforcement of current wetlands and water quality regulations, use of the SEQR process, and implementation of State and Federal natural resource programs.

The report also recommended further studies to include field work conducted in all four seasons to better identify species in need of protection, field checking of air photo map interpretations to confirm accuracy, and a thorough inventory of wetlands in the corridor. Due to their importance to several amphibian species, this inventory should include vernal pools and other smaller wetlands not identified on the DEC wetland maps.

The Bio-Inventory of Rare, Endangered and Threatened Species and Ecological Communities in Wetlands of the Salmon River Corridor contract was executed in July 2003 by the Department of Planning and Community Development, and extended to September 2005. The study area was mapped, requests were made to landowners for access and inventories were completed. Since 2005 a more extensive inventory has been completed by Natural Heritage to supplement the Dru Associates inventory in the Salmon River Watershed region. The information derived from the bio-inventory will be a valuable supplement to existing information used for land use management planning in the river corridor.

B. DEC Initiatives

State efforts to acquire former Niagara Mohawk Power Corporation land within the corridor have now been negotiated as part of a legal settlement and will become finalized in 2007. Surveying of the properties is ongoing along with other technical aspects of finalizing the acquisition process. Acquisition of these parcels by the state is essential in helping control the threat of unrestricted development within the corridor and for the protection of this unique resource. The areas acquired will increase public fishing, hunting, and recreational opportunities while still providing protection of the resource. Areas in the acquisition will be designated as State Forest Lands and continue to pay taxes to the local communities. Once in DEC ownership long term plans are to link the corridor by developing a hiking trail from Redfield to Pulaski where possible.

NYSDEC has completed work on improving access to the Salmon River Reservoir. This included relocating and upgrading the boat launch in Redfield along with construction of a new fishing pier that is accessible for those with disabilities using NYSDEC Habitat Access Stamp funding and line item funding from State Senator Jim Wright. Work still to be completed includes the Redfield Island Day Use Area adjacent to the new launch which will also be improved and the old boat launch which will be redeveloped into a car top launch and day use area. Work including

bank stabilization of about a half mile of river adjacent to the Salmon River Hatchery and downstream to the Lower Fly Fishing Area has been completed. The work was done using the most up to date natural stream morphology methods available and was conducted under the supervision of NYSDEC and the USFWS. Work was completed in the summer of 2006. Work came in under budget and as a result plans are being developed to restore another section of river above the Salmon River Hatchery in 2007.

NYSDEC is still actively looking for and pursuing opportunities within the Salmon River Corridor where acquisition or conservation easements with willing land owners can take place. NYSDEC is considering a project to acquire lands adjoining future state lands scheduled to be acquired from National Grid and other parties. The purpose of the project is to consolidate the ownership of the parcels with future State Forest lands for improved protection of the river corridor and to provide additional public access to those lands. Acquisition would be consistent with the New York State Open Space Plan and would only be pursued as a friendly purchase from a willing seller. The property would be paid for with funds from the Environmental Protection Fund. In accordance with Environmental Conservation Law [Section 54-0303] whenever funding from that source is used to acquire land not specifically listed on a prior state land acquisition plan, the town where the land is located must be offered the opportunity to object to the acquisition

NYSDEC initiated in 2004 a Salmon River Watershed Biodiversity and Ecological Habitat Assessment in order to assess the condition of natural resources within the 173,000 acre Salmon River Watershed. The Tug Hill commission is facilitating the project and administering grant funds awarded by the U.S. Fish and Wildlife Service. Field work conducted by the NY Natural Heritage Program which is a partnership between the Nature Conservancy and NYSDEC has been completed. Based on work from the assessment a Natural Resource Targets workshop was held in the September 25, 2006. The objective of the workshop was to identify 3-8 natural resource targets that represent the full range of biodiversity within the watershed. A viability analysis of the targets workshop was conducted from Oct. 2006 through March 2007. The viability analysis gathered information from published and unpublished reports and conducted interviews with scientists and resource managers to assess the current condition of each natural resource target identified at the September target selection meeting. A threats analysis workshop was conducted on May 4, 2007. The objective of the workshop was to identify threats to the long term health and viability of the targets identified in workshop. The remaining steps planned for the project include:

1. A strategies workshop will be conducted in June 2007. The objective of this workshop will be to identify specific strategies to abate the threats identified in workshop
2. A series of information meetings will be presented for members of the general public in August through September 2007. Work will continue through the fall of 2007 resulting in a final assessment report that local towns, village boards, and

government agencies within the watershed can utilize for strategic planning and conservation needs.

After 23 years of legal procedures and scientific study Occidental Chemical agreed to pay NYS a \$12 million settlement for damage to Lake Ontario and its fisheries caused by its Niagara Falls manufacturing plant, Hooker chemical. NYSDEC has received the money through the Lake Ontario Natural Resources Damages settlement and it will be used for fisheries restoration projects along Lake Ontario and its tributaries. The money will be distributed over a four year period. Projects in Oswego County that ranked high for funding include renovations to the Salmon River Hatchery water supply, high tech fish marking equipment that will allow fisheries managers to distinguish wild naturally reproduced salmonids from hatchery stock, and stream bank restoration, trail development, and public access along the Salmon River.

NYSDEC is actively involved in trying to stop the spread of the fish disease VHS or Viral Hemorrhagic Septicemia (VHS). Fish kills along Lake Ontario, Lake Erie and the St. Lawrence River occurred in 2006 and were identified as being caused by VHS. Fish affected were warm and cool water species such as round goby and bass. VHS is classified as a reportable disease by the World Organization for Animal Health. This disease is not harmful to humans. Salmon and trout tested at the NYSDEC Salmon River Hatchery were disease free as was the hatchery itself. Regulations controlling the sale of baitfish and transfer to other waters outside the Great Lakes have been initiated to try and stop the spread of the disease.

C. Tug Hill

Early in 2002 the Nature Conservancy and the NYS DEC announced that they had negotiated the purchase of 45,000 acres of the Tug Hill core forest. Most of the area purchased is in DEC Region 6, with only a small portion in Region 7, which encompasses Oswego County. However, the purchase will help protect the watershed and headwaters of the Salmon River and its tributary streams, so there is a net environmental benefit to Oswego County from the transaction. The area was not removed from the tax rolls, and will remain open to the public for hunting and fishing, providing enhanced recreational opportunities in the area.

D. Other

Potential threats to the Salmon River Corridor and Tug Hill that will need review and monitoring and evaluation in the near future include:

- Snowmobile use, especially in Tug Hill region, has resulted in an increased winter population, which in turn requires more services (gas stations, restaurants, etc.). Increased residential and seasonal camp development will have associated increases in solid waste, water supply needs and septic issues.

- ATV operation on County and State lands raises environmental concerns including degradation of trails and landscape due to ruts, soil erosion, clogging of culverts and sedimentation problems in adjacent waterways, as well as trespassing onto adjacent private lands.
- Invasive species, both aquatic and terrestrial, need to be monitored and a threat assessment determined.

3. Oswego River Corridor

A. General Setting

Over the past several years, the EMC has been active with many groups and programs involving the Oswego River Corridor, including the Oswego River Remedial Action Plan (RAP). The Oswego River watershed includes the Finger Lakes, industries, the city of Syracuse and other municipalities, and extensive areas of farmland and forest, and encompasses an area of over 5,000 square miles. The Oswego River is second only to the Niagara River in size as a tributary to Lake Ontario. Upstream pollutants are known to have traveled through the river and harbor, and impacted the Lake Ontario ecosystem. The Oswego River still has mirex contamination from previous industrial activities along its shoreline. Oswego County is the only local body addressing problems within the river corridor. In July 2006 the Lower Oswego River and Harbor were delisted as a Great Lakes Area of Concern by the International Joint Commission due to the efforts of several state and local groups and agencies. The delisting of the Oswego Harbor and the river up to the Varick Dam is addressed as an Area of Concern under other programs.

B. Brownfield Assessments

Brownfields are defined as abandoned, idled or underused properties where expansion or redevelopment is complicated by real or perceived hazardous substance, pollutant, or contaminants. A project entitled *The Oswego Canal Transformation Project: An Old Pathway to a New Economy* was implemented under the auspices of the Department of Planning and Community Development in the 2004. The objective of this project was to use Assessment Grant funds to perform environmental assessments on the most critical brownfield sites within the Corridor. The project identified the most critical sites through a standardized process of inventorying sites within the Corridor and prioritizing those sites based on key community and municipal objectives. The two objectives of this project were: (1) evaluate sites which are petroleum contaminated and (2) evaluate sites that are contaminated with non-petroleum or hazardous substances.

In 2005, Brownfield/EPA Phase 1 studies were completed for 23 sites in the Oswego River Corridor with 22 sites approved for Phase 1 ESAs. These included Dix Sunoco (Phoenix), Fulton Mall (two sites), SOFCO (Fulton), Flex-o Wire (Oswego), Fitzgibbons Boilerworks (Oswego) and Oswego Stevedoring. Phase 1 studies in

progress include 62 N 5th Street (Fulton), Building 80 (A.L. Lee Memorial Hospital, Fulton), Leto Island (Oswego), and Oneida Street, Fulton (four sites). In 2006 eight Phase II ESAs were recommended to the US EPA for approval. In addition, the City of Fulton applied to NYS DOS for additional \$193,500 Brownfield Opportunity Area (BOA) funding and the City of Oswego applied for an additional \$250,000 BOA funding. A Community Brownfield Advisory Group (CBAG) has been appointed to serve as an advisory board for the project. With Brownfield funding, the County has acquired Pictometry data (digital aerial photographs which are georeferenced and vertically and horizontally accurate) for a 2-mile wide corridor of the Oswego River.

C. Shoreline Erosion

Residents along the river continue to be concerned over erosion and other shoreline impacts from the wake of boats using the river. Over the past several years, the EMC has developed educational materials and promoted boater awareness of the impacts of boat wakes, and the wake regulations applicable on the river. The EMC has promoted use of native vegetation by shoreline residents to restore riparian habitats and to help mitigate the effects of wake erosion along the river shore. This is likely to continue to be an issue over the next several years.

In 2004, the Department of Planning and Community Development received the Oswego River Shoreline Restoration Program Habitat Evaluation Design report from Dru Associates. The report outlines a quantitative model that can be used to easily evaluate a property's condition with respect to wildlife use and bank stabilization. According to the report, the aim of this initiative is to "show riverside landowners how to increase their property values for wildlife and improve stream bank stabilization through a program that teaches and rewards landowners for undertaking actions that stabilize or restore riparian habitats that 'mimic' the original native shorelines."

D. Other Corridor Initiatives

a. The Friends of the Oswego River Canal, a grassroots organization, is currently working to secure grant funding to help advance its plans for the development of a trail system along a stretch of the Oswego River Canal from the City of Fulton to the Village of Phoenix. Eventually, however, the group hopes that the 7.5 mile stretch of trail will be part of a bigger plan that connects to similar trails in each community along the canal.

b. Friends of Great Bear is a newly formed group, made up of residents of Oswego County, interested in the conservation and protection of the Great Bear property. This unique area is owned by the City of Fulton, which has its municipal water wells on site. A diversity of flora and fauna can be found on the property along with it bordering the Oswego River and Canal. In cooperation with the City of Fulton, the group's goals are the advocacy of the preservation and protection of this natural environment, so that the public may share and make use of the property wisely as a recreational resource.

4. Lake Neatahwanta

Lake Neatahwanta in the City of Fulton and Town of Granby has been under evaluation for over 15 years by the Lake Neatahwanta Reclamation Committee to diagnose the causes of its water quality problems, and to develop possible remediation solutions. Studies commissioned by the Committee have determined that the lake is experiencing cultural eutrophication due primarily to high phosphorus levels. The primary remediation goal is to reduce algae and suspended sediment levels to allow swimming and other recreational activities. Watershed management strategies proposed by consultants include dredging, constructed wetlands to help filter and retain sediments and nutrients, riparian restoration along tributary streams, and possible in-lake bio-manipulation of the food chains. Federal monies have been received to begin the process. The CNY Regional Planning and Development Board is assisting the committee in moving ahead with its \$750,000 Federal grant. The Committee will begin implementation of its initial plans and begin dispersal of project funds by May 2007. Early efforts will focus on watershed improvements, with a goal of having programs in place by September 2007.

5. Lake Ontario Coastline and Adjacent Upland Areas

According to NYS Department of State's 1989 Dune Management Study, the sand dunes along the eastern shore of Lake Ontario are an integral part of a coastal barrier environment that consists of beaches, sand dunes, embayments and wetlands. This barrier system, which extends for roughly 17 miles, contains the largest and most extensive freshwater sand dune formations in New York State, and is among the most extensive in the northeast. The dune system contains several rare or unique habitats with associated threatened and endangered species. The dune wetland complex has been identified as a Biodiversity Investment Area under the State of the Lakes Ecosystem Conference (SOLEC), sponsored by USEPA and Environment Canada. DEC recognizes several significant fish and wildlife habitats within the complex, and the NYS Department of State has delineated several significant coastal fish and wildlife habitats within the complex as well. It is also a priority conservation site within the Nature Conservancy's Binational Blueprint for Conservation of the Great Lakes.

A. Selkirk Fen

In 2005, Selkirk Fen, immediately to the east of Brennan Beach, and south of Deer Creek WMA, was transferred to the State of New York, to be managed by DEC. Brennan Beach has completed the septic system upgrades required at that time by DEC. Scientists have been cordially welcomed to access the wetland through the campground property. The bog buckmoth population (New York Endangered) has been monitored there for three years now. The 2006 flight was the best there to date, and the data now demonstrates that the bog buckmoth population in Selkirk Fen is the largest of the six known colonies in Oswego County (and so, also in New York). Bog turtle (Federal Threatened, New York Endangered) research is also in its third year. SUNY Oswego has requested State Wildlife Grant funding for

continuation of these research efforts, as well as for removal of an invasive shrub, glossy buckthorn, that threatens the habitat conditions for all rare plants and animals that occur in the site.

3. Basin-wide Collaboration

First Bi-national Great Lakes Dune Conference: In October, 2006, NY Sea Grant brought together 76 scientists, managers, and educators who work in Great Lakes dunes from across the Great Lakes Basin to share knowledge and experience with their colleagues. In a unique approach, all presentations were made to the entire group, so there would be sharing across disciplines. The outcome was very positive, and dune workers now maintain working relationship through a listserve (gldunes). The annual International Association of Great Lakes Research (Late May, 2007, in PA) will feature a session on dunes. New York will send two participants.

B. Planning

1. The Ontario Dune Coalition, a partnership of about 30 public and private organizations with common interest in the preservation and optimum use of the Eastern Lake Ontario dune system, with respect for private property, has commissioned an update of the NYS Department of State 1989 Eastern Lake Ontario Dune Management Study. The report is nearly complete, and has been presented to Dune Coalition members. The report has set forth a 16 point stewardship vision for stewardship of the dune system, together with a strategy for implementing the vision over the next decade. Highlights of the vision include:

- Recognition that the dunes and wetlands they shelter are one system and the goal is to develop widespread public appreciation of the system;
- Active management should aim to benefit the resource, as well as local residents, visitors, and the general public;
- Coordination of the work and interests of all entities is crucial;
- Management plans are needed for the various public properties, and these plans should reflect balance between conservation and beneficial use;
- Regulation should address issues of public health, safety, and welfare, and include dealing with the potential impacts of flooding and erosion, as well as motorized water traffic;
- Activities should seek sustainable economic benefits, while considering the issues of carrying capacity and cumulative impacts;
- Shoreline management should respect the natural protective features and use non-structural methods as much as possible.
- Planning should occur at the municipal and county level as well, especially for inlet management at Sandy Pond;
- Adequate funds should be developed for effective planning and management;

- All plans need to allow for response to changing conditions.

2. Additional Planning efforts underway in the Eastern Lake Ontario include:

- Comprehensive Plan for Pulaski/Richland (contractor is CNY Regional Planning and Development Board);
- Comprehensive Plan for the Town of Sandy Creek (contractor is CNY Regional Planning and Development Board);
- Salmon River Watershed Plan (contractors are Tug Hill Commission and The Nature Conservancy);
- Sandy/South Sandy Creek Watershed project (contractors are Tug Hill Commission and The Nature Conservancy). While the watershed of Sandy and South Sandy Creek lie to the north of Oswego County, this project includes the shoreline beaches and dunes as well as the watersheds of Deer Creek, Little Sandy Creek, Lindsey Creek, and Skinner Creek, all of which lie largely within the County. Scientists and interested members of the community have been involved in meetings to give input to selecting conservation targets and evaluating threats to the system. A meeting to consider conservation strategies is planned for spring 2007.

D. Education

The Eastern Lake Ontario dune system and the adjacent Salmon River Corridor support significant holdings of public conservation lands. Both areas are prized for public recreation. Within Oswego County, these resources include Deer Creek Marsh Wildlife Management Area and Sandy Pond Beach Natural Area, as well as Sandy Island Beach State Park and State Forest holdings in the Salmon River Corridor. In 2005, NYS Department of State outsourced education of its public recreation users of both systems to New York Sea Grant through a five year agreement to fund a Coordinated Steward Program. In 2006, Sea Grant fielded four, six month Salmon River Stewards and six summer Dune Stewards. The mission of the Stewards is to educate visitors to use the areas in an environmentally responsible way. The response to the program has been very favorable, from the standpoint of both land managers and resource users.

In addition, the very popular educational booklet, *Sand, Wind and Water* has been updated and reprinted, with funding from NY Sea Grant, The Nature Conservancy, Friends of Sandy Pond Beach, the John Ben Snow Foundation, and NYS Department of State. Copies may be obtained from NY Sea Grant.

6. Phoenix/Schroepfel Area

The Village of Phoenix and Town of Schroepfel have a history of water concerns, including water supply and quality, proposed water districts, and zoning issues regarding minimum lot size requirements to protect the extensive Sand Ridge aquifer. Based on 2000 census data, parts of the Village of Phoenix and Town of Schroepfel fall within the Syracuse urban area as defined by the new Phase II Storm Water Regulations. As such, the Town and Village have been designated as municipal storm sewer systems (MS4), requiring them to implement education and management practices to protect the quality of local water bodies. Progress is being accomplished with new water lines, new water districts and new sewage lines being established, and a new water tower completed and online. With the proposed development of Destiny USA in northern Onondaga County (a retail, research and tourism center, which would include the largest shopping mall in the United States), as well as suburban sprawl from Syracuse, there may be increased pressure for development to the north, into the Phoenix/Schroepfel area. Such development will require detailed assessment and planning to ensure the continuation of a high quality water supply to the residents of the southern part of Oswego County.

Of potential impact to the Phoenix/Schroepfel and other downstream Oswego River communities is the new waste treatment facility to be built near Armory Square in Syracuse. During heavy precipitation events, the rebuilt waste water treatment facility on Hiawatha Boulevard could not handle the combined storm sewer overflow and residential waste water. The treatment facility had to discharge to Onondaga Lake, which then drains north ultimately to the Oswego River. If predicted development associated with Destiny USA transpires, it is essential that any new facility be sized and designed to handle high inflow conditions to reduce the need to discharge partially or untreated effluent into local water bodies.

7. Sandy Creek/Lacona and Mexico Area Wellfields

The Towns of Sandy Creek, Lacona and Mexico have all investigated identifying and developing new wellfields as municipal water sources to support the increasing needs of their residents. The EMC previously delineated the current municipal wellfields and recharge areas for Sandy Creek/Lacona, and provided recommendations regarding associated compatible development within the various recharge zones. Similar information would be very beneficial for any new wellfield development in these towns, as well as for other wellfields presently in use throughout the County. This will become even more beneficial as towns, and perhaps even the County, establish new water districts in the future. Previously, the EMC was able to accomplish these studies using grant money with matching funds from the involved municipalities. With the loss of EMC funding at the County level, the EMC will likely not be able to support these types of studies in the near term.

8. Oneida Lake North Shore

Land Use

Real estate speculators are buying large parcels of forest land north of Oneida Lake, especially near water bodies. Often they are then harvesting the timber without regard for sustained yield, subdividing the land, and marketing it to buyers in large urban areas around the country. These forest blocks are being fragmented, taken out of production, and many are being occupied by low value structures that exploit a loophole in the state building code. A memorandum of understanding from the New York Department of State defines a classification of building referred to as "Group U" that is not required to conform to the standards set forth in the Uniform Fire Prevention and Building Code for residential structures. One caveat of the definition is that these structures can not have plumbing, sinks, toilets, or utilities of any kind. Mixed use development is spreading along major roadways into townships that have little or no land use control. The absence of planning and zoning in these communities allows a chaotic and inefficient development pattern to occur. In some places, public utilities are being extended into these unplanned areas without consideration of the impact of the consequential development.

Nuisance/Invasive Species

The north shore of Oneida Lake (the largest body of water wholly within New York State) forms a large part of the southeast border of the county, and represents a major recreation area for residents and visitors. The lake supports populations of at least three invasive plants. Eurasian milfoil has been documented in the lake since the 1970s, although its population appears to have been kept in check by a non-native insect (*Acentria*) which feeds on the plant. Water chestnut appeared in the western part of the lake in 1999, and has the potential to severely impact shallow water habitats in the lake. Purple loosestrife has out-competed native cattails and other native plants, and dominates many marsh areas along the lake. Loosestrife is not used extensively by any native birds or mammals as a food supply, and may result in their abandoning areas dominated by this plant. Water chestnut and loosestrife may require extensive remediation efforts in Oneida Lake.

Invasive plant species are making inroads into the interior of the county and they are currently unchecked. Phragmites is following the highways northward from the lakeshore and invading the roadside wetlands. The plant is established along the road edge in many places and beginning to spread through the adjacent wetlands.

Japanese Knotweed has established robust stands along State Route 69 and is present in many populated areas. This plant can become dominant and almost impenetrable along stream banks, compromising important riparian habitat and preventing recreational access.

9. Lake Ontario

A. Water Withdrawal

In December 2005 The Great Lakes Governors and Premiers signed agreements at the Council of Great Lakes Governors' (CGLG) Leadership Summit that provide protection for the Great Lakes–St. Lawrence River Basin.

The agreements include the following points:

- There will be a ban on new diversions of water from the Basin. Limited exceptions could be allowed, such as for public water supply purposes in communities near the Basin, but exceptions would be strictly regulated.
- The States and Provinces will use a consistent standard to review proposed uses of Great Lakes water.
- The collection of technical data is to be strengthened, and the States and Provinces will share the information, which will improve decision-making by the governments.
- Regional goals and objectives for water conservation and efficiency will be developed, and they will be reviewed every five years. Each State and Province will develop and implement a water conservation and efficiency program.
 - Lasting economic development will be balanced with sustainable water use to ensure Great Lakes waters are managed responsibly.
- The waters of the Basin are recognized as a shared public treasure and there is a strong commitment to continued public involvement in the implementation of the agreements.

B. Lake Level Regime Change

A draft of the International Joint Commission's (IJC) Lake Ontario-St. Lawrence River Study was released for comment in 2005. This study assessed and evaluated three different plans (A, B, C, also known as the Economic Plan, the Environmental Plan, and the Blended Plan) to regulate outflows from Lake Ontario through the St. Lawrence River. The plans are available at www.losl.org for review. There are many concerns regarding the plans, including lack of proposal for a long range plan and the failure to provide an adaptive management strategy, (which would allow reaction and decisions to be made as changes in the water level occur) rather than hard plan which may not be able to react as quickly as needed. Both the Oswego County EMC and the Oswego County Legislature submitted letters in August 2006 supporting Plan B. Updated information is available at the website above.

C. Lake Restoration Collaboration

Following a public comment period, the final *Great Lakes Regional Collaboration's Strategy to Restore and Protect the Great Lakes* was released in December 2005. The Governors of the eight Great Lakes States expressed strong support for the Great Lakes Collaboration Implementation Act introduced in the U.S. Senate and House of Representatives. These bills would implement the recommendations of the Great Lakes Regional Collaboration, a strategic planning effort in which the Governors played a

leadership role. New York Governor George Pataki said: "This legislation is critical to preserving and sustaining these valuable resources and we look forward to continuing to work with our partners as we move forward to implement the Great Lakes Regional Collaboration Strategy."

Agencies, non-profits, and tribal interests throughout the Lake Ontario Basin have also been working on a Bi-national Habitat Conservation Strategy for the Lake Ontario ecosystem during 2005-2006. The project undertakes an objective of the bi-national Lake wide Management Plan for Lake Ontario. It is a public process intended to achieve the following goals:

- Coordination of the Lake Ontario-focused work of the various agencies and entities on both sides of the border,
- Maintain and/or restore or enhance self-reproducing and diverse biological communities,
- Assure that contaminant levels do not limit the uses or health of people or plants and animals.

Using the same methodology that has been in use over the past several years for the Salmon River Watershed Plan, the planning team includes a long list of entities on both sides of the border, including American experts from NYS DEC, Department of State, the Army Corps of Engineers, Tug Hill Commission, and scientists at Cornell. ESF, and SUNY Brockport. The process is being coordinated by David Klein and Dan Kraus, of The Nature Conservancy in the US and Canada, respectively. To date the group has met for three workshops to consider conservation targets, threats to those targets, and strategies for management action.

D. Sport Fishing

Research continues on the impact of zebra mussels and quagga mussels on the Lake Ontario food chain and the lake's salmon and trout fishery. Some reports indicate that the filter feeding mussels have removed large amounts of zooplankton and phytoplankton (microscopic and nearly microscopic animals and plants) from the water column. This has the dual effect of increasing water clarity, and decreasing the amount of food available for the bait fish which rely on this plankton for food. This in turn reduces the available population of bait fish preyed upon by major game fish such as salmon and trout. The number of game fish and their average size may experience a decrease as a result, which would have an impact on the local sport fishing industry. New exotic species seem to appear regularly and the impact of these exotics on the natural ecology of the lake is still unknown. Federal regulations governing ballast water discharges / impacts from ocean going ships that transverse the St. Lawrence River and Lake Ontario have effectively addressed a way to stop the continuing spread of exotic species.

E. Recreational Diving

The vastly improved water clarity resulting from zebra mussels has contributed to an increase in recreational diving in Lake Ontario. The southern shore of Lake Ontario has many documented shipwreck sites, which have proven to be popular locations for recreational divers to explore.

F. Wind Power Development

Proposals to develop wind powered turbines along the southeast shore of Lake Ontario have generally included turbines sited off-shore. The southeast shoreline of Lake Ontario is widely regarded as an important avian migratory pathway. In the spring, large concentrations of raptors (birds of prey such as hawks, falcons and eagles) have been well documented along the lake's on shore and near shore regions. The impact of wind turbines on these species needs to be further assessed in regard to this particular section of Lake Ontario. The focus of the 2005 New York State Association of Environmental Management Councils annual meeting was on wind powered turbines, indicating the widespread interest and concern over the impacts of developing this resource.

OSWEGO COUNTY ENVIRONMENTAL MANAGEMENT COUNCIL 2006 ANNUAL REPORT

INTRODUCTION

By State law and County Resolution, the EMC's primary mission is to serve as a review and advisory board to local and state government on matters affecting the protection, conservation, preservation and proper management of the natural resources of Oswego County. In 1996, the Council agreed to serve as lead agency for the purpose of implementing eight major strategies of the Oswego County Comprehensive Plan. These strategies are:

- II.4.b. Identify potential wildlife movement corridors between major open space areas and encourage their incorporation into greenway, trail and local comprehensive planning efforts.
- II.4.d. Work with the NYS Natural Heritage Program to inventory habitats of threatened, rare and endangered species throughout Oswego County and identify areas with unique or important ecosystems that warrant protection.
- II.4.e. Encourage landowner agreements or donation of conservation easements by waterfront industries for the purposes of habitat protection, especially along Lake Ontario and major waterways.
- V.2.a. Develop a comprehensive inventory of all data on municipal wellfields, zones of contribution, recharge areas, aquifers and potential aquifers in the County and seek funding to more accurately determine these areas.
- VIII.3.b. Identify resources that have scientific or educational importance and natural heritage value and encourage education, interpretation and research opportunities relating to these resources.

- IX.3.c. Encourage development of and develop nature interpretive facilities focused on the major natural resource areas of the County.
- IX.5.b. Advocate proactive solutions and flexible regulatory approaches to environmental issues so that regulations do not become a hindrance to appropriate development.
- X.4.b. Develop environmental education and research programs to enhance knowledge and awareness of the local environment.

GRANTS RECEIVED AND ADMINISTERED

During 2002 the EMC generated \$119,874 in State and Federal grant funding. Within these grants \$12,453 was returned to the county to cover their administration by the EMC staff. Due to the EMC's loss of funding and Program Coordinator, administration of any previously received grants was turned over to the Oswego County Department of Planning and Community Development (OCP&CD) in 2003. No new grant applications were filed by the EMC during 2006.

MAJOR EMC ACTIVITIES

1. EMC Strategic Plan and Membership

EMC members developed and approved the 2006 EMC Strategic Plan and assigned members to lead and be responsible for various portions of the plan. Major activities in the 2006 Strategic Plan included continued monitoring of the progress of the Salmon River Corridor Bio-Inventory Project and the Salmon River Watershed Conservation Plan project, development and coordination of local Earth Day activities, participating in many local environmental organizations, providing support to the Planning Department for the implementation of the Oswego River Greenway Brownfield project, regular review of the Environmental Notice Bulletin for projects with potential impact on Oswego County natural resources, researching and developing informational materials as requested by local governing bodies, and continuing the EMC guest speaker program for education about current environmental issues. Reports by members were provided at monthly meetings as progress was made on the many aspects of the plan.

The EMC actively recruited new members during the year to fill vacancies, meet permissible membership levels, broaden the Council's knowledge and experience base, and establish a broader geographic distribution of its membership. In the coming year, the EMC will continue to refine its structure, pursue grants and other funding sources in order to establish a countywide Household Hazardous Waste Collection day, and recruit new members as needed.

In 2006, the Legislature merged the Department of Promotion/Tourism with Economic Development and Planning under David Turner. The EMC held several discussions to assess its role in this new structure. The EMC affirmed it will continue to pursue its

primary mission as an advisory group to the County Legislature, and will continue to maintain a close working relationship with the County and other local bodies.

2. Lake Ontario/St. Lawrence River (Strategies IX.5.b and X.4.b)

In 2005, the Lake Ontario - St. Lawrence River Study Board entered the final year of a comprehensive five-year study for the International Joint Commission (IJC) to assess and evaluate the current criteria used for regulating water levels on Lake Ontario and in the St. Lawrence River. The current criteria in effect were established in 1958. The three proposed plans are the Economic Plan, the Environmental Plan, and the Blended Plan. EMC previously reviewed the three new plans and submitted a letter to the IJC indicating its support for the Environmental Plan, which has favorable provisions regarding hydroelectric power and lake and shoreline biota.

In 2006, after receiving public comments, additional revisions to the plan were made. In response to the revisions, the EMC reviewed, revised and resubmitted its earlier comments. The EMC also provided input to the Oswego County Legislature for the submission of the Legislature's comments.

3. Ontario Coastal Wetlands Bioinventory/Salmon River Watershed Conservation Plan/Salmon River Corridor (Strategy II.4.d, II.4.e, VIII.3.b., IX.5.b.)

As part of this project, the EMC originally contracted with the Natural Heritage Program (NHP) in 2001 to conduct a biodiversity inventory of selected coastal wetlands in Oswego County. In early 2004, the current contract to perform a biological inventory on several wetland communities in the Salmon River corridor was amended and extended to September 30, 2005. The New York State Natural Heritage Program (NYSNHP) was contracted to carry out the work. Requests to landowners for permission to access these wetlands were sent out, with 77 landowners responding. The results of this inventory will provide the EMC and other interested parties (NYSDEC, NYSNHP, developers and planning boards) with accurate, up-to-date information on uncommon plants, animals and rare or exemplary ecological communities that occur in the Lake Ontario coastal wetlands. The information will be a valuable supplement to existing information used for land use management planning.

EMC continued to monitor progress of activities in the corridor. New York State is continuing to acquire properties, and is looking to be more proactive in terms of protecting some properties prior to actual acquisition. The first draft of the Habitat Assessment was issued for review in 2006, and the selection of target species and habitats began in the fall.

Also in 2006, private citizens began working on a river corridor trail in the Village of Pulaski.

4. Oswego County Aquatic Vegetation Control Program (Strategy X.5.b.)

In 2006, the EMC continued distribution of its series of pamphlets on nuisance aquatic vegetation found in Oswego County. The Woodstock EMC was given a copy of the water chestnut brochure, and given authorization by the EMC to reproduce them as needed.

John DeHollander of the Oswego County Soil and Water Conservation District continued to update EMC on the results of its water chestnut control program. He presented the EMC with the final report on the 2006 Aquatic Vegetation Control Program. In response to questions from the EMC, he also noted that the biocontrol research program is essentially on hold at this time due to a current lack of funding.

5. Local Involvement (Strategy IX.5.b. and X.4.b.)

EMC members have served as members and liaisons on several local environmental groups and initiatives, including the Dune Coalition, Lake Neatahwanta Reclamation Committee, Save Oswego County Land Trust, Salmon River Watershed Conservation Plan, Water Quality Coordinating Committee, St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM), Friends of Great Bear and Friends of the Oswego River Canal. Periodic reports to the EMC regarding the activities of these groups add to the breadth and depth of EMC knowledge regarding environmental issues in the County.

EMC provided nuisance aquatic vegetation fact sheets for the annual open house at the Altmar Fish Hatchery.

EMC also sponsored a proclamation in the County Legislature for Earth Week, encouraging local residents to “participate in Earth Week Clean-ups and Celebrations and to proudly accept responsibility for their part in securing a safe health environment for the generations to come.”

8. Household Hazardous Waste Collection Funding (Strategy IX.5.b.)

The EMC continued to work with the Legislature regarding costs and funding of a Household Hazardous Waste Collection day, with the goal of establishing a county budget line item for the event. As a result of these efforts, household hazardous waste collection days are being planned to be held in 2007.

9. Solid Waste Management (Strategy IX.5.b.)

EMC Chair Dave Hertzler acted as EMC observer to the County Solid Waste Management Board, and provided regular updates to members on solid waste issues in the County. In February 2006, the EMC reviewed and discussed a consultant's report on the Management and Operation of the Oswego County Solid Waste System. The consultant noted that privatized operation of the County landfill was not feasible due to the competition and supply/demand for waste.

10. Alternate Fuels

In 2006, the EMC submitted its final biodiesel report and fact sheet to County Legislature Chairman Russ Johnson.

CONCLUSION

Oswego County continues to possess high quality water supplies and an impressive diversity of species and habitats. The major environmental threat is from development near the most sensitive of these valuable resources. This threat has increased with the recent economic downturn in the County, which has generated pressure to increase local tax revenues whenever and wherever possible. The primary role of local decision-makers should be to evaluate development and projects in light of potential environmental impacts, and to attempt to promote development compatible with the area's resources. In light of its lead agency status for several Oswego County Comprehensive Plan strategies, the EMC's ability to collaborate, coordinate, facilitate and educate remains an important resource for local planners and developers.

PUBLICATIONS AVAILABLE FROM THE EMC

"Biodiesel and Biofuel Information Report", Oswego County Environmental Management Council Report: 2005.

"Eurasian Watermilfoil Alert", Oswego County Environmental Management Council: 2002.

“Household Hazardous Waste Clean-up Day Funding Report”, Oswego County Environmental Management Council Report: 2005.

“Purple Loosestrife Alert”, Oswego County Environmental Management Council: 2002.

“Water Chestnut Alert”, Oswego County Environmental Management Council: 2002.

“Welcome to the Oswego River and Canal, Boating Wakes and Shoreline Erosion.” Oswego County Environmental Management Council: 2001.

“Wind Power Resource Materials: Oswego County Wind Power Project.” Oswego County Environmental Management Council Resource Paper: August 2003.

“Backyard Burning, A growing pollution problem.”, NYS Legislative Commission on Solid Waste Management.

“Clean Water and You, What you can do about nonpoint source pollution”, New York Soil and Water Conservation Districts.

“Stormwater Runoff: the problems.” New York State Department of Environmental Conservation.

Current EMC Membership

Dr. David R. Hertzler, Chair	Town of New Haven
James Best, 1 st Vice Chair	Town of Granby
Fran Verdoliva, 2 nd Vice Chair	Town of Mexico
Sandra Bonanno, Secretary-Treasurer	Town of Volney
Legislator Barbara Brown	Town of Palermo/Hastings
Tim Carroll	Town of Granby
Dick Drosse	Town of Minetto
Alix Krueger	Town of Albion
Dr. Peter Rosenbaum	Town of Minetto
Don Ross	City of Fulton
Hal Smith	City of Oswego
Dale Young	Town of Hannibal
Karen Noyes, Ex-Officio	Oswego County Department of Planning and Community Development
John DeHollander, Ex-Officio	Oswego County Soil and Water Conservation District