



Oswego County
Environmental
Management Council

2011 STATE OF THE ENVIRONMENT

AND

2010 ANNUAL REPORT Of ACTIVITIES

<http://www.oswegocounty.com/planning/emc>

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**Oswego County Environmental Management Council
2011 State of the Environment and 2010 Annual Report of Activities
Executive Summary Outline**

State of the Oswego County Environment

The report provides a summary of the environmental issues and concerns in the following areas:

- An overview of Oswego County environmental issues and concerns in general, including nuisance aquatic vegetation and invasive species, wetlands legislation, inactive hazardous waste sites, household hazardous waste, oil and natural gas drilling, wildlife corridors, and county water resources
- Salmon River Corridor and Tug Hill, including potential impacts to the Salmon River, its tributaries, headwaters, unique habitats, New York State Department of Environmental Conservation (NYSDEC) initiatives in the corridor and watershed, and impacts of recreational activities on the Tug Hill
- Oswego River Corridor, particularly brownfields assessments and redevelopment, and shoreline erosion
- Lake Neahtahwanta reclamation
- Lake Ontario Coastline and adjacent uplands, including the coastal wetlands and dune system, Lake Ontario basin-wide education, collaboration and planning efforts
- Sandy Creek/Lacona, Mexico and Phoenix/Schroepfel water issues, including the proposed integrated beef cattle finishing/processing and closed loop ethanol production facility
- Oneida Lake north shore land use, nuisance and invasive species, and the Oneida Lake watershed management plan
- Lake Ontario water withdrawal, lake level regime changes, lake restoration collaboration, sport fishing, recreational activities, and wind power development issues
- Air quality issues in the county due to new EPA ozone and particulate standards

2010 Annual Report of EMC Activities

As lead agency for eight major strategies of the Oswego County Comprehensive Plan, the EMC participated in several projects and initiatives to support these strategies. The report provides information on the EMC involvement with the following:

- EMC Strategic Plan and Membership
- Bion closed loop beef finishing/processing and ethanol production facility proposal
- New York State Association of Environmental Management Councils annual meeting
- Oswego County Aquatic Vegetation Control Program and invasive species management
- Local environmental groups and initiatives such as the Ontario Dune Coalition, Lake Neatahwanta reclamation, Salmon River Watershed Conservation Plan, Water Quality Coordinating Committee, St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM), Oswego

County Solid Waste Management Board, Friends of Great Bear, Friends of the Oswego River Canal, and Oswego County Green Team

- Solid Waste Management, including household hazardous waste
- Alternate fuels projects and development in the County, including hydrofracturing for natural gas
- EMC website and information
- Water resources management via the establishment of a county-wide Water Resources Commission by the legislature
- Open burning laws and issues
- Other EMC activities

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 national economic downturn which has generated pressure to increase local tax revenues whenever and wherever possible and to reduce funding for environmental concerns. 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.

Oswego County Environmental Management Council 2011 State of the Environment

INTRODUCTION

The Oswego County Environmental Management Council (EMC) 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 Categories

A. Nuisance Aquatic Vegetation and Invasive Species: Nuisance aquatic and terrestrial 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*), pale swallow-wort (*Cynanchum rossicum*), zebra mussel (*Dreissena polymorpha*), quaga mussel (*Dreissena bugensis*), and round goby (*Neogobius melanstomus*) continue spread unchecked in many areas impacting native organism habitats and food chains, recreational activities, and aesthetics.

Japanese stiltgrass (*Microstegium vimineum*) was discovered at Selkirk Shores State Park in 2008, the first appearance of this species in all of Central and Northern New York. This species presents a significant threat to open wetland habitats in the County. State Parks once again held a volunteer work day to remove the infestation but continued attention is needed.

NYSDEC reports eleven known infestations of giant hogweed in the County, most of which were treated at least partially by either New York State Department of Transportation (US 104 east of Oswego and State Route 48 south of Oswego) or a NYSDEC hogweed management team in 2010.

In the past few years, pale swallow-wort (*Cynanchum rossicum*) has also been observed in a number of places including the Towns of Oswego, Richland, Palermo, and Volney, but especially in the Town of New Haven. Control costs, including educational campaigns and eradication will continue to require major planning and economic consideration at both Town and County levels. Oswego County lies within the service area of the St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM). SLELO is charged with coordinating efforts among all interested partners regarding prevention, early detection/rapid response, management, and education regarding invasive species of all types. New York State budgeted up to \$150,000 two years ago for support of this effort. SLELO was promised a state contract two years ago for this funding to hire a coordinator to be housed at The Nature Conservancy's Pulaski office and fund priority inventory and management projects. The contract has not yet been signed. EMC has designated a representative to this body.

The Oswego County Soil and Water Conservation District (SWCD) once again coordinated efforts to control the invasive exotic aquatic species water chestnut. State dollars were available through the Finger Lakes-Lake Ontario Watershed Protection Alliance (FOLLOWPA) annual invasive species control funding to SWCD. SWCD also received a commitment of federal stimulus dollars from the Great Lakes Restoration Initiative, which came through the US Environmental Protection Agency (EPA) to NYSDEC and then through FOLLOWPA to the Oswego County SWCD.

Once grant funding was secured, the County Legislature agreed to front the funding necessary to hire a contractor, Allied Biological, to chemically treat up to 213 acres on the Oswego River between Minetto and Phoenix. Results were very successful in killing over 200 acres of water chestnut. The Bassmasters group of Onondaga County provided necessary hand pulling efforts in the Oneida River, both in Onondaga and Oswego County waters, to control small manageable areas for water chestnut.

When the committed state and federal dollars are actually reimbursed to SWCD, and SWCD reimburses the County for the funding fronted during the summer, there will still be monies available to underwrite the 2011 program as long as funding arrives before the critical season for treatment. Requests for proposal (RFPs) have gone out to certified pesticide applicators for the 2011 season's work. The SWCD will face a revised NYSDEC permitting process this year. It is not known whether this will impact obtaining the necessary permit. As of January 1, 2011 no state or federal reimbursement money has been received.

Potential insect invasions have become a threat to Oswego County. Emerald ash borer (*Agrilus planipennis*), Asian long-horned beetle (*Anoplophora glabripennis*), and hemlock wooly adelgid (*Adelges tsugae*) are approaching and have the potential to decimate timber resources in the County. Prevention is the most cost effective measure for dealing with invasives and DEC's recent directive to ban movement of firewood further than 50 miles is an effort to prevent arrival of these insects.

The Nature Conservancy has received grant funding to address invasive species in the coastal zone along the eastern shore of Lake Ontario in 2011. This grant will provide some capacity for management of water chestnut, glossy buckthorn, phragmites, and purple loosestrife in the County in the coming three years. SWCD has also made its annual request for 2011 invasive species funding through FL-LOWPA.

B. Wetlands and 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.

Several EMC members are actively participating in the Marsh Monitoring Program (MMP). Bird Studies Canada, in partnership with Environment Canada, developed the MMP in Ontario in 1994. With the financial support of the US EPA, Great Lakes National Program Office, and the Great Lakes Protection Fund, the MMP was launched throughout the US Great Lakes States in 1995. Carried out by a network of volunteer surveyors, the MMP functions to provide long-term monitoring of marsh-dependent bird, frog, and toad species in marsh habitats throughout the Great Lakes basin. Data collected by MMP volunteers is used to determine long-term trends in species diversity, occurrence, and abundance, and to directly inform and guide conservation, restoration, and management programs for marshes and their bird and amphibian inhabitants.

C. Hazardous Waste Sites: Several inactive or delisted hazardous waste sites currently exist in the County. Among them are the Pollution Abatement Services (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 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 presence of hazardous materials at these locations.

D. Household Hazardous Wastes: In 2008 the County appropriated funds for the construction of a permanent Household Hazardous Waste Facility to be located at the Bristol Hill Landfill. The facility began operation on May 6, 2009. Utilization dropped

by almost half in 2010. The County will explore increased promotion of the program in 2011.

E. Oil and Natural 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 identify and mitigate possible impacts.

Beginning in 2009, New York State experienced rapid expansion of interest in natural gas development in the Marcellus and Utica shale formations using hydrofracturing (hydrofracking) well development techniques. While used for many years in other areas of the country, hydrofracking presents a number of environmental challenges, including wastewater disposal and potential surface well contamination. While the Marcellus and Utica formations do not extend into Oswego County, the EMC continues to monitor the use of this technology in near-by counties and other states. At this time, New York State has a moratorium on hydrofracking in order to examine the environmental and economic impacts of this drilling technique.

F. 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 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, such as the proposed coal gasification project in Scriba along the Lake Ontario shoreline, needs to be managed in relation to the preservation of open space and wildlife corridors. Development must be planned to mitigate impacts to these valuable habitats and improve the quality of life for County residents.

G. County Water Resources: Oswego County has been blessed with an abundant supply of high quality surface and ground water resources including three major aquifers. Protecting and enhancing these valuable resources are important objectives. Since conservation of resources is generally a step behind development and appears all too often as an afterthought, the necessity to aggressively address local water quality and quantity is imperative.

The Tug Hill Aquifer is a 47-mile long, 103 mi² aquifer system that extends from southern Jefferson County, through Oswego County and into Oneida County. It is the source of drinking water for eleven municipalities as well as the source for private wells serving residences, manufactured home parks, camp-grounds, and other facilities. Water from the aquifer is also used for manufacturing, the dairy processing

industry, agriculture, and the NYSDEC Fish Hatchery in Altmar. Several streams that are hydraulically connected to ground water in the central part of the aquifer are critical fish habitat for salmon and trout and help support a significant recreational fishing economy.

Critical issues facing this aquifer are impacts from withdrawal and significant development pressure. The northern portion of the aquifer has been designated as a Sole Source Aquifer by the US EPA. Several large changes in withdrawal rates from the aquifer have occurred, or are proposed, including cessation of pumping of a well field for a paper company, purchase of those wells for expanded municipal water systems, potential water bottling operations, and declining yields from an aging well field at the state fish hatchery. There are concerns about increased long-term development over the aquifer, especially in the northern part due to development associated with the expansion of the military base at Fort Drum. Local and state governments, commercial, farming, and individual water users need information to understand what effects these activities may have on the aquifer and how to sustain this resource in support of future growth and economic development.

The Sand Ridge Aquifer is another major County groundwater resource. The aquifer is comprised of a narrow 13 mile long band of glacial deposits and is located mostly in the Towns of Palermo and Schroepfel. The aquifer is recharged primarily by precipitation and discharges to wetlands and the Oneida River. There are two municipal wells in the Town of Schroepfel supplying the village of Phoenix as well as many private domestic wells. Major threats to the aquifer include the possible development of a closed-loop 72,000 head cattle finishing/processing and ethanol production facility, expansion of gravel mining operations, and increased withdrawal associated with future development in the southern part of the County.

The Great Bear Springs (also known as the Fulton Aquifer) are a source of water for the City of Fulton and have been designated by New York State as a primary aquifer. The aquifer is comprised of various surficial glacial deposits. According to the current County Comprehensive Plan, the wells currently in use produce an average of 1.6 million gallons per day with a maximum daily production of 2 million gallons. The City of Fulton also owns three wells near the Oswego River and the former Miller Brewing plant. The wells are contaminated by chemical wastes, but are capable of producing an average of 800,000 gallons per day. At the present time, water from two wells is treated to remove the contamination and the water is then sent to the City's distribution system. Any developments over this aquifer must be carefully considered in relation to impacts to the quantity and quality of the water supply.

Major County surface water resources include Lake Ontario, the Oswego River, the Salmon River, Lake Neatahwanta, and numerous small ponds and streams. In addition, the County contains over 80,000 acres of wetlands, comprising some 13% of the County's total land area. Impacts of development on and near these resources must be addressed in relation to benefits such as flood control, recreation, wildlife habitat, and maintenance of groundwater quality.

2. Salmon River Corridor and Tug Hill

A. Salmon River Bio-inventory: Field work assessing the condition of natural resources within the 173,000 acre Salmon River Watershed was completed in 2008 by the NY Natural Heritage Program - a partnership between the Nature Conservancy and NYSDEC. The Tug Hill Commission facilitated the project and administered grant funds awarded by the US Fish and Wildlife Service. A final assessment report was produced and distributed to participant agencies, county, town, village governments, local public libraries, and the public. The report, "Salmon River Watershed Biodiversity and Ecological Habitat Assessment", can be accessed from the Tug Hill Commission website www.tughill.org. NYSDEC is presently using the assessment report in the Upper Salmon River Unit Management Planning Process.

B. NYSDEC Initiatives: Ownership of Niagara Mohawk Power Corporation land along the Salmon River Corridor was negotiated as part of a legal settlement with the present company National Grid. Completion of surveying of the acquired properties is expected in spring 2011. Along with other technical aspects of finalizing the acquisition process it is anticipated that closing on the property will take place by summer 2011.

The NYSDEC will still actively look for and pursue opportunities within the Salmon River Corridor where acquisition or conservation easements with willing land owners can take place. Any consideration for land acquisition would be undertaken to consolidate ownership with State Forest Lands, improve corridor protection, and provide additional public access to those lands. Acquisition would be consistent with the New York State Open Space Plan.

Funding for acquisition from the Environmental Protection Fund is in accordance with Environmental Conservation Law [Section 54-0303] which gives the local town where the land is located the opportunity to object to the acquisition. However, ongoing NYS budget constraints are limiting land acquisitions at the present time.

A 2008 settlement with Occidental Chemical has provided funding of NYSDEC Salmon River Corridor projects, including \$500,000 for stream bank restoration and trail development. Currently, designs are being initiated. Finalization of the land acquisition with National Grid, giving ownership to NYSDEC, will facilitate actual project implementation. Additional funding that can be combined with the above is also being pursued for stream bank restoration through the Army Corp of Engineers from the Great Lakes Restoration Initiative.

Region 7 Lands & Forests staff conducted a public scoping meeting in May 2009 to gather public comments on DEC managed land in the Upper Salmon River Unit Management Plan area that includes five state forests, fishing access sites and boat

launches, Conservation Easement Lands, and a pending new acquisition of land from National Grid located on the Salmon River Reservoir. Development of management plans by DEC staff initiated in 2009/2010 is ongoing and will be followed by a draft management plan that will be presented to the public for further comment.

C. Salmon River Flooding: Major flooding occurred on the Salmon River in the fall of 2010 with a flow of 25,000 cubic feet per second - the second highest flood on record for the river. The flooding resulted in severe damage to the streambed, stream banks, and adjacent state lands and properties such as public fishing access sites and boat launches. Significant damage was done to a retaining wall in the Village of Pulaski near the sewage treatment facility. NYSDEC is working with the US Army Corp of Engineers to develop plans for the reconstruction of this damaged section of river in Pulaski. Local and state government officials are investigating sources of funding for the repairs which were estimated at one million dollars.

D. Sport Fishing: The impact of invasive aquatic species continues to threaten the ecology of Lake Ontario. Development and implementation of federal and state regulations governing ballast water discharges are necessary to stop the continuing spread of exotic species.

New threats such as Asian carp, which could enter the Upper Great Lakes via the Mississippi River and connecting canal systems, loom on the horizon. If this species was to become established in the Upper Great Lakes, they could eventually make their way downstream to Lake Ontario. Asian carp could have a devastating impact on the existing food chain, the lake's cold water salmon and trout fisheries, and the inshore warm water fisheries.

Sport fishing in Oswego County and Lake Ontario provides a multimillion dollar economic impact to the local communities along the shoreline. In the summers of 2009 and 2010 naturally reproduced young-of-the-year Atlantic salmon were found in the Salmon River during research sampling by the United States Geological Survey and NYSDEC. Natural reproduction of Atlantic salmon had not been documented in the river since the late 1800s.

Atlantic salmon have been stocked at low levels in the Salmon River since 1996 to provide a presence of this native species, to provide trophy angling opportunities, and to continue researching the potential of future restoration. It was believed that Atlantic salmon in Lake Ontario feeding on a diet of alewives (*Alosa pseudoharengus*) (a non-native forage species which has high concentrations of the enzyme Thiaminase, resulting in a thiamine [Vitamin B1] deficiency) would cause reproductive failure and limit the success of restoring the salmon. Recent changes in Lake Ontario's forage base, including a significant decrease in alewives, may be creating a more diverse food source for Atlantic salmon thus increasing their ability to reproduce successfully. A marked increase of Atlantic salmon catches in Lake Ontario the past two years may be an indication that Lake Ontario may once again be able to support a viable naturally reproducing population of this popular sport fish.

From part of the financial settlement with Occidental Chemical, NYSDEC purchased a mass-marking trailer. This has allowed the fin clipping of all Chinook salmon stocked in Lake Ontario since the spring of 2008. The technology allows, for the first time, all 1.8 million Chinook salmon to be fin clipped to distinguish between hatchery produced and naturally reproduced fish. The Salmon River is known to have reproduction levels of Chinook salmon in the millions on an annual basis. Until now there was no way to know the actual survival rate of these fish and their contribution to the fishery. With the marking of all hatchery fish this question can now be addressed.

Early indications from sampling in the lake show naturally-reproduced Chinook salmon accounted for approximately 31% of the fish caught by anglers. Approximately 57% of adult Chinook salmon returning to the main stem of the Salmon River were unclipped, naturally-reproduced fish, while returns to the Salmon River Hatchery, as expected, were predominately hatchery produced fin-clipped fish.

The Salmon River Tributary Creel Survey, conducted September through November 2010, showed that 705,000 angler hours (113,000 angler trips) were spent fishing on the Salmon River. This is an increase from the 634,000 angler hours recorded during the 9 month September through May 2006/2007 survey. The 2010 three month river survey was 76% of the total fishing effort expended on all Lake Ontario tributaries surveyed during 2006/2007. It also equaled 78% of the total Lake Ontario boat fishery effort and, if the survey had been carried out for the remainder of the year, more than likely would have surpassed the boat fishery.

Trends in fishing nationwide have shown declining participation. The Salmon River Survey results go against this trend and actually equal the fisheries' peak participation in the late 1980s. Catches in the lake boat fishery and the tributary fishery for salmon and trout have remained at a very high level for species such as steelhead and Chinook salmon. Steelhead catches in 2010 were at record levels in the boat fishery. Data on Lake Ontario Fisheries can be found in the NYSDEC 2011 Annual Report of the Bureau of Fisheries Lake Ontario Unit to the Great Lakes Fishery Commission Lake Ontario Committee.

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, 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 impacting 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 Oswego Harbor were delisted as a Great Lakes Area of Concern (AOC) by the International Joint Commission due to the efforts of several state and local groups and agencies. The delisting of Oswego Harbor and River up to the Varick Dam is addressed as an AOC under other programs.

NYSDEC is still working with the Open Space Institute to purchase Leto Island, a popular fishing access area on the Oswego River in the City of Oswego. The current owners would like to see the land remain open to the public through state acquisition. Private sale and development is an option if the sale to New York State is not accomplished. The completion of the sale has been hindered by a bridge that provides access to the area, presently owned by the NYS Canal Corporation and the NYS Department of Transportation, which is in need of rehabilitation.

B. Brownfield Assessments: Brownfields are defined as abandoned, idle or underused properties where expansion or redevelopment is complicated by real or perceived hazardous substances, pollutants or contaminants. A project entitled *The Oswego Canal Transformation Project: An Old Pathway to a New Economy* was implemented under the auspices of the Oswego County Department of Planning and Community Development in 2004. The objective of this project was to use US EPA Assessment Grant funds to perform environmental assessments on the most critical brownfield sites within the river 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 to: (1) evaluate sites which are petroleum contaminated and (2) evaluate sites that are contaminated with non-petroleum or hazardous substances.

To date, 107 brownfield sites have been identified in the Oswego Canal Corridor and 24% of these sites have had Phase I Environmental Site Assessments completed. The EPA grants term limits have closed with a NYS Brownfield Opportunity Area (BOA) Grant continuing with the brownfield projects located in the City of Oswego.

Five sites were prioritized and Phase II studies are underway at two sites in Fulton and one in Oswego. Upon completion of the Phase II work, 308 Harrison Street will be sold by the City of Fulton to a private owner and placed back on the tax rolls. The site at 62 N 5th Street will be transferred to an adjacent property owner. In Oswego, the site at 68 West First Street will be transferred to a private developer for redevelopment.

The County has a website which describes recent brownfield activity and progress. It can be found at: <http://co.oswego.ny.us/planning/brownfield.html>.

A direct link to the Oswego Brownfield Opportunity Grant information can be found at: <http://oswegoboa.com/>

C. Other Corridor Initiatives: Friends of Great Bear is a group 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, Town of Volney, the Canal Corporation, and private landowners. Several of its municipal water wells are located on the City of Fulton property. The adjacent property is owned by the Town of Volney. A diversity of flora and fauna can be found on the property and the bordering Oswego River and Canal. In cooperation with the City of Fulton, Town of Volney, and other landowners, the group's goals are advocacy for 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. During the 2010 season, a new trail including a bridge was developed and was color coded with trail markers. In addition, several plank bridges were built across muddy areas on the property.

Sunoco has modified and reopened the former Northeast Biofuels ethanol plant south of Fulton. All environmental, emergency, safety, and logistical issues identified with the Northeast Biofuels operation will remain as Sunoco moves forward. Start-up and production of ethanol has been ongoing since July 2010.

Shoreline erosion is of concern along most of the corridor. Lake Ontario water levels, storm and spring thaw run-off, and wakes created by boat traffic are among the factors that influence erosion of shoreline properties.

4. Lake Neatahwanta, City of Fulton and Town of Granby:

Lake Neatahwanta collects significant phosphorus loading from the inlet streams that drain the surrounding watershed. In 2001, it was estimated that 20 tons of phosphorus was deposited in the lake each year. A remediation plan, funded by a Federal grant of \$433,700 and the in-kind local share of \$354,845 (total of \$788,545) to reduce the phosphorus loading was implemented by the Lake Neatahwanta Reclamation Committee. Farm best management practices (BMPs) and riparian restorations on the inlet streams were initiated. It was projected that this plan would reduce the phosphorus loading to 7 tons per year. This plan was completed in 2008 and all funds have been exhausted. The present loading on the lake has not been verified.

The Committee was never formally disbanded but has not functioned since 2008. The last step planned for lake restoration was to dredge the lake bottom. The Mayor of Fulton has a plan for building a hydraulic dredge from available materials and operating it with volunteers. This plan, if implemented, would reduce dredging costs but significant funds would still be needed. No funds are immediately available.

The Town of Granby Supervisor has created a new committee. When this committee becomes active, the EMC will be invited as observers.

5. Lake Ontario Coastline and Adjacent Upland Areas

According to NYS Department of State's 2007 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 is a priority conservation site within the Nature Conservancy's Binational Blueprint for Conservation of the Great Lakes and a DEC designated Natural Heritage Area. DEC recognizes several significant fish and wildlife habitats within the complex. The NYS Department of State has delineated several significant coastal fish and wildlife habitats within the complex as well.

A. Coastal Wetlands: The fall flight of the bog buckmoth (*Hemileuca sp.*, New York Endangered) was monitored only on the Nature Conservancy's Rainbow Shores Preserve in 2010, because of lack of funding. Genetic research, however, is ongoing at SUNY Oswego.

Bog turtle (*Glyptemys = Clemmys muhlenbergii*) (Federal Threatened, New York Endangered) research and conservation activities are ongoing at three sites in Oswego County conducted by SUNY-Oswego researchers and state, federal, and non-governmental organization collaborators. A Nature Conservancy grant for invasive species management includes work on Selkirk Fen to remove glossy buckthorn from the fen in order to improve habitat for bog buckmoth and bog turtle.

B. Basin-wide Collaboration - 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. For five years, NYSDEC contracted education of its public recreation users of both systems to New York Sea Grant through a Coordinated Steward Program, but in 2010 that contract was not renewed nor is that funding likely to be available again in the foreseeable future. In 2010, The Nature Conservancy fielded two part time stewards who worked mostly on the beaches but also occasionally at Salmon River Falls. The mission of the stewards was 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. At this juncture, funding for some version of the Steward Program is being sought from a number of sources but in these uncertain fiscal times the future of the program is in question.

With a grant from NYS Department of State, Sea Grant completed its "Traveling Trunks" project, an education program geared to middle school-aged children. Each trunk is a plastic tote filled with materials for a hands-on lesson on dunes. Materials

cover birds, fish, muskrats, plants, the bog buckmoth, sediment, and invasive species. Twenty trunks are being distributed among school districts and various other venues where leaders of children's groups may access them. The trunks come with lesson plans and information on all covered topics. EMC is a recipient of one of the trunks and it is available upon request.

New York Sea Grant's Entergy-funded dune signage project was completed to provide educational signage for use on public and private dune properties. Signage is available but has not yet been installed.

On behalf of New York Sea Grant, the Oswego County Soil and Water Conservation District received funding in 2008 from NYS Department of State for a comprehensive set of interpretive panels about the Dune/Wetland Complex and the riparian areas inland from the shore. Sea Grant has worked with contractor Bob McNamara and an advisory committee to develop these educational materials. Eight kiosks were developed for placement at accessible locations, some within Oswego County, others further north. The contractor has completed the project. The panels will be manufactured for installation in the spring of 2011.

C. Planning: The Ontario Dune Coalition is a partnership of 29 public and private organizations with common interest in the preservation and optimum use of the Eastern Lake Ontario dune system. It received the completed NYS Department of State 2007 report entitled, *New York's Eastern Lake Ontario Dune and Wetland System: Guidelines for Resource Management in the 21st Century*, available online at <http://www.nyswaterfronts.com/downloads/ny%20elodws/default/nys%20elodws.htm>. The report acknowledges dramatic improvement in resource protection and management over the past 20 years and features a 16 point Stewardship Vision for continued collaboration. To advance adoption and implementation of the Stewardship Vision, NYS Department of State has drafted a memorandum of understanding which member organizations will be invited to sign. Oswego County EMC is represented on the Coalition, and currently provides its chairman. As always, EMC stands ready to support grant proposals and help with educational materials as needed

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, as well as 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.

In 2009, Bion Environmental Technologies, Inc. began investigating the feasibility of developing a large scale integrated beef cattle closed-loop project somewhere in Oswego County. The project's initial phase would include finishing facilities for 72,000 head of beef cattle, ethanol production, and an associated beef processing plant. Bion has shown interest in siting the main facility in the town of Schroepfel. In 2010, the Schroepfel Town Board initially expressed interest in pursuing the project with Bion but later rescinded their support. (See Section B of the EMC's 2010 Annual Report of Activities below.) As currently proposed, there remain significant environmental, infrastructure, transportation, and community services concerns with this project.

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 not be able to support these types of studies.

8. Oneida Lake North Shore

A. Land Use: Real estate speculators are buying large parcels of forest land north of Oneida Lake, especially along the lake and streams. 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 for the impact of consequential development.

Traffic flow on NYS Route 49 is increasing dramatically and, in the absence of any land use planning or control of driveway penetrations, congestion is occurring, traveling is less safe, and commuting times are increasing. Linear development of mixed uses is spreading along the highway exacerbating the problems and adversely impacting the rural character of the area.

B. 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. Purple 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 in the near future if not adequately addressed soon.

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 throughout the county. This plant can become dominant and almost impenetrable along stream banks compromising important riparian habitat and preventing recreational access.

The double crested cormorant, a large fish eating bird, has been implicated in the reduction of walleye, yellow perch and other fish populations in Oneida Lake, and it disturbs nesting common terns, a threatened species in New York State. A US Department of Agriculture economist estimated that cormorants ate so many Oneida Lake fish from 1995 to 2005 that the local economy suffered a loss in revenue of between 100 to 500 million dollars. In 2004 the USDA funded a \$1 million cormorant harassment program on the lake. The funding was reduced to \$643,000 by 2009. The program was effective with the lake's perch and walleye populations making a significant recovery. The Federal funding for cormorant control on Oneida Lake has been eliminated from the 2010 federal budget. There is grave concern that the elimination of this program will have devastating effects on the fishery.

Zebra mussels are present extensively throughout the lake basin. Zebra mussels filter plankton from the water, which removes a major food source of young fish, and

the subsequent improved water clarity exposes them to predators. Zebra mussels also have reportedly caused the extinction of many of the lake's native clams.

Researchers have also speculated that within the next few years, the round goby (already present in the Great Lakes) will invade the lake in large numbers. Gobies eat zebra mussels which collect botulism bacteria. Other fish and birds that eat the gobies can become infected and die.

Studies of Oneida Lake by Cornell University and other researchers are regularly identifying new invasive species. The ecological and economic impacts of these species will be an object of concern for many years to come.

The Oneida Lake Watershed Management Plan, a multi-agency project, was recently established to address water resource protection for the entire watershed. Project information is available at www.cnyrpdb.org/oneidalake. The project addresses several efforts including funding for watershed improvement projects and public education programs and activities. The *Oneida Lake State of the Lake and Watershed Report* is available online or through the Central NY Regional Planning and Development Board.

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: For the past eight years, the International Joint Commission (IJC) has been reviewing regulation of water levels and flows for the Lake Ontario-St. Lawrence River system. After considering public comment on a draft proposal released in March, 2008, Commissioners concluded that regulation should be based on a revised set of goals and criteria aimed at more natural flows while respecting other interests. It proposed a one year process to resolve outstanding issues and obtain the concurrence of the federal governments. Under this process, the IJC has commissioned a Working Group of representatives from each of the federal governments, as well as from New York State, Ontario, and Quebec, to develop both Orders of Approval and a Regulation Plan that will embrace mitigation measures for any economic hardships that would result to any of the interests affected by the Plan, as well as an adaptive management framework for evaluating the Plan and adapting to changing conditions. The IJC's charge to the Working Group included reporting to the IJC by June 2009. Additional information may be found at <http://www.ijc.org>.

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." In February 2008, the Great Lakes Commission released the following statement regarding the region:

"A united Great Lakes region calls on Congress to strengthen national investment in Great Lakes restoration and protection as outlined in the *Great Lakes Regional Collaboration Strategy to Restore and Protect the Great Lakes*. Increased support from the Federal government is needed to implement recommendations in the Strategy and to match the significant investment of state and local governments, Tribes and private funds in Great Lakes restoration. The following highest priority actions – a subset of the Strategy recommendations – are consistent with the requests of the Governors of the Great Lakes States. We urge Congress to act on these regional priorities to address significant threats and capitalize on high-value restoration opportunities.

- Stop Aquatic Invasive Species: Enact comprehensive legislation such as the *National Aquatic Invasive Species Act (S. 725)* to address aquatic invasive species. If passage of a comprehensive bill was not possible in 2008, we urge Congress to strengthen and pass legislation to ensure that commercial vessels entering the Great Lakes-St. Lawrence system meet uniform ballast water discharge requirements and legislation to screen species that might invade the

region from non-ballast pathways. Fully fund the Great Lakes Fishery Commission to control sea lamprey and the U.S. Army Corps of Engineers to complete construction and operation of the dispersal barrier system on the Chicago Sanitary and Ship Canal.

- Clean Up Toxic Sediments: Reauthorize the Great Lakes Legacy Act at \$150 million annually and fully fund the Act in FY2009 to continue to clean up contaminated sediments and restore Great Lakes “toxic hot spots.”
- Restore Great Lakes Wetlands: Continue existing support and appropriate an additional \$28.5 million for Federal programs to partner with the States, Tribes, local governments and other non-federal partners in restoring 200,000 acres of Great Lakes wetlands. Appropriate \$16 million for the Great Lakes Fish and Wildlife Restoration Act.
- Protect Water Quality: Restore funding and prevent further cuts to the Clean Water State Revolving Fund (reduced by more than one-third in FY2008) by appropriating \$1.35 billion for FY2009. Great Lakes States will lose approximately \$143 million in funding this year as a result of the FY2008 cuts.”

For more information, go to <http://www.glc.org/restore/>.

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. 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 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.

Round gobies, another exotic in Lake Ontario, have been implicated as a vector in the transport of Type E botulism to sport fish and birds. On a positive note gobies are being predated upon by numerous predator species in the lake and are providing a new alternative food source for many game fish. 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 traverse the St. Lawrence River and Lake Ontario have addressed a way to stop the continuing spread of exotic species. Sport fishing in Oswego County and Lake Ontario provides a multi million dollar economic impact to the local communities along the shoreline.

Many species of the algae genus *Cladophora* may represent impairment to fishing and boating activities in some localized areas. *Cladophora* can exist either attached

to a below surface substrate or as large free floating mats or colonies. It is currently believed that the improvement in water clarity due to the presence of zebra mussels in the lake has allowed *Cladophora* to form large colonies at much deeper depths. A large fixed colony may be dislodged by wave action and get washed into near-shore areas as a free floating mat. While these colonies represent a temporary impact to fishing, boating and even water intake structures, typically wind, storms and lake currents move these mats from place to place, and the impairment is thus short-term.

In the late spring and early summer of 2009, and for the first time since the late 1800s, naturally reproduced Atlantic salmon were found in the Salmon River. Forty-three young-of-year Atlantic salmon were found in two locations. Atlantic salmon have been stocked at low levels in the Salmon River since 1996 to provide a presence of this native species, to provide trophy angling opportunities, and continue researching the potential of future restoration. It was believed that Atlantic salmon in Lake Ontario feeding on a diet of alewives, a non native forage species which has high concentrations of the enzyme thiaminase, would cause reproductive failure and reduce the opportunity for restoration. Recent changes in Lake Ontario's forage base may be creating a more diverse food source for Atlantic salmon and therefore increasing their ability to reproduce successfully. There has been a marked increase in sport fishing catches of Atlantic salmon in Lake Ontario the past two years.

E. Recreational Diving: The vastly improved water clarity resulting from zebra and quagga mussels has contributed to an increase in recreational diving in Lake Ontario. In addition, due to the cold, freshwater conditions present here, the rusting and marine life growth that claim many shipwrecks elsewhere (particularly in saltwater) aren't present to the same extent. 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 construct 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 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. In 2006, construction of a large wind farm on the Tug Hill Plateau was completed. Another wind farm is proposed for Jefferson County.

In early 2010, the New York Power Authority (NYPA) proposed locating a large number of wind-powered electricity generating turbines in Lake Ontario waters off the Oswego County shoreline. In March 2010, the Oswego County Legislature passed a resolution opposing the project, stating concerns over lack of local control of the

project, the end users of the generated electricity, and the relatively short time provided to consider the proposal. The NYPA has indicated that if local communities were not in favor of the project, they would not consider development in that area. They are currently pursuing development in Lake Erie and the western Lake Ontario basin. While the EMC favors the development of renewable energy in general, this proposal must be fully evaluated in order to fairly weigh all factors involved, including environmental benefits, environmental drawbacks, tourism impacts, property rights, and aesthetics.

10. Air Quality

In general, Oswego County continues to maintain good air quality. In late 2009 EPA proposed tightening standards for ozone and fine particulates. Depending upon the final level determination, Oswego County could once again find itself in non-attainment of Federal air quality standards. The setting of the final standards and development of an implementation schedule will take a number of years, so local impacts will not be felt in 2011. Typical compliance strategies include enhanced mobile source inspections and lowering of industrial emission limits.

Because all of New York State is part of the Northeast Ozone Transport Region, Oswego County will remain part of that area for purposes of ozone compliance classification.

In October of 2009 DEC amended the Air Resources Regulations Part 215 (Open Fires) to prohibit many types of open burning- including trash. "Backyard" burning of trash is the largest single contributor of dioxin to the air. DEC Environmental Conservation Officers will be the primary enforcers of this regulation. Information on open burning can be found at <http://www.dec.ny.gov/chemical/58519.html>. During 2010 the EMC developed and had printed an informational brochure on the new regulation for public distribution.

DEC also held public comment sessions on proposed Part 247 regulations to control smoke emitted from outdoor wood boilers. The proposed regulations were modified after reviewing the public comments and the regulations were issued in final form in December 2010. They can be found at <http://www.dec.ny.gov/regs/71720.html>.

Oswego County Environmental Management Council 2010 Annual Report of Activities

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.

1. MAJOR EMC ACTIVITIES

A. EMC Strategic Plan and Membership

In February, EMC members approved the 2010 EMC Strategic Plan. One major activity in the Plan was continuing to lead the effort to establish a countywide or regional body to oversee water resource issues. During the course of the year, EMC presented their proposal to the Oswego County Legislature Economic Development and Planning Committee and to the Black River/St. Lawrence River Resource Conservation and Development Council. Other major plan activities included acting as the lead in coordinating county-wide Earth Week cleanup efforts, participating as EMC representatives to many local environmental organizations, review and update

the status of invasive species throughout the County, conduct 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, broaden the Council's knowledge and experience base, and establish a broader geographic distribution of its membership. In 2010, Tim Carroll (Town of Granby) served as Council Chair, Dick Drosse (Town of Minetto) served as 1st Vice Chair, Mike Kerker (Town of Oswego) served as 2nd Vice Chair, and Sandy Bonanno (Town of Volney) served as Secretary/Treasurer.

B. Bion Closed Loop Beef Finishing/Processing and Ethanol Facility Proposal (Strategy IX.5.b)

In 2009, Bion Environmental Technologies, Inc. began investigating the feasibility of developing a large scale integrated beef cattle closed-loop project somewhere in Oswego County. The project's initial phase would include finishing facilities for 72,000 head of beef cattle, ethanol production and an associated beef processing plant.

In 2010, the EMC continued to monitor the progress of the project including corresponding with Bion representatives, attending public meetings on the project, and meeting with local residents who could be impacted by the development. Tim Carroll agreed to a request from Bion to act as a reviewer of technical data resulting from implementation of the Bion technology at the Kreider farm in Lancaster County, Pennsylvania. The EMC will continue to monitor progress and results of the Kreider farm project and any proposed Bion developments in Oswego County.

C. Oswego County Aquatic Vegetation Control and Invasive Species Management (Strategies IX.5.b. and X.4.b.)

In 2010, the EMC continued participation in programs and activities to facilitate distribution of its series of pamphlets on nuisance aquatic vegetation found in Oswego County. The information was made available at the annual open house at the Salmon River Hatchery in Altmar, the Sustainability Fair at SUNY Oswego during Earth Week, and at the County Fair.

EMC member Dick Drosse led an effort to restore grant money at the county level to treat over 200 acres of water chestnut in the Oswego River. Although delayed by discussions in the County Legislature, treatment was applied late in the season, and its success will be determined during the next growing season. EMC will continue to support funding for treatment of this invasive species.

D. Local Involvement (Strategies 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), Oswego County Solid Waste Management Board, Friends of Great Bear and Friends of the Oswego River Canal, and Oswego County Green Team. 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.

In March and April, EMC members Tim Carroll, Dr. Peter Rosenbaum, Sandy Bonanno, Dick Drosse and Dr. Carlton Salvagin participated in the first annual Sustainability Forum and Sustainability Fair organized by SUNY Oswego. Activities included participating in a question and answer session with over 75 members of the public and other environmental organizations during the Forum, and staffing an EMC display focusing on energy conservation, invasive species green energy initiatives and the recently enacted NYS Open Burning Law at the Fair. EMC also provided a display with information on invasive species at the October Open House at the Altmar Fish Hatchery.

In November, Dick Drosse represented the Oswego County EMC at the New York State Association of Environmental Management Councils annual meeting at West Point. He attended presentations on environmental initiatives by non-profit organizations in the Lower Hudson Valley region and on invasive species.

EMC also sponsored a proclamation in the County Legislature in 2010 for Earth Week. The proclamation encouraged local residents to participate in Earth Week Clean-ups and Celebrations and to proudly accept responsibility for their part in securing a safe healthy environment for generations to come. The proclamation was publicized by Oswego County Promotion and Tourism. Over 35 groups committed to participate.

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

EMC members Dr. Carlton Salvagin and Mike Kerker served as representatives on the Solid Waste Management Board. Through monthly reports, they kept EMC informed on solid waste issues such as flow control (intended to keep all trash generated in the county here to increase revenues through tipping fees), the landfill gas project, recycling efforts, repairs and improvements at the several transfer stations, household hazardous waste collection and the ferrous metals recovery system.

The Earth Week cleanup activities of 2010, again coordinated by EMC, showed an approximate 75% reduction in plastic drink bottles collected during the county-wide volunteer effort in 2009. This appears to be a direct result of the recent Bigger Better Bottle Bill, which required a deposit on bottled water and other beverages. This bill was strongly supported in the past by EMC via letters to various state representatives and has reduced the volume of recyclable plastic materials entering the County waste stream.

F. Hydrofracturing (Strategies II.4.e and IX.5.b)

EMC members continued to review and discuss the state of hydrofracturing technology used to retrieve natural gas from the Marcellus Shale formation. Although Marcellus shale is not present in Oswego County, the so called hydrofracking technique could be employed if economic conditions ever become favorable to extract natural gas from other formations in the county. EMC contacted geologist Dr. Bruce Selleck of Colgate University, a recognized expert in the Marcellus Shale formation and natural gas extraction. He noted that while there are some gas bearing formations other than Marcellus Shale in Oswego County, they do not produce the volume of gas needed to be economically viable, and are very unlikely to be developed at this time.

G. EMC Website and Information (Strategies VIII.3.b and X.4.b)

In accordance with its strategic plan, the EMC has established a website with a list of members, links to the Annual Report and other projects. For more information, go to <http://www.oswegocounty.com/planning/emc>.

EMC also continued progress with making electronic copies of minutes, agendas, reports and other educational materials so they can be more readily available for search, copy and electronic transfer. In 2010, EMC set up a Facebook account to make information on EMC and other environmental issues available to a wider audience.

H. County Water Management (Strategies V.2.a and IX.5.b)

In October 2007, the EMC presented a report to the Oswego County Legislature on County water resource management and the potential impacts of a water bottling facility on the Tug Hill Aquifer. The report recommended that a water resources management plan be developed to protect, preserve and establish wise use guidelines and regulations for Oswego County water resources. It also recommended that a County Commission be created to oversee and direct the water resources management plan.

In May 2009, the EMC convened a meeting with representatives of several county and state agencies including Oswego County Department of Community Development, Tourism and Planning, Tug Hill Commission, Oswego County Soil and Water

Conservation District, Central New York Regional Planning and Development Board, North Shore and Salmon River Councils of Governments, New York State Department of Environmental Conservation Region 7, and Oswego County Health Department. The purpose of the meeting was to discuss strategies to develop and implement a County water management plan and the possible reactivation of the Oswego County Water Quality Coordinating Committee.

The result of this meeting was the development of a practical initial strategy for creating a Water Resources Commission and creating a Water Resources Management Plan in the near term, while laying the groundwork for a long-term vision. It was intended to be an example of how the goals, strategies and composition of the proposed Commission could be established.

The proposal was presented to the County Legislature and to the Black River-St. Lawrence River Resource Conservation and Development Council for consideration of implementation on either a countywide or regional scale.

I. Open Burning (Strategies IX.5.b. and X.4.b.)

In 2010, the New York State Department of Environmental Conservation passed a law regulating open burning which include banning burning of household waste. There were several exceptions written into the law for agriculture, campfires and other situations. After contacting DEC and the Oswego County Health Department, EMC noted a lack of information and educational material. EMC partnered with Cooperative Extension to design and print a pamphlet summarizing the law and its requirements. EMC then began distribution at several events in the county.

J. Guest Speakers (Strategy VIII.3.b)

EMC continued inviting guest speakers to monthly meetings in order to educate members on a variety of environmental issues. In 2010, EMC welcomed Don Hassig of the Cancer Action Network, who spoke on the potential health effects of adding processed animal fats to animal feed. Chanda Lindsay of the Black River-St. Lawrence River Resource Conservation and Development Council (RC&D) discussed the mission of that organization. As a result, EMC has partnered with the RC&D as a representative from Oswego County. Steve Lewandowski of the Rochester-based Lake Ontario Coastal Initiative gave a presentation on threats to coastal waters of Lake Ontario. In particular he addressed phosphorus inputs from various watersheds into the lake and the impacts on water quality.

K. Other EMC Activities

During 2010, EMC wrote letters to local, state and federal representatives in support of several environmental programs and initiatives, including a request for County funding for control of water chestnuts in local waters and continued funding of the United States Geological Survey Tug Hill Aquifer Study.

EMC also closely monitored a proposal by the New York Power Authority to develop a large-scale offshore windfarm in Lake Ontario. Before EMC was able to complete research of the proposal and make a recommendation, the County Legislature passed a resolution to not support the development due largely to strong opposition by several residents and organizations representing the eastern Lake Ontario basin and lack of local control. NYPA has indicated they do not intend to develop the windfarm in this area in the face of such opposition.

CONCLUSION

Oswego County continues to possess high quality water supplies and an impressive diversity of species and habitats. The major environmental threats are from development near the most sensitive of these valuable resources. These threats have increased with the recent national economic downturn and the subsequent 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

1. *“Backyard Burning, A growing pollution problem”*, NYS Legislative Commission on Solid Waste Management.
2. *“Biodiesel and Biofuel Information Report”*, Oswego County Environmental Management Council Report: 2005.
3. *“Eurasian Watermilfoil Alert”*, Oswego County Environmental Management Council, 2002.
4. *“Household Hazardous Waste Clean-up Day Funding Report”*, Oswego County Environmental Management Council Report, 2005.
5. *“New York State Open Burning Laws”*, Oswego County Environmental Management Council, 2010.
6. *“Oswego County Water Resource Management and Nestlé’s Water Bottling Plant Impact Report”*, Oswego County Environmental Management Report, October 2007.
7. *“Purple Loosestrife Alert”*, Oswego County Environmental Management Council, 2002.
8. *“Transgas Development Systems Coal Gasification Proposal Report to County Legislature”*, Oswego County Environmental Management Report, February 2008.
9. *“Water Chestnut Alert”*, Oswego County Environmental Management Council, 2002.
10. *“Welcome to the Oswego River and Canal, Boating Wakes and Shoreline Erosion”*, Oswego County Environmental Management Council, 2001.
11. *“Wind Power Resource Materials: Oswego County Wind Power Project”*, Oswego County Environmental Management Council Resource Paper, August 2003.

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