Oswego County Environmental Management Council

2017 STATE OF THE OSWEGO COUNTY ENVIRONMENT

AND

2016 ANNUAL REPORT Of ACTIVITIES

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

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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…". Therefore, 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."*

1. General Categories

A. Nuisance 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 (*Dreissenna polymorpha*), quagga mussel (*Dreissena bugensis*) and round goby (*Neogobius melanstomus*) continue to spread unchecked in many areas impacting native organism populations, habitats and food chains, recreational activities and aesthetics. Others, such as emerald ash borer (*Agrilus planipennis*), hemlock woolly

adelgid (*Adelges tsugae*), and Asian long-horned beetle (*Anoplophora glabripennis)* are likely to soon arrive with the prospect of large impacts.

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. The 2016 Annual Report and other resources are available on the SLELO website at www.sleloinvasives.org/?s=2016+annual+report. Field reports from 2016 are also available, at www.sleloinvasives.org/field-reports/2016-field-season/.

Oswego County's participation in SLELO included Oswego County Soil and Water Conservation District (SWCD), Oswego County Cooperative Extension and an EMC member. SWCD again coordinated efforts in controlling invasive water chestnut. In 2016, the water chestnut control program saw a dramatic decrease in areas requiring treatment. Of the original 220 acres in the Oswego River, only about 20 acres needed treatment in 2016. A 40-acre site in Ox Creek also required treatment. In addition to chemical application, the district launched a hand-pulling effort by employing 5 interns known as the Water Chestnut Assault Team (Water CATs). The interns removed more than 3.5 tons of water chestnut from the Oswego River corridor, Oneida Lake, Oneida River, Rice Creek, Grindstone Creek, Little Salmon River and Sage Creek. A similar approach to this program is planned for 2017 and the area around Battle Island will be added to the sites receiving chemical treatment. The funding sources for these projects include Finger Lakes-Lake Ontario Watershed Protection Alliance (FL-LOWPA) and a state grant through New York Senator Patty Ritchie's office.

For the fifth year, Oswego County SWCD surveyed and treated giant hogweed in the county. In 2016, 61 sites were visited for control. Of these, 59 sites were in Oswego County and had previously been treated with herbicides. The total number of sites was a slight increase from 2015 and there is a similar expectation for 2017. This invasive species is a serious public health threat, posing a risk of significant burns from the sap. More information is available at http://www.nyis.info/index.php?action=invasive_detail&id=45. The funding for the giant hogweed control program is provided by the United States Forest Service.

Potential insect invasions have become a threat to Oswego County, especially the emerald ash borer (EAB). While there has yet to be a confirmed occurrence in the county, ash trees are abundant and experts have warned that the arrival of emerald ash borer in Oswego County is imminent. Economic threats include a serious liability risk from falling branches and dead trees in municipal areas. Prevention is the most cost effective measure for dealing with invasives and Department of Environmental Conservation's (DEC's) recent directive banning movement of firewood further than 50 miles is an effort to prevent the spread of these insects. A map showing EAB quarantine boundaries in New York State and management options for landowners and managers is available at http://www.dec.ny.gov/animals/7253.html. Oswego County SWCD has led the effort to provide information municipalities need to prepare.

Hemlock woolly adelgid (*Adelges tsugae*), which defoliates and kills hemlocks in 4-10 years, has become widespread in the Finger Lakes area. It is approaching Oswego County from known occurrences in both Cayuga and Onondaga Counties. Hemlocks are abundant in Oswego County, especially on the Tug Hill. SLELO fielded technicians to look for it in 2016. While it was not confirmed in any location, disturbing evidence was found at a number of sites. Perhaps due to drought, hemlocks displayed loss of needles, browning and other signs. Definitive evidence can only be observed in winter and spring, so follow-up monitoring is essential. See http://www.sleloinvasives.org/field-reports/2016-field-season/ for the SLELO 2016 field report on hemlock woolly adelgid.

B. Solid Waste: The Department of Solid Waste (DSW) is continuing to address the problem of sewage sludge from the City of Oswego deposited in the Bristol Hill landfill. The sludge creates ammonia levels in the landfill leachate exceeding DEC limits. Through significant DSW and Xogen Inc. efforts, the problem has successfully been reduced to figures *below* DEC maximum limits using experimental, small-scale bio-reactors. A continuing problem is the buildup of iron bacteria scale on the reactor media. Reverse osmosis has been considered as has electrolysis. The long-time efforts and lack of success with the experimental-scale reactor and the projected costs and questionable success of a commercial-scale unit has resulted in the following proposal: Proposed: Discontinue leachate disposal at the City of Fulton Wastewater Treatment Plant since ammonia levels exceed their permit levels. Contract with the City of Oswego to accept up to 12,500,000 gallons of leachate from the county and the county would accept up to 2,900 tons of wastewater treatment plant sludge. Oswego's DEC permitable ammonia levels are higher than those permitted to Fulton. This proposal would meet permit levels and save the DSW money. A back-up option could be an agreement with the City of Watertown. The Infrastructure, Facilities and Technology Committee is reviewing the proposal.

Air emission tests are required at the Energy Recovery Facility (ERF) every three years by DEC. The scheduled tests were delayed due to the extensive economizer repair project now completed. The tests have been completed and *all* contaminant emissions are below regulation limits.

The 2016 Household Hazardous Waste Program continued to be promoted resulting in an increase in received volumes over 2015. A program to encourage the free disposal of used tires, successful in 2013, 2014 and 2015 was even more successful in 2016.

The disposal of electronic wastes remains a significant problem. The disposal/recycling of CRTs has forced the financial return on electronics downward. The world's economy since 2008 has also reduced the financial return for all recyclable materials.

The DSW web site reflects many of these issues.
http://www.oswegocounty.com/dsw/facilities.html

C. Natural Gas Drilling: Beginning in 2009, New York State experienced rapid expansion of interest in natural gas development from the Marcellus and Utica shale formations using hydraulic fracturing (hydrofracking or fracking) well development techniques. Used for several years in other areas of the country, hydrofracking presents

a number of environmental challenges including habitat destruction, aesthetic degradation, well water contamination, fire, air pollution, chemical spills, access road and pipeline construction, along with other drilling and transporting-related impacts. The increasing use of natural gas contributes to global climate change but at a supposed lesser impact than the traditional energy sources of coal and oil. A recent study which considers the entire hydrofracking process from well to combustion at the point of use shows that burning natural gas is on par with the burning of coal. Methane, the major component of natural gas, is about 15 times more destructive in the environment than carbon dioxide. The study addressed methane's environmental impacts and impacts on climate change resulting from gas leaks during drilling, flaring, pipe leaks, processing leaks, transportation leaks and combustion. The best New York State counties for the extraction of natural gas are Broome, Tioga and Chemung. While the Marcellus shale does not extend into Oswego County, the Utica shale formation is present. However, the Utica shale formation is not considered to be economically viable for development at this time. The EMC continues to monitor the use of this technology in other states.

Since 2008, New York State has had a moratorium on hydraulic fracturing in order to examine the health, environmental and economic impacts of this drilling technique. In June of 2014, the Court of Appeals ruled that townships could use zoning ordinances to ban the process. In the fall of 2014, the state of Pennsylvania released a study identifying 243 problems with the fracking process and their impacts on the environment and citizenry. These problems included methane gas contamination, spills of wastewater and other pollutants, and water-wells that went dry or became otherwise undrinkable. (New York Outdoor News, October 3, 2014, page 15). It has also been determined that the initial assumptions of the volume of natural gas available in the northern PA area were overestimated.

Following a six-year moratorium and an over two-year health study, the New York State governor along with the NYS Department of Health Commissioner announced that hydrofracking will not be conducted in the state. Official rejection of fracking was made by the DEC commissioner. Since there was not an official law passed, a change of state administration could overturn this decision.
www.dailysignal.com/2016/.../epa...water-pollut
www3. epa.gov/region02/water/npdes/perm...
http://www.ecowatch.com/2016/06/08/epa-radiation-drinkingwater/

D. <u>County Water Resources:</u> Oswego County has been blessed with an abundant supply of high quality surface and ground water resources including three major aquifers: the Tug Hill Aquifer, the Sand Ridge Aquifer and the Great Bear Aquifer. Major surface water resources include Lake Ontario, Oneida Lake, the Oswego River, the Salmon River and Lake Neatahwanta.

Protecting and enhancing these valuable resources are important objectives. The impacts and development of both sewage and water districts must be considered together to provide this protection.

For additional information see USGS publications Groundwater Quality in the Eastern Lake Ontario Basin, New York, 2008.
http://pubs.usgs.gov/of/2011/1074/pdf/ofr2011-1074_reddy_508.pdf

Groundwater Quality in Central New York, 2012
http://pubs.usgs.gov/of/2014/1226/pdf/ofr2014-1226.pdf

EPA publication Northern Tug Hill Glacial Aquifer
http://www.epa.gov/region2/water/aquifer/tughill/support.htm

E. Water Withdrawal: Privatization of water supplies has become a global issue, with water increasingly being treated as a commodity, rather than as a necessary resource of limited quantity in need of preservation and protection, in both matters of law and commerce. Several years ago, Nestle Waters North America proposed to establish a water bottling facility to withdraw several million gallons of water per day from the Tug Hill Aquifer. While that proposal was subsequently withdrawn, there will continue to be pressure to withdraw water from this aquifer, as well as Lake Ontario and other bodies of water within the Great Lakes Basin.

For example, under the Great Lakes Compact and the companion Agreement, diversions of water from the Great Lakes-St. Lawrence River Basin (Basin) to areas outside the Basin are banned with limited exceptions and only when strictly-regulated criteria are met.

The City of Waukesha, Wisconsin, is a community that is outside the Basin (but is in a county that straddles the Basin divide) and applied for such an exception several years ago. The State of Wisconsin determined the city's application was approvable under state law.

In June 2016, the governors of the 8 basin states approved the application. Absent any legal challenges, the city will become the first U.S. community located entirely outside the Great Lakes drainage basin to receive a diversion of lake water under the Great Lakes Compact.

http://www.waukeshadiversion.org/

http://archive.jsonline.com/news/waukesha/decision-day-arrives-for-waukeshas-lake-michigan-water-request-b99747111z1-383762921.html

F. Expansion of Electricity Distribution Systems: Toronto-based OneGrid Corp. is seeking regulatory approval to build a 260-mile underwater transmission line to carry electricity from Upstate NY nuclear plants, wind farms and other generators to the high-priced Downstate NY market. The nearly $1.5 billion project would bury two 6" diameter cables in trenches in the bottom of the Erie Canal and Hudson River. This endeavor could improve the financial outlook for Oswego County's three nuclear plants as they are included in the NYS governor's plan to reduce carbon emissions. (The Post-Standard, May 1, 2016).

2. Salmon River Corridor

A. Salmon River Watershed Resources: The Salmon River Watershed Natural Resources Assessment provides a compilation of data to describe the current condition of natural resources in the 280-square mile watershed. The assessment is being used to establish priorities and resource management goals of the NYSDEC. Completed in 2008 by the State University of New York College of Environmental Science and Forestry, the document may be found at: http://www.tughill.org/services/natural-resource-management/salmon-river-watershed/

To see the NYSDEC Upper Salmon River Unit Management Plan, go to:
http://www.dec.ny.gov/lands/92808.html

B. Salmon River: The Salmon River, located in Oswego County, stretches 17 miles from the Lighthouse Hill Reservoir in Altmar to where it empties into Lake Ontario at Port Ontario. There are 12 miles of Public Fishing Rights along the river. The Salmon River offers some of the finest sport fishing in the country. Two major fish records have been set in the Salmon River: the Great Lakes record Chinook salmon (47 lbs. 13 oz.) and the world record Coho salmon (33 lbs. 4 oz.).

Protection of water quality of the Salmon River is one of the highest priorities for the DEC. Maintaining soil and water quality in the headwater streams is essential to keeping the lower river healthy. More information on the Salmon River Corridor is available at http://www.dec.ny.gov/lands/71912.html.

C. DEC Initiatives: DEC is continuing to pursue acquisition of lands in the Salmon River Corridor that would improve public access, provide habitat and shoreline protection, and improve the fisheries.
http://www.newyorkupstate.com/outdoors/2016/11/national_grid_giving_2800_acres_of_land_to_ny_state_along_salmon_river.html

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. The Oswego River watershed, an area of over 5,000 square miles, includes the Finger Lakes, industries, the City of Syracuse,
other municipalities and extensive areas of farmland and forest. 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 Oswego Harbor impacting the Lake Ontario ecosystem. The Oswego River still has mirex contamination from previous industrial activities in its watershed.

For more information, go to:
http://www.dec.ny.gov/docs/water_pdf/oswegostage3.pdf

In February 2015, the US Environmental Protection Agency proposed removing most of Fulton from the Superfund list, declaring that all but a 50' section of the former Fulton Terminals site no longer presents a threat to public health or the environment.

B. Brownfield Areas: Brownfield areas can be defined as abandoned, idle or underused properties where expansion or redevelopment is complicated by real or perceived hazardous substances, pollutants or contaminants. The Brownfield Opportunity Area (BOA) Program was established under the Superfund/Brownfield Law in 2003. Subsequent revisions to the legislation authorized municipalities to pursue redevelopment and revitalization of these distressed areas and provided resources to local communities to accomplish these goals. According to the NYS Department of State (DOS), "The Program provides resources to New York communities to establish effective revitalization strategies that return dormant and blighted parcels into productive, catalytic properties. Our goal is to work in partnership with local communities and organizations to develop and realize a community vision for redevelopment and community revitalization."

In September 2015, the City of Fulton was designated as a Brownfield Opportunity Area. The City of Fulton BOA consists of a 531-acre area bordering the Oswego River on the east side. It includes some 42 brownfield and underutilized sites, including the former Fulton Terminals and Bird Incorporated sites along the Oswego River within the city limits. According to the NYS DOS, "Primary revitalization objectives include remediation and redevelopment of brownfield and abandoned properties that scar the historic shores of the City, infrastructure improvements to increase connectivity, and a marketing strategy to encourage investment in priority sites." The Fulton Terminals site was proposed for removal from the US EPA National Priorities List in 2015, which will remove a barrier to redevelopment.

http://www.oswegocounty.com/planning/brownfield.html

C. Friends of Great Bear: Friends of Great Bear (http://friendsofgreatbear.org/) consists of residents from 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 New York State Canal Corporation and private landowners. Several municipal water wells are located on the City of Fulton property. A diversity of flora and fauna can be found here and along 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. Construction and maintenance of public trails are ongoing efforts of the group. In 2016, application for a grant to acquire additional acreage, including Whiskey Island, was not approved. The organization will continue to explore other funding opportunities to acquire the property.

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

A. Lake Neatahwanta: Lake Neatahwanta is a 683-acre lake located in the Town of Granby and City of Fulton. The mean lake depth is 8.2 feet and the maximum depth is 12.1 feet. Lake Neatahwanta collects significant phosphorus and sediment loading from inlet streams, farms and non-point sources that drain the surrounding watershed resulting in cultural eutrophication of the water body. Widespread blue-green algae blooms have occurred annually for the past several years.

Information on blue-green algae and water bodies impacted can be found at http://www.dec.ny.gov/chemical/77140.html

Federal, state and local funding has been procured in the past to help pay for lake restoration, including dredging, which began in 2014. The City of Fulton has partnered with the Fulton Community Revitalization Corporation to raise additional funds to help support a comprehensive restoration project for the lake. Dredging activities in cooperation with the Town of Granby Lake Reclamation Committee continued in 2016. Employing the dredging equipment purchased by the town, volunteers dredged shallow water, near-shore areas within the City of Fulton from Stevenson Beach to Bullhead Point. The goal is to improve water quality and near-shore conditions enough to permit re-opening the public swimming facilities at Stevenson Beach.

http://www.oswegocountynewsnow.com/granby-dredging-committee-outlines-progress-plans-on-rehabilitating-lake-neatahwanta/article_425154f5-8ab5-5117-9c76-b2c39f414a5b.html

B. Local Waterfront Revitalization Program: In 2016, the Fulton Community Development Agency (FCDA) and the City of Fulton began revisions to the Local Waterfront Revitalization Program (LWRP) for submittal to the NYS Department of State. According to the FCDA, the LWRP represents "an effort to establish a more comprehensive plan for its waterfront areas", which include both the Oswego River and Lake Neatahwanta. To be in agreement with the state's policy, the plan will (among other goals) strive to conserve and protect fish and wildlife resources and habitats while promoting appropriate use and development of waterfront area.

http://fultoncda.com/?page_id=631

5. Lake Ontario Coastline and Adjacent Upland Areas

A. Sand Dunes and Embayments: According to the 2007 NYS Department of State (DOS) 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 17-mile barrier system includes the largest and most extensive freshwater sand dune formations in the 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. The complex includes three DEC wildlife management areas and two state parks. DEC recognizes several significant fish and wildlife habitats and the NYSDOS has delineated several significant coastal fish and wildlife habitats within the complex as well.

In 2016, a pair of US Endangered Piping Plover established a nest at Sandy Island Beach State Park. This beach-nesting shorebird had not nested at Sandy Pond in over 30 years. State Parks fielded a coordinator to recruit, train and supervise a team of volunteers to protect the birds from disturbance. The volunteers provided frequent on-site public contact and education but were unable to prevent egg predation of the nest. The adults abandoned the nest and were not seen for the rest of the summer. State Parks also worked with the Sandy Pond Channel Maintenance Association, Oswego Co Soils and Water Conservation district and the permitting agencies to develop a dredging permit that met the needs of the habitat, the birds and recreational users. Channel dredging occurred in early August.

State Parks is also in the midst of restoration of a recently acquired parcel within Sandy Island Beach State Park. Grant funding will allow for construction for a new walkover along with invasive species removal, restoration plantings and interpretive signage.

B. <u>Coastal Wetlands:</u> The eastern Lake Ontario coastal wetlands in Oswego County are home to the bog buckmoth (*Hemileuca* sp.1. NY endangered) and the bog turtle (*Glyptemys = Clemmys muhlenbergii,* US threatened, NY endangered). Monitoring of the populations of these rare species is ongoing by NYSDEC, State University of New York (SUNY) - Oswego researchers and the Central New York Land Trust (CNYLT). Threats include invasive species and excess nutrient loading which can result in habitat changes unfavorable to the continued existence of the bog buckmoth and bog turtle.
http://www.sleloinvasives.org/about-invasives/native-species/bog-buckmoth/

http://www.fws.gov/northeast/nyfo/es/bogturtle.htm

C. <u>Basin-wide Collaboration/Education:</u> The Eastern Lake Ontario system and the adjacent Salmon River Corridor support public conservation lands including

Deer Creek Marsh WMA, Sandy Island Beach State Park, and State Forest holdings in the Salmon River Corridor. Again in 2016, DEC fielded three Student Conservation Association volunteers as stewards who worked mostly on the beaches. An additional steward worked mostly at Salmon River Falls. The mission of the stewards was to educate visitors to use the areas in an environmentally responsible way. The program is working and is anticipated to be continued in 2017.

D. Planning: NY Sea Grant hosted a Lake Ontario Coastal Resiliency Forum in September for environmental professionals to report on two grant projects conducted by Sea Grant and Oswego County SWCD. Participants heard about GIS analysis of current and historical performance of multiple outlet channels between North Sandy Pond and Lake Ontario. A final report will provide recommendations for local decision makers to consider when making ongoing decisions regarding channel management. Climatology and photomonitoring products will be displayed on a new interactive website to be hosted by Sea Grant. The new website is anticipated to go live in 2017.

6. Phoenix/Schroeppel Area

The Village of Phoenix and Town of Schroeppel 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.
http://www.phoenixwaterwarriors.com/wp-content/uploads/2014/09/Water_Stuff/Kedenburg_Docs/2-Geohydrology_Water-Quality_of_Sand-Ridge.pdf

In 2011, the Oswego County Department of Health determined that wells supplying drinking water in the Phoenix area were considered as groundwater resources under the direct influence of surface water. This means that water from these wells could be contaminated by surface waters.
http://www.villageofphoenix-ny.gov/2016/12/07/important-information-about-your-drinking-water-july-september-2016/

A proposed water district incorporating portions of County Routes 10 and 12 in the Town of Schroeppel was voted down in 2016. The water district was proposed to allow the Onondaga County Water Authority to supply water to the area because many residents reported problems with wells, including hard water and discolored or bad tasting water.
http://www.oswegonews.com/osw/schroeppel-water-district-tanked-again-20160401

7. Oneida Lake North Shore

Mixed use development along the north shore of Oneida Lake presents a number of issues which could impact the lake. Residential and commercial building

construction, installation of public and private utilities (including gas, electric, high speed internet, sewer and water), increased traffic, recreational activities, local wood products industries, lack of formal planning or zoning and invasive species are all currently impacting the lake.

The Central New York Regional Planning and Development Board (CNYRPDB) publication Oneida Lake Watershed 2011 Ecosystem Status Report provides information on human influences (including land use and recreation), lake characteristics and nuisance/invasive plant and animal species (including water chestnut and double-crested cormorants).

See:http://www.oneidalakeassociation.org/OLA%202011%20Oneida%20Lake%20Watershed%20Status%20Report-1.pdf

In addition, a management strategy for Oneida Lake is outlined in a 2004 CNYRPDB report titled A Management Strategy for Oneida Lake and Its Watershed. http://www.cnyrpdb.org/oneidalake/managementstrategy.asp

Additional information on Oneida Lake and its watershed is available at http://www.oneidalakeassociation.org/about-oneida-lake.htm

8. Lake Ontario

A. 2012 Great Lakes Water Quality Agreement

This formal agreement between the United States and Canada addresses water quality issues in the Great Lakes and St. Lawrence River. The International Joint Commission's (IJC) major priority areas for 2012-2015 follow:

- Lake Erie Ecosystem Priority to Reduce Phosphorus Loads and Algal Blooms
- Assessment of Progress Toward Restoring the Great Lakes
- Strengthening the Capacity to Deliver Great Lakes Science and Information
- Public Engagement and Education

IJC's progress report is available and open for public comment. A public forum was held in October 4-6, 2016. The IJC's first triennial Assessment of Progress Report, under a new agreement, will be available in 2017.

For ongoing updates go to: http://www.ijc.org/en_/Great_Lakes_Quality

B. Lake Ontario Lakewide Action and Management Plan

The Lake Ontario Lakewide Action and Management Plan Annual Report 2016 states progress in the following priorities:

- Implementing the Binational Biodiversity Conservation Strategy (BBCS);
- Advancing the Cooperative Science and Monitoring Initiative (CSMI);
- Improving coastal wetland and nearshore ecosystems;
- Assessing and managing nutrients;
- Restoring fish and wildlife species and habitat; and
- Minimizing the impact of aquatic invasive species.

The entire report can be found at: https://binational.net/2016/10/03/loar2016/

For information on US Environmental Protection Agency Lake Ontario water quality initiatives go to: https://www.epa.gov/greatlakes/lake-ontario

C. Water Quality: The Obama administration's Waters of the United States rule still faces opposition in Congress. The rule redefines the rules and regulations of U.S. waterways originally protected under the Clean Water Act.

Reauthorization of the Land and Water Conservation Fund would continue use of revenue from offshore oil and gas leases to provide funds and matching grants to federal, state and local governments for acquisition of land and easements on land and water.

Throughout the Great Lakes system, applications are being made for water withdrawal. An article by the Natural Resources Defense Council on April 14, 2016, reported that letters were sent to all Great Lake governors regarding water use. Governors signed a Great Lakes Compact in 2005 addressing that water withdrawals were to be made only when safe water options have been exhausted.

www.politico.com/story/2015/05/epa-waterways-wetlands-rule-118319

https://www.epa.gov/cleanwaterrule/final-clean-water-rule

www.lwcfcoalition.org/about-lwcf.html

https://www.nps.gov/lwcf/

https://www.doi.gov/lwcf

D. Synthetic Polymers/Microplastics: The environment cannot process plastics. The portent for the health of fish and the health of all species that eat the fish is of growing concern. The human population density and its impact makes Lake Ontario the most highly stressed lake in the Great Lakes system.

Microplastic beads or microbeads are contained in various products such as exfoliating body washes, lotions, toothpastes, moisturizers, cosmetics and cleaning supplies. Many of these tiny beads pass through waste water treatment facilities and enter into the environment with the treated effluent from the facility. At present, no major study of the levels of microbeads in local Oswego waters has been conducted but a September 15, 2015, study reported microplastic contamination in *all* of the world's major oceans.

The microbeads tend to float on water where feeding fish mistake them for fish eggs. The problem is that PCBs, pesticides and motor oil systematically adhere to the beads. These toxins accumulate in the bodies of the fish and enter the food chain contaminating all consumers – other fish, fish-eating birds and, of course, humans.

The United States may ban the use of microplastic beads in products. The House of Representatives approved a bill on 12/08/2015. The Senate passed The Microbead Free Waters Act on 12/18/2015. President Obama signed the bill on 12/28/16 and it went into effect immediately.

For the full report from the NYS Attorney General, see:
http://ag.ny.gov/pdfs/Microbeads_Report_5_14_14.pdf

http://www.cbsnews.com/news/microbead-free-waters-act-president-obama-signs-new-law/

www.congress.gov/bill/114th-congress/house-bill/1321

www.govtrack.us/congress/bills/114/hr1321

E. Pharmaceuticals and Other Chemical Contaminants: The impact of disposal of pharmaceuticals via wastewater treatment plant effluents is of significant environmental concern. The U. S. Geological Survey, along with academic institutions, is conducting studies to determine the effects of emerging contaminates, inform water-resources managers and, ultimately, help develop effective water management practices.

The studies are determining concentrations of prescription drugs such as antibiotics, sleep aids, muscle relaxants, opioids, painkillers and antidepressants. Included are industrial chemicals such as BPA (bisphenol A, used to make some plastics), surfactants (grease cleaners), DEET (mosquito repellent), dioxins, pesticides, mercury, flame retardants, materials found in personal care products, hormones (naturally produced by humans) and ethanol.

Current studies address the effects of mixtures of these chemicals on fish physiology and behavior. Already seen are impacts on fish size, reproduction, rate of sexual maturity, survival rates and sex ratios in addition to behavioral changes related to escaping predation. As with mercury, PCBs, lead and other common contaminates found in our drinking water, consumption of these chemicals and mixtures may prove to provide physical and psychological impacts from human consumption of fish. These impacts are to be studied in the future.

For additional information see:

www.yourclasical.org/story/2015/12/14apex-exploring-pharma

www.ncbi.nim,nih.gov/pubmed/26561986

F. Lake Water Levels and Flows: In December 2016, the International Joint Commission signed an updated order of approval for regulation of water levels and flows in Lake Ontario and the St. Lawrence River. Plan 2014 was approved after over 16 years of research, public comment, and government review. In an attempt to develop an approach for managing water levels and flows in the Lake Ontario-St. Lawrence River system that takes into account environmental factors, Plan 2014 allows a greater fluctuation of water levels than have occurred under the current regulations in place since 1958. The intention is the restoration of the health and diversity of thousands of acres of Lake Ontario wetlands. Many lakeshore residents are opposing the plan, citing the potential for increased erosion and flooding which could damage properties and facilities along the shoreline.

See more at: http://www.ijc.org/en_/news?news_id=581 and

http://www.syracuse.com/outdoors/index.ssf/2016/12/plan_2014_controversial_plan_to_regulate_lake_ontario_water_levels_approved.html

G. Sport Fishing: Sport fishing in Oswego County provides a multimillion-dollar economic impact to the local communities along the Lake Ontario shoreline and its rivers and streams. It is estimated that the annual economic impact of sport fishing in the county, including the Salmon River, is at least twenty-four million dollars. Threats to the fishery include invasive species, habitat destruction, lake water level management and loss of public access.

On October 26, 2016, in response to conclusive evidence of two successive years of poor alewife reproduction, the Lake Ontario Committee (LOC) announced salmon stocking reductions in 2017 designed to maintain future recreational and economic benefits of Lake Ontario's sport fisheries. The stocking reductions, which are moderate in size, will help reduce predatory demand on alewife, with the objective of fostering a robust forage base for the future.

Detailed information on the Salmon River and Lake Ontario fisheries is available at:

http://www.dec.ny.gov/outdoor/27068.html and http://www.glfc.org/.

H. Asian Carp: It is only a matter of time before Asian carp invade Lake Ontario with potentially significant impact on the fishery and tourism. The University of Illinois is working with the U.S. Geological Survey testing the effectiveness of infusing water with CO2 gas to discourage bighead and silver carp regional expansion. The study is supported by the U.S. Environmental Protection Agency's Great Lakes Restoration Initiative. Findings of the study demonstrate that most species of fish avoid areas with CO2-infused water. Slow progress with limited success and inertia exhibited by the various agencies involved in assorted deterrent techniques assure Asian carp invasion in the entire Great Lakes system.

www.umesc.usgs.gov/invasive_species/asian_carp.html

http://wwx.inhs.illinois.edu/research/asian-carp/

www.asiancarp.us/news/carbondalereport.htm

I. Toxic Algae: Toxic algae blooms have increased in duration, frequency and geographic area within the last decade. The Finger Lakes Land Trust, in its recent report, said agricultural runoff and the warming climate are lowering water quality. Land acquisition and conservation easements are necessary to help buffer waterways. These efforts would create new wetlands, preserve farms, protect drinking water and leave remaining shoreline undeveloped. The report was based on a yearlong assessment with input from 40 other nonprofits, county and regional planning departments and government conservation agencies. Oswego County should be concerned since much of the Finger Lakes system drains into the county through the Oswego River and into Lake Ontario.

www.fllt.org/phenology/www.usanpn.org/

www.newyorkupstate.com/.../finger_lakes_toxic_algae_threat_land_trust_urges_100_

J. Great Lakes Commission: Restoration programs for the Great Lakes have been underway at the federal level since 2010. The Great Lakes Restoration Initiative is a successful and popular program that is helping states and local partners clean up degraded toxic hotspots, restore habitat for fish and wildlife, thwart Asian carp and other invasive species, and prevent polluted runoff that can close beaches and cause harmful algal blooms in the eight-state Great Lakes region.

For information on specific issues, see http://www.glc.org

In 2016, the GLC reaffirmed a commitment to a regional maritime system, calling on governments to better support aging water infrastructure.

K. Great Lake Ontario National Marine Sanctuary: Activity continued in 2016 on the National Marine Sanctuary proposal begun in 2015 by Jefferson, Oswego, Cayuga and Wayne Counties to the National Oceanic and Atmospheric Administration.

http://www.lakeontarionms.com/

http://thelakeshorenews.com/2016/05/25/a-national-marine-sanctuary-on-lake-ontario/

9. Air Quality

In general, Oswego County continues to maintain good air quality. 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.

Coal-fired electricity generating facilities west of New York State are slowly being retired and replaced with natural gas-fueled units. This is reducing acid deposition in New York State but, as mentioned in the Natural Gas section of this report, there may *not* be reductions of climate change impacts.

DEC has amended the Air Resources Regulations Part 215 (Open Fires) to prohibit many types of open burning, including trash. Backyard burning of trash is by far the largest single contributor of dioxin to the air primarily due to plastic coatings, wraps and containers in the trash. EMC distributes literature about the law and impacts of trash burning at each of its public displays at various events in Oswego County. Local law enforcement agencies are not involved in enforcement and DEC enforcement of the regulation has been lax.

10. Climate Change and Renewable Energy

A. Climate Change: Scientific and statistical evidence of global climate changes must be considered over political rhetoric. Short-term extremes in weather must be examined within the context of long term trends. For example, while February, 2015, was the coldest month on record locally since formal record keeping began around 1900, nine of the ten highest average annual global temperatures have occurred in the 21st century. (http://www.ncdc.noaa.gov/sotc/global/2013/13). The draught and high temperatures of

the summer of 2016 resulted in Lake Ontario temperatures five degrees above average potentially resulting in significant 2016-17 winter snow fall as evidenced by the pre-Thanksgiving snow storm and the large snow volumes falling on the Tug Hill region.

Redistribution of many flora and fauna species may very well correlate with climate change. Scientific evidence is demonstrating that tree and plant species are slowly moving northward. Animals, birds and insects, formerly considered as 'southern', are also being found in more northern climates. EMC will continue to monitor climate change information and studies in 2017.

B. Renewable Energy:

B.1. Wind Power Development

There has been no progress on the development of draft guidelines for land-based wind-powered electricity generating facilities by the Oswego County committee established in 2013. The guidelines were to be used by developers of potential facilities as they formulated their plans in compliance for construction permits.

A wind-powered electricity generating facility (wind farm) proposed for the eastern waters of Lake Ontario was previously supported by the EMC but abandoned due to political influences. The strong emphasis by the state of New York in the promotion of all renewable energy forms may reopen discussion of a wind farm located in this area in the future. There are many details to be considered.

A few single-unit turbines have been installed by private individuals and companies but their related costs are high in relation to photovoltaic installations.

B.2. Photovoltaic Systems

The county of Oswego has seven existing solar photovoltaic installations. The site preparation for a 1 megawatt facility at the Hannibal Transfer Station was initiated but that project was placed on 'hold'.

Oswego County has made a significant commitment to renewable energy in the form of photovoltaic system arrays. Currently the county leases five 50 kW systems. A 28 kW array is owned and is installed at the county health offices facility. Another leased system at Camp Hollis is rated at 33 kW. The large system, under a purchase agreement, in Volney is a 2 mW facility. A 1 mW system is planned at the Scriba Highway Garage. The purchase agreements are being met with slow cooperation from National Grid. When all facilities are operable, the electrical output should provide approximately 85 % of the day-to-day needs of the county.

Some townships in Oswego County have been considering contracts with photovoltaic systems companies. For example, Hannibal is considering the installation of a ground-mounted system on the property immediately behind its municipal building on Cayuga Street. Private landowner investigation is also continuing for a large installation on the east side of County Route 7 approximately 1.2 miles north of NYS Route 3.

The SolarizeCNY workshops, including six hosted by EMC in Oswego County and presented by Bill Edwards of Skyline Solar in 2015, resulted in the installation of 221 residential-size photovoltaic systems. Of all counties in the CNY area, Oswego had the greatest number of actual installations. Plans for 2017 workshops are projected to be directed toward larger systems than those appropriate for individual residential applications. Termed *Community Distributed Generation or Shared Solar,* customers would join a 'community account' taking advantage of a larger array supplying multiple homes or businesses with electricity. The array could be located at considerable distance from participating customers.

Oswego County Environmental Management Council
2016 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. EMC members revise the annual work plan to keep closely aligned with the objectives and strategies set forth in the current Oswego County Comprehensive Plan. Taking original objectives from this plan, the EMC develops strategies to assist the county in meeting those objectives.

http://www.oswegocounty.com/planning/compplan.pdf

1. MAJOR EMC ACTIVITIES

A. EMC Strategic Plan and Membership

The EMC's 2016 Strategic Plan was developed and approved unanimously by its members and is attached as Appendix A to this report.

In 2016, Tim Carroll (Town of Granby) served as EMC Chair, Dr. Carl Salvagin (Town of Hannibal) served as Vice Chair and Sandy Bonanno (Town of Volney) served as Secretary/Treasurer. Membership is comprised of city, township, and county department and agency representatives. The EMC will continue to seek new members in 2017 to broaden the knowledge and experience of EMC members, and to provide a wider geographic representation on the EMC.

John DeHollander, a long time ex-officio EMC member representing the Oswego County Soil and Water Conservation District, retired from his position in September. His vast knowledge of local environmental issues and wise counsel contributed

greatly to the EMC over the years. He was replaced as District Manager by Joe Chairvolotti of the SWDC.

B. Oswego County Aquatic Vegetation Control and Invasive Species Management

The EMC continued participation in programs and activities to facilitate distribution of its series of fact sheets on nuisance aquatic vegetation found in Oswego County. Members actively serve on committees addressing these issues.

C. Local Involvement

EMC members continued to serve as members and liaisons on several local environmental groups and initiatives including the Lake Neatahwanta Revitalization Committee, Central New York Land Trust, St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM), The Ontario Dune Coalition, Oswego County Solid Waste Management Board, Friends of Fulton Parks, Friends of Great Bear, Oswego County Federation of Sportsmen's Club, New York State Association of Environmental Management Councils, the Great Lake Ontario Marine Sanctuary proposal, and Solarize CNY. Research activities and 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.

Members displayed and distributed informational materials, as well as responding to questions on local environmental issues at the annual Altmar Fish Hatchery Open House.

As they have since 2005, EMC sponsored a proclamation in the Oswego County Legislature for Earth Week 2016. 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 and local media.

In addition, a press release was issued by the EMC promoting the theme 'Go Native!'. Residents were urged to use native vegetation in their landscapes. Native plants are adapted to local conditions, generally require less long term maintenance and water, are more pest resistant, and help preserve our natural heritage by providing food and habitat for local wildlife.
EMC maintains an Earth Week website at http://oswegocounty.com/earthweek.html

D. Solid Waste Management Board

EMC member Dr. Carl Salvagin served as representative on the Solid Waste Management Board. Through bi-monthly reports, the EMC was kept up to date on solid waste issues in Oswego County.

E. EMC Website and Information

In accordance with its Strategic Plan, the EMC maintains a website with a list of members, links to the Annual Report and other projects. Printed information for public distribution at various events is kept current. For more information, go to: http://www.co.oswego.ny.us/planning/emc/index.html

F. Renewable Energy

EMC continued to work closely with Solarize CNY and the Oswego County Department of Community Development, Tourism and Planning to help develop, organize, and promote a campaign to promote development of solar power in Central New York. The 2016/2017 campaign will focus on municipal procurement and community distributed generation, commonly called 'shared solar'.

G. Lake Ontario Water Level Regulation

The governments of the United States and Canada have approved the International Joint Commission's Plan 2014 regulating the water levels of Lake Ontario and the St. Lawrence River. Several law suits have been initiated to rescind approval. EMC's efforts to keep current on developments continue.

H. Great Lake Ontario National Marine Sanctuary

EMC drafted a letter to the National Oceanic and Atmospheric Association in support of the proposal by Oswego County, Wayne County, Cayuga County, Jefferson County, and the City of Oswego to designate SE Lake Ontario as a National Marine Sanctuary. http://www.lakeontarionms.com/

I. Local Water Issues

Along with representatives from the NYS Department of Environmental Conservation, the CNY Regional Development and Planning Board, Oswego County Health Department, Oswego County Soil and Water Conservation District, Oswego County Planning Department, Cornell Cooperative Extension, National Resource Conservation Service and the Tug Hill Commission, the EMC
is actively participating in the effort to reactivate the Oswego County Water Quality Coordinating Committee.

2. Other EMC Activities

EMC sent a letter of support for the Central New York Land Trust, Inc. proposal to purchase 130 acres (that have for the past ten years comprised the northern third of Great Bear Springs Recreation Area in the Town of Volney) was sent to the NYS Office of Parks, Recreation and Historical Preservation.

3. CONCLUSION

Oswego County continues to possess high quality water supplies and an impressive diversity of species and habitats. The major environmental threats are from human 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. With its formal support (as stated in its strategic plan) of Oswego County Comprehensive Plan strategies, the EMC's ability to collaborate, coordinate, facilitate and educate remains an important resource for local planners and developers.

4. 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.

5. 2016 EMC Membership

Tim Carroll, Chair	Town of Granby
Dr. Carl Salvagin, Vice Chair	Town of Hannibal
Sandra Bonanno, Secretary-Treasurer	Town of Volney
Jim Karasek, Legislator	District 22
Kelley Weaver	City of Fulton
Dr. Peter A. Rosenbaum	Town of Minetto
Hal Smith	City of Oswego
Fran Verdoliva	Town of Mexico
Pete Backus	Town of Richland
Karen Noyes, Ex-Officio	Oswego County Community Development, Tourism and Planning Department
John DeHollander, Ex-Officio	Oswego County Soil and Water Conservation District

Appendix A

Oswego County Environmental Management Council
2016 Strategic Plan

Objective 1: *Maintain steady progress toward reducing discharge of toxic substances, nutrients and sediments to the waters of the county.*

Strategy 1a: Act as lead in a cooperative effort to re-activate the Water Quality Coordinating Committee or create a countywide/regional Water Resources Commission to oversee water resource issues in the county and region.

Strategy 1b: Provide an EMC member as liaison to organizations working on the reclamation and revitalization of Lake Neatahwanta.

Objective 2: *Support long-term planning and control mechanisms and effective response efforts to insure residents, resources and properties are safeguarded from the effects of flooding and water level fluctuations.*

Strategy 2a: Review, comment on and monitor progress of the International Joint Commission on development and review of a new plan for regulation of water levels in Lake Ontario/St. Lawrence River.

Strategy 2b: Monitor ongoing application of the Lake Ontario/St. Lawrence River water level regulation plan by the International St. Lawrence River Board of Control.

Objective 3: *Support the protection, stabilization, restoration and optimum public use of the Lake Ontario coastal zone's important environmental resources.*

Strategy 3a: Continue to monitor proposals to develop offshore and land-based wind powered electricity generating systems in Oswego County and surrounding area, including review of impacts of other similar developments around the world.

Strategy 3b: Participate with the Oswego County Legislature in developing best management practices, guidelines or regulations regarding public, private or commercial development of wind powered electricity generating systems.

Strategy 3c: Provide an EMC member as liaison to Dune Coalition and monitor the progress of the Stewardship Vision for the Eastern Lake Ontario Dune/Wetland system.

Strategy 3d: Participate with Oswego County in the process to designate eastern Lake Ontario as the Great Lake Ontario National Marine Sanctuary.

Objective 4: *Develop an ecological approach to planning for county growth to protect habitat for the diversity of plant and animal species, assure the protection of unique and irreplaceable biological resources and sustain the traditional activities of hunting, fishing, trapping and viewing wildlife.*

Strategy 4a: Continue to monitor progress of the most recent NYS Open Space Conservation Plan (http://www.dec.ny.gov/lands/98720.html) as it pertains to present land acquisition, private land stewardship, public access to waterways and the conservation of locally significant open space resources in Oswego County. Submit reports to county legislature and county/local planning departments.

Strategy 4b: Review local, county, regional, and state comprehensive plans and encourage incorporation of wildlife habitats of threatened rare and endangered species which warrant protection in these planning efforts. Advise as necessary. Submit reports to county legislature and county/local planning departments.

Strategy 4c: Request and review the Natural Heritage Program Inventory reports. Maintain reports on file and advise as necessary, with caution as to the exact location of endangered species.

Strategy 4d: Participate in projects involving the inventory and development of the Salmon River Corridor and Watershed, including the Salmon River corridor trailway.

Strategy 4e: Provide support for the Friends of Great Bear Recreation Area.

Strategy 4f: Identify tasks to further education, interpretation and research opportunities related to resources that have scientific or educational importance and natural heritage value.

Strategy 4g: Monitor Environmental Notice Bulletin, assess impacts of proposals as needed, provide comments to lead agencies.

Objective 5: *Support the preservation and management of public and private forest lands for a variety of uses including sustainable harvest of forest products, recreation, wildlife habitat, surface and groundwater protection and air quality enhancement.*

Strategy 5a: Monitor and research issues such as zones of water contribution, recharge areas and aquifers relating to water withdrawal developments in Oswego County.

Strategy 5b: Encourage support and funding for the USGS Tug Hill Aquifer Study.

Objective 6: *Encourage implementation of best available technology and best management practices to maintain and improve air quality and protect the health of county residents.*

Strategy 6a: Provide support through an EMC member liaison for the Oswego County Solid Waste Management Board.

Strategy 6b: Provide support to Oswego County and regional efforts to promote and develop solar electric installations.

Objective 7: *Encourage practices for efficient, environmentally sustainable agricultural production and maintain or enhance agricultural lands as a viable and competitive natural resource.*

Strategy 7a: Monitor research and proposals for biomass to energy projects in Oswego County.

Objective 8*: Increase EMC data accessibility for public use.*

Strategy 8a: Inventory, review and reorganize EMC reports, files, minutes and other pertinent data where possible, and reformat pertinent information as necessary. Provide link to the information on the Oswego County website.

Strategy 8b: Continue to create written town-by-town inventory of all county wetlands based on the data from the original mapping project completed in 1981. Provide public access to baseline data from this project.

Strategy 8c: Expand EMC electronic presence by regularly updating the EMC home page and investigating other opportunities available on the internet.

Strategy 8d: Prepare reports, fact sheets, and other sources of information related to environmental issues, as recommended by the EMC or requested by the Oswego County Legislature.

Strategy 8e: Prepare an annual “EMC State of the Environment Report” and submit to the Oswego County Legislature.

Strategy 8f: Continue the EMC guest speaker program for education about current environmental issues.

Objective 9: *Maintain EMC presence through participation in community environmental education events.*

Strategy 9a: Continue participation in public events with environmental themes in Oswego County.

Strategy 9b: Review, update and distribute educational materials and information that EMC showcases at public events and posts on the county government EMC website pages.

Strategy 9c: Develop a proclamation for the Oswego County Legislature to encourage all county citizens to participate in Earth Week cleanup and events.

Objective 10: *Participate in any review and revision of the Oswego County Comprehensive Plan when proposed.*

Objective 11: *Monitor and provide information about the threats invasive species pose to terrestrial and aquatic resources in Oswego County. Support continued funding for water chestnut and other invasive species control in county waters.*

Strategy 11a: Provide an EMC member as liaison to the regional St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM) with Jefferson, St. Lawrence and Oneida Counties and encourage participation by Oswego County agencies.

Strategy 11b: Promote and distribute information on community preparedness and developing action plans to combat emerald ash borer in the county.

Approved November 18, 2015

Tim Carroll, Chair

Oswego County Environmental Management Council