



Oswego County
Environmental
Management Council

2018 STATE OF THE OSWEGO COUNTY ENVIRONMENT

AND

2017 ANNUAL REPORT Of ACTIVITIES

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

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**Oswego County Environmental Management Council
2017 STATE OF THE OSWEGO COUNTY 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 represent county cities, townships and various organizations, and 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 (*Dreissena 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. Emerald ash borer (*Agilus planipennis*) was

reported in the county for the first time this year. Others, such as 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 2017 Field Reports and other resources are available on the SLELO website at <http://www.sleloinvasives.org/field-reports/2017-field-reports> .

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 2017, the water chestnut control program saw an increase from 2016 in areas requiring treatment. Of the original 220 acres in the Oswego River, about 80 acres needed treatment in 2017, including the area around Battle Island (new this year). The district again fielded hand-pulling efforts by employing five interns known as the Water Chestnut Assault Team (Water CATs). The interns removed seven tons of water chestnut from the Oswego River corridor, Oneida Lake, Oneida River, Rice Creek, Grindstone Creek, Salmon River estuary, Little Salmon River and Sage Creek. A similar approach to this program is planned for 2018. 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 sixth year, Oswego County SWCD surveyed and treated giant hogweed in the county. In 2017, 63 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 2016 and there is a similar expectation for 2018. 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. 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), which was confirmed this year by SWCD to be present in the Central Square area. In addition to timber loss, 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 late summer of 2016 and again in 2017. 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 between October and June is essential. See <http://www.sleloinvasives.org/field-reports/> for the SLELO 2017 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. There was a proposal made last year to discontinue leachate disposal at the City of Fulton Wastewater Treatment Plant since ammonia levels exceed their permit levels. A 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 was proposed. Oswego's DEC permissible 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 approved the proposal. Volney landfill leachate is now going to Oswego. Silk Road leachate is still going to Fulton.

The 2017 Household Hazardous Waste Program continued to be successful resulting in an increase in volume of received wastes over 2016. Since its beginning, received waste volumes have increased year-over-year.

A two-day program to encourage the free disposal of used tires, successful annually 2013 - 2017, resulted in the collection of 7,659 tires. The program has been extended for public health/safety considerations and convenience. This year it was conducted at all transfer stations rather than at just one location. This decision resulted in shorter lines, shorter collection times and fewer people waiting in line with their vehicle engines running for long periods of time.

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.

Considerable maintenance has been done and more is needed at the Energy Recovery Facility (ERF) as the plant ages. Replacement of the river water pumps was completed. Replacement of old switchyard electrical equipment and stack monitoring equipment will be done next year.

Odors at transfer stations emanating from materials being composted are of concern. Several options were considered. Aeration on site was selected as the first option. Temperatures in the 140 F degree range have been successfully attained.

The handling of household trash has been of concern from both private and commercial standpoints. A significant number of used batteries are not being separated from the trash. Some commercial haulers are not keeping materials destined for recycling separated from trash during collection.

The DSW web site reflects many of these issues.

<http://www.oswegocounty.com/dsw/facilities.html>

C. County Water Resources: 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. Lake Ontario provides drinking water for many Oswego County communities as well as others in Onondaga County. In 2015, almost 19 million gallons per day, or nearly 50% of the Onondaga County Water Authority water came from Lake Ontario. (<http://www.ocwa.org/about/sources-of-water/>)

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

For additional information see:

Groundwater Quality in Central New York, 2012

<http://pubs.usgs.gov/of/2014/1226/pdf/ofr2014-1226.pdf>

Hydrogeology and Water Quality of the Tug Hill Glacial Aquifer in Northern New York

<https://pubs.er.usgs.gov/publication/wri884014>

D. 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.

<http://www.detroitnews.com/story/news/local/michigan/2017/03/03/environmentalists-bristle-nestles-water-bid/98701402/>

A discussion of the environmental impact of large scale water withdrawals from the Great Lakes can be found at

<http://www.creditvalleyca.ca/wp-content/uploads/2016/05/GreaterLakes-ECT-Withdrawals-Discharges-GI-6-Municipalities-Final-20160510.pdf>

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.

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

E. 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. The target in-service date is 2012-2022 according to OneGrid.

<http://onegridcorp.com/index.php/project/empire-state-connector>

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: In 2017, the NYSDEC completed the acquisition of over 6,000 acres along the Salmon River and in the towns of Redfield and Orwell from National Grid (formerly Niagara Mohawk). The acquisition was a result of a 2005 consent decree brought by the State of New York asserting that Niagara Mohawk violated provisions of the federal Clean Air Act while operating its various power generation facilities in the state.

<https://www.governor.ny.gov/news/governor-cuomo-announces-acquisition-more-6000-acres-protected-land-oswego-county>

The DEC sought public input for management of these and other lands in the area in 2017. <http://www.dec.ny.gov/press/110754.html>

3. Oswego River Corridor

A. General Setting: 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. 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, which resulted in the remediation and subsequent delisting of many polluted sites along the river.

For more information, go to:

http://www.dec.ny.gov/docs/water_pdf/oswegostage3.pdf

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." See <http://www.oswegocounty.com/planning/brownfield.html>

In 2017, efforts were underway at the Federal level to extend the EPA's Brownfield Program.

http://www.oswegocountynewsnow.com/news/katko-looking-to-extend-brownfield-program/article_2f86caba-17f1-11e7-ae59-7fdc4abdcee5.html

More than 600 native trees and shrubs were planted at brownfield sites in the cities of Oswego and Fulton as an urban forestry project coordinated by the Oswego County Department of Community Development, Tourism and Planning. The Department and the Atlantic States Legal Foundation, Inc. of Syracuse received a grant from the Great Lakes Restoration Initiative through the USDA Forest Service.

The project is designed to reduce polluted run-off from urban land in Fulton and Oswego entering Lake Ontario. The major goal is to reduce stormwater runoff from contaminated sites into the Oswego River and Lake Ontario. The sites were selected because of their history of industrial contamination or proximity to a water body directly connected to Lake Ontario.

The county asked for input from residents in the spring of 2016 and has been working with the city of Oswego Tree Advisory Board, the city of Fulton Parks and Recreation Department and Friends of Fulton Parks.

The first phase of the project took place in autumn of 2016, when 125 trees and 101 shrubs were planted in Fulton at Van Buren Park and the former Fulton Terminals site, and 109 trees and shrubs were planted adjacent to the former Hammermill Paper site and at the Eastside Wastewater Treatment Plant in Oswego.

In 2017, 126 trees were planted near Wine Creek in Oswego along the northern perimeter of the Oswego Speedway parking area and along East Albany Street in front of the Speedway. Another 88 trees were planted along an abandoned railroad corridor parallel to East Schuyler Street, and eight were planted at the former Ames Irons Works site on East Cayuga Street. Sixty-eight trees and 33 shrubs were recently planted near the Lake Neatahwanta shoreline in Recreation Park.

The species include redbud, various types of oaks and maples, sassafras, hackberry, pagoda dogwood, sweet birch, Kentucky coffee tree, American hornbeam, pawpaw, butternut, staghorn sumac and American basswood. The trees were planted by Catholic Charities of Onondaga County's Project Joseph and will be maintained by them for the first year of growth.

"The Great Lakes are the largest system of fresh surface water in the world," noted Karen Noyes, associate planner with the Oswego County Department of Community Development, Tourism and Planning. "This grant program is intended to help to improve the forest ecosystem in the Great Lakes basin, using federal funds that were allocated to protect and restore the Great Lakes."

C. Friends of Great Bear: Friends of Great Bear (<http://friendsofgreatbear.org/>) is a volunteer stewardship organization of those interested in the conservation and protection of the Great Bear property. This unique area is owned by the City of Fulton, Town of Volney and the New York State Canalway Corporation. 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 wise use of the property as a recreational resource. Construction and maintenance of public trails are ongoing efforts of the group. In 2017, the group completed a year-long fundraising campaign to raise \$165,000, which was used to purchase the last remaining private property on the site - 130 acres, including Whiskey Island. The purchase was completed in October.

<http://www.oswegonews.com/osw/campaign-raises-enough-money-to-save-whiskey-island-northern-great-bear-20171013?gallerydate=2017-10-11Z>

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

A. Lake Neatahwanta: Lake Neatahwanta is a 715-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.

http://www.newyorkupstate.com/news/2017/08/lake_neatahwanta_blue_green_algae_upstate_new_york_toxic_algae.html

Federal, state and local funding has been procured in the past to help pay for lake restoration, including dredging, which began in 2014. Dredging activities by the Town of Granby Lake Reclamation Committee continued in 2017.

http://www.oswegocountynewsnow.com/news/dredging-of-lake-neatahwanta-to-start-in-may/article_e35accbe-1bd7-11e7-a764-bb542b8ebc18.html

The City of Fulton, in conjunction with the city-based Lake Neatahwanta Revitalization Corporation, purchased a used dredge from Groh Dredging and Marine Construction, the contractor originally hired to begin dredging in 2014. Trained city employees and volunteers will be performing future dredging operations.

http://www.oswegocountynewsnow.com/news/fulton-takes-delivery-of-dredge/article_cec9fdc4-83a1-11e7-8d6b-93ce470ed041.html

B. Local Waterfront Revitalization Program: In 2017, the Fulton Community Development Agency (FCDA) and the City of Fulton continued its work on revisions to the Local Waterfront Revitalization Program (LWRP) for submittal to the NYS Department of State. A public information meeting was held in February to update residents on the progress of the effort and to solicit input.

According to the FCDA, the LWRP represents “an effort to establish a more comprehensive plan for its waterfront areas”, which includes 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 areas.

http://fultoncda.com/?page_id=628

5. Lake Ontario Coastline and Adjacent Upland Areas

A. Sand Dunes and Embayments: According to the 2007 NYSDOS 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.

June 2017 saw the highest water levels on Lake Ontario since records have been kept - 248.95 feet in late June. Levels remained very high through most of the summer and shoreline residents suffered considerable loss of lake frontage. Along the dune shoreline, the toes of the dunes were eroded back about 20-40 feet from previous locations. Dunes on the North Spit of Sandy Pond were worst affected. New York State provided emergency funding for repair and some landowners reported speedy action on the part of the state in providing assistance. Undeveloped dune areas (Wildlife Management Areas and State Parks) saw erosion as well, but these sites are able to recover naturally as water levels come down and sand returned to the beach. This was observed by Labor Day. As of mid-November, 2017, the lake was at 245.7 feet, which was 15 inches above the level of mid November 2016 and 14 inches above the long-term average for that time of year. For perspective, this level is still 11 inches below the all-time high for this time of year (1951) and 45 inches above the all-time low (1934).

Some people pointed to the newly implemented International Joint Commission (IJC) Plan 2014 as the reason for the high water, but IJC pointed out several conditions that could not have been anticipated:

1. The lake went into winter at a lower than average level
2. We had a normal amount of snow, but had five complete melt-off events before spring. The implications of a melt-off event are that ice cover on the St. Lawrence

River becomes unstable and IJC must reduce outflows in order to prevent ice jams down river

3. April through early July saw record rainfall, both locally and throughout the basin, as well as in the Ottawa River basin. IJC used the highest water release levels in regulation history to try to mitigate the high water.

In 2017, a few US Endangered Piping Plover individuals visited Sandy Island Beach State Park briefly, but did not nest. Improved habitat next year can be expected as a result of the high water.

Sandy Island Beach State Park did a dune front stabilization project on its south boundary. Because of the management activities associated with the high water, construction for a new walkover along with invasive species removal, restoration plantings and interpretive signage in the northern part of the park has been postponed.

B. Coastal Wetlands: 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.sleoinvasives.org/about-invasives/native-species/bog-buckmoth/>

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

C. Basin-wide Collaboration/Education: 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 2017, 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 2018.

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 geographic information system (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 was anticipated to go live in 2017.

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.

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 Schroepfel 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/schroepfel-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 Development and Planning Board (CNYRPB) coordinates the Oneida Lake Watershed Management Plan.

See <http://www.cnyrpd.org/oneidalake/solw.asp>

The 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.cnyrpd.org/oneidalake/managementstrategy.asp>

Harmful algal blooms (HABs) occurred in the summers of 2016 and 2017 on Oneida Lake, impacting swimming and other recreational. The New York State DEC provides information on HABs at <http://www.dec.ny.gov/chemical/77118.html>

Invasive aquatic species such as zebra and quagga mussels have had impacts on Oneida Lake over the last several years. Further impacts are expected due to invasive round gobies.

<https://phys.org/news/2017-08-invasive-gobies-oneida-lake-complexionagain.html>

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

The Great Lakes Water Quality Agreement is a commitment between the United States and Canada to restore and protect the waters of the Great Lakes. The agreement provides a framework for identifying binational priorities and implementing actions that improve water quality. The Environmental Protection Agency (EPA) coordinates U.S. activities under the agreement. For updates and background information see:

<https://www.epa.gov/glwqa>

B. Lake Ontario Lake-wide Action and Management Plan

The most recent Lake Ontario Lakewide Action and Management Plan 2017 Annual Report summarizes the following information:

- Accomplishments in restoring habitat and species in the St. Lawrence River, coastal wetland restoration and outreach and engagement
- Challenges for nutrient reduction initiatives
- Update on the Niagara and St. Lawrence River monitoring efforts
- Next steps for advancing science priorities and on-the-ground actions.

The entire report can be found at: <https://binational.net/2017/10/24/loar2017/>

C. Water Quality: The Great Lakes are the world's largest freshwater ecosystem. Lake Ontario's location as the furthest downstream of all the Great Lakes means it will receive water quality impacts from all the upstream lakes. This includes everything from chemical pollution to invasive species.

The Great Lakes Commission is launching initiatives to change the way cities handle stormwater. In 2014 roughly 22 billion gallons of untreated sewage or stormwater was released into the Great Lakes, and environmental groups say that overflow is due to poor stormwater management. The Commission is promoting a variety of technologies

including pervious pavement and simple ways to remove sediment from water. "Green infrastructure" technologies include rain gardens, bioswales, green roofs or rain barrels, or porous pavement that mimic how stormwater is handled by nature.

Pursuant to the [Great Lakes Water Quality Agreement](#), Canada and the United States, together with their many partners, established a suite of 9 indicators of ecosystem health, supported by 44 sub-indicators, to assess the state of the Great Lakes.

<https://binational.net/2017/06/19/sogl-edgl-2017/>

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

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. In addition to considering that Lake Ontario receives a majority of its water from the other four Great Lakes, its human population density and resulting impacts makes Lake Ontario the most highly stressed lake in the Great Lakes system.

A study done by Rochester Institute of Technology (RIT) inventoried and tracked concentrations of plastics in the Great Lakes. Researchers found that nearly 10,000 metric tons (22 million pounds) of plastic debris enter the Great Lakes every year from the US and Canada. Lake Ontario alone receives approximately 1,400 metric tons of plastic litter which is about 80% of the litter on shorelines. Plastic particles released from Toronto appear to accumulate on the southern shores of Lake Ontario including around Rochester and Sodus Bay. Mike Dawes of Trout Unlimited reported that, "Two-thirds of all fish populations now test positive for plastics".

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. PCBs, pesticides and motor oil 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.

As of July 1, 2017, manufactures are required to phase out plastic microbeads from personal care products sold in the United States.

<https://www.newswise.com/articles/july-marks-the-beginning-of-a-u-s-ban-on-microbeads-what-are-microbeads-and-do-they-affect-the-planet>

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

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 contaminants, 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 contaminants found in our drinking water, consumption of these chemicals and mixtures may prove to provide physical and psychological impacts from human consumption of fish. Studies of these impacts are continuing.

A study published in the journal "Environmental Science and Technology" on 8/16/17, co-authored by a research team that included scientists from the University of Buffalo and SUNY-Buffalo, provides the most recent findings. The percentage of Americans taking antidepressants rose 65 percent between 2002 and 2014. These drugs (Zoloft, Celexa, Prozac and Sarafem) and their metabolites are a major problem being found in the brains of *every fish studied* from waters entering Lake Ontario. Hau,Charlotte. *Antidepressants Found in Some Great Lakes Fish*. New York Outdoor News.10/6/17, p.11.

For additional information see:

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

www.ncbi.nlm.nih.gov/pubmed/26561986

F. Lake Water Levels and Flows: In December 2016, the IJC 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. The 2017 projections by The Nature Conservancy include efforts at restoring and making the largest wetland complex in the US outside of the Everglades - one hundred square miles or 64,000 acres. Many lakeshore residents are opposing the plan, citing

the potential for increased erosion and flooding which could damage properties and facilities along the shoreline.

Since the significantly wet winter of 2016-17, the Lake Ontario Riparian Alliance has noted many continued negative effects of the weather and Plan 2014. Flooding of municipal water and sewage treatment systems, breaching of Sodus Bay and Port Bay, significant shoreline erosion, loss of houses/cottages close to shore and other impacts have been enumerated.

The estimated increase in economic value for NYS through new hydroelectric generation, shipping, outdoor recreation and tourism is estimated to return about \$12 million annually. Partnerships have been and are being established to improve shoreline resilience which include integrating the best designs for breakwalls and dredging harbors and channels during times of low water. (The Nature Conservancy. "A Great Win for the Great Lakes".

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

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

<https://www.glerl.noaa.gov/data/wlevels/levels.html>

G. Sport Fishing: Sport fishing in Oswego County provides a multimillion-dollar economic impact on the local communities along the Lake Ontario shoreline, 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.qlfc.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.

<http://www.chicagotribune.com/news/local/breaking/ct-asian-carp-near-lake-michigan-20170818-story.html>

<https://www.npr.org/sections/thetwo-way/2017/06/23/534105477/invasive-carp-caught-9-miles-from-great-lakes-in-cause-for-serious-concern>

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

<http://wx.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 year-long 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.

The summer of 2017 saw the continued expansion of toxic algae blooms to more waters including municipal drinking water sources in NYS. Both Oneida Lake and Lake Neatahwanta in Oswego County again had confirmed blooms. The City of Fulton and Town of Granby efforts toward the restoration of Lake Neatahwanta are continuing albeit slowly.

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

www.newyorkupstate.com/.../finger_lakes_toxic_algae_threat_land_trust_urges_100

http://ny.healthinspections.us/ny_beaches/

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

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

K. Great Lake Ontario National Marine Sanctuary: On March 21, 2017, the National Atmospheric Administration approved moving forward with the application by Jefferson, Oswego, Cayuga and Wayne Counties to establish a National Marine Sanctuary in eastern Lake Ontario.

<https://www.facebook.com/Great-Lake-Ontario-National-Marine-Sanctuary-Proposal-1477188119243269/>

<http://www.oswegonews.com/osw/noaa-accepts-great-lake-ontario-national-marine-sanctuary-application-20170321>

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 causing 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. The wetter than average 2017 summer and the fifth hottest October on record are sure to impact the winter of 2017-2018.

Jim Howe, Chapter Director of The Nature Conservancy, says, " The Tug Hill region is expected to warm by as much as four to six degrees Fahrenheit by the 2050s." (Nature.Org/CWNY). The environmental group is undertaking a funded project to re-establish a strong and diverse forest able to weather a changing climate and ensure the ecosystem provides clean air, water and timber. Replanting of native tree species and applying traditional silviculture techniques will help the forest adopt to change.

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 members will continue to monitor climate change information and studies in 2018.

B. Renewable Energy:

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.

2. Solar 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 has also been initiated for a large installation on the east side of County Route 7 approximately 1.2 miles north of NYS Route 3.

Last year, the six SolarizeCNY workshops hosted by EMC resulted in the installation of 221 residential-size photovoltaic systems. There was only one workshop this year. Seven vendors participated. Public attendance was small. No information has been received about resulting/confirmed installations. Residential system installations

continue stimulated by the federal and NYS state tax credits resulting in a 55% reduction in system costs.

Oswego County Environmental Management Council 2017 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.

Annually, EMC members revise their strategic plan to keep closely aligned with the objectives and strategies set forth in the current Oswego County Comprehensive Plan and to consider major environmental issues in the county. 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 2017 EMC Strategic Plan was developed and approved unanimously by its members and is attached as Appendix A to this report.

In 2017, Tim Carroll (Town of Granby) served as EMC Chair, Sandy Bonanno (Town of Volney) served as Vice Chair and Dr. Carl Salvagin (Town of Hannibal) 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 2018 to broaden the knowledge and experience of EMC members and to provide a wider geographic representation on the EMC.

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 and other invasive species such as giant hogweed and emerald ash borer which are found in Oswego County. Information materials were inventoried and updated to reflect the best available information.

C. Local Involvement

EMC members continued to attend meetings, or serve as members and liaisons, of 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 Water Quality Coordinating Committee, Oswego County Soil and Water Conservation District, Oswego County Solid Waste

Management Board, Friends of Fulton Parks, Friends of Great Bear, New York State Association of Environmental Management Councils, the Great Lake Ontario Marine Sanctuary proposal and Solarize CNY. 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 responded to questions on local environmental issues at the Altmar Fish Hatchery open house.

As they have since 2005, EMC sponsored a proclamation in the Oswego County Legislature in 2017 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 and local media.

In addition, a press release was issued by the EMC promoting the theme 'Let's Clean Up and Green Up'. Residents were encouraged to participate in community or neighborhood litter and debris cleanup activities, reuse and recycle wherever possible and plant trees and shrubs using native vegetation. EMC also provided work gloves, bags and safety vests for several cleanup activities.

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. The EMC annually receives many letters thanking them for the information available on the site and suggesting additional links that users might find helpful.

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. In 2017, EMC provided publicity, materials and volunteer support for a well-attended workshop in Oswego. Over the two years that workshops were held in Central New York, Oswego County had the highest percentage of attendees signing up for evaluation of their homes for installation of solar panels.

G. 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. In 2017, the group completed work on updating Oswego County's Water Quality Strategy, which had not been revised in many years.

Dr. Greg Boyer of SUNY College of Environmental Science and Forestry, spoke at an EMC meeting to educate members on Lake Neatahwanta nutrient loading and harmful algal blooms.

H. Wind Farms

EMC members attended the Avangrid Renewables open house in Redfield. The open house provided information on a proposed 125-unit wind farm in the Town of Worth and Town of Redfield. Construction and maintenance activities may impact water quality in the Salmon River. <http://www.avangridrenewables.us/madriver/>

I. Other EMC Activities

EMC prepared a letter sent to United States senators and representatives encouraging restoration of full federal funding for Sea Grant and associated Lake Ontario research. EMC also encouraged Oswego County Legislators to support restoration of the funding in the federal budget.

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. 2017 EMC Membership

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

Appendix A

Oswego County Environmental Management Council 2017 Strategic Plan

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

Strategy 1a: Participate in a cooperative effort to re-activate the Oswego County Water Quality Coordinating Committee.

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 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 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 ELO 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 pastimes of hunting, fishing, trapping and viewing wildlife.*

Strategy 4a: When proposed, review revisions to 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 report to county legislature and county/local planning departments.

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

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

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

Strategy 4e: 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 efforts in Oswego County 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 Oswego County website.

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

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

Strategy 8ef: 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 21, 2016

Tim Carroll, Chair

Oswego County Environmental Management Council