



Owasco Lake Watershed Inspection Program

2018 Annual Report

Program Mission:

To make regular thorough inspections of Owasco Lake, its watercourses, and its watershed to identify compliance with the Rules and Regulations set forth for the Owasco Lake Watershed and to provide educational outreach within the watershed community that supports environmental awareness and lake stewardship.

2018 Highlights

	<u>Pgs.</u>
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A summer view to the southwest over the Dresserville Creek sub-basin from Town of Sempronius, NY

Watershed Highlights

Watershed Status

The Owasco Lake watershed experienced limited widespread and severe meteorological events in 2018, relative to other areas of the finger lakes and southern tier.

Despite the dry weather patterns for watershed in 2018, the southern portion of the watershed and the Lake Inlet Valley from Moravia to Groton continued to demonstrate high vulnerability to erosion and flooding, illustrating the ongoing need for flood resiliency and community protections.

Rainfall and snowmelt events, which occurred throughout the year, were less detrimental to the landscape and watercourses than in 2017. Nevertheless, sediment transport and deposition occurred, identified by numerous visual observations made of multidirectional sediment plumes.

In 2018, a new multi-agency monitoring initiative began, poised to evaluate the changing chemical and physical interactions occurring within Owasco lake, that may be contributing to Harmful Algae or Cyanobacteria blooms (HABs). Generally, scientists agree the relationship between wet weather and the potential for non-point source pollution in the form of nutrient runoff may be an important driver of algal blooms in this watershed. In 2018, HABs occurred less frequently and with lower intensity throughout the lake when compared to the previous 2 years.



Early autumn lake view from
Emerson Park, Town of Fleming, NY

2018 Watershed Inspection Summary

The Inspection Program closely monitored all streams, road ditches, construction sites, residential septic systems, and commercial and agricultural operations throughout the watershed to ensure protective measures and practices were utilized.

In addition to continuous and widespread watershed surveillance for activities considered potentially detrimental to water quality, staff conducted **76** site visits, identifying **16** water quality violations.

Construction Activities

Residential construction sites inspected throughout the watershed in 2018:

<u>Town</u>	<u>Number Inspected</u>
*Owasco -	8
Niles -	4
Fleming -	3
*Skaneateles -	1
Dryden -	1
*Moravia -	4
Scipio -	3
Total Sites Inspected:	<u>24</u>
*Site Violations	3
(due to lack of stormwater permit)	



Shoreline construction, Emmi Drive,
Town of Owasco, NY

Watershed Highlights, Continued

Severe Erosion /Infrastructure

Erosive effects were identified on steep slopes, ravines, ditches and streambanks within the watershed that resulted in land subsidence and associated nutrient removal from the landscape.

<u>Watershed Feature</u>	<u># of Occurrences</u>
Streambank Erosion -	12
Road Ditches -	(no significant lengths of ditches were disturbed)
Culverts Failures -	5
Total Sites Inspected:	<u>17</u>
Site Violations:	0



Abandoned railroad culvert, outfall erosion, Firelane 11, Town of Scipio, NY

Agricultural Concerns

Landowners throughout the watershed took important steps towards reducing soil loss. Thousands of acres of cover crops were planted, miles of fence were installed, and field gullies were stabilized.

<u>Land Use Concern</u>	<u># of Occurrences</u>
*Animal-Stream Access -	5
*Compost Pile Locations -	2
Logging Equipment -	2
Field Erosion -	2
Manure application/disposal -	2
Total Site Inspections:	<u>12</u>
*Site Violations:	7



Steep slope crop field, gully erosion stabilized, Firelane 23, Town of Niles, NY

Miscellaneous Inspections

<u>Watershed Concern</u>	<u># of Occurrences</u>
Suspicious Culvert Discharge -	1
Deer Carcass Removal from Lake -	1
Fuel Spills (Niles/Sempronius/Fleming) -	4
Fertilizer Spills -	2
*Disposal / Abandoned Landfills -	2
*Septic Concerns -	9
Barn Fire -	1
Yard Debris Disposal -	2
Shore Litter Accumulation -	1
Total Site Inspections:	<u>23</u>
*Site Violations:	6



Rainbow coloration from petroleum fluid leak on Duryea Road, Town of Niles, NY

Useful Facts and Contact Information

If you suspect an problem effecting the lake or streams within the watershed, please contact us ASAP! ***All reports received will remain anonymous!***

* To report an algae bloom on Owasco Lake, please call 315-427-5188, or visit: www.owascoinspection.org for anonymous reporting.

Important Reminders:

- * To avoid disruption of trout spawning, in-stream work should be avoided to the greatest extent practicable from **November 1 - June 15.**
- * Shoreline Construction Medium High Water level: **713.9'**
- * NYS Lake Classification for Owasco Lake: **AA—source for drinking water**
- * Stream Classifications: The watershed has protected stream segments that may require permitting. Before performing any shoreline or streambank construction, make certain state and federal permits are in place.

Owasco Lake Watershed Facts & Figures

Drainage Area:	208 square miles
Counties:	3 - Cayuga, Onondaga, Tompkins
Townships within the watershed:	14 - Owasco, Fleming, Groton, Scipio, Skaneateles, Moravia, Sempronius, Locke, Genoa, Lansing, Niles, Summerhill, Dryden, Sennett
Maximum Lake Depth:	~177 ft
Lake Length:	11 Miles
Lake Average Width:	1.2 Miles
Lake Average Depth:	96 Feet
Finger Lakes Rank:	6th Largest
# of Residents Consuming Owasco Lake Waters:	~45,000
Land to Lake Ratio:	20:1 (Largest in Finger Lakes)
Average Volume of Water in Owasco Lake:	~260,000,000,000 gallons

Staff and Program Updates

A warm welcome to Dr. Adam Effler, the new Executive Director for the Owasco Lake Watershed Management Council! Dr. Effler embarked on his new role on March 4th, 2019 and is excited about the opportunity to engage and collaborate with residents, partner organizations, and communities to build capacity for the management council and subsidiary programs. As a well-established Upstate New York resident, he is a passionate science educator with over 20 years of experience working with both private and public sectors to solve an array of local environmental problems. The wealth of knowledge, experience, and personable demeanor he brings will certainly amplify the restoration efforts to improve the health of Owasco Lake and its watershed! Dr. Effler's Contact: (315)975-7416.

PLEASE NOTE:

The Inspection Program is now located at the Cayuga County Parks and Trail office at Emerson Park.

*Our new mailing address is:
**6914 East Lake Road
Auburn, NY 13021**

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Owasco Lake Watershed Inspection Program Committee Members

- ◇ **Ms. Debra McCormick, Councilor, City of Auburn**
- ◇ **Mr. Ed Wagner, Supervisor, Town of Owasco**
- ◇ **Ms. Aileen McNabb-Coleman, County Legislative Representative**
- ◇ **Mr. Seth Jenson, PE, Director of Municipal Utilities, City of Auburn**



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