

History

Oneida Lake is a remnant of Lake Iroquois that was impounded by a glacier approximately 12,000 years ago. The first major development occurred in the early 1800's. Industrial activities included the logging business, sand business, basket making, salt industry, summer resorts, and the glass industry (www.OneidaLakeChronicles.com).

Demographics

Approximately 262,164 people live in the watershed. In 1900 there were 476 dwellings reported. In 1960 there were 4,298 dwellings reported. (A dwelling is a seasonal camp to permanent residence). Oneida Lake provides anglers more fish per acre than any other lake in the northeastern United States. The net economic value of Oneida Lake's freshwater fishery was estimated in 1996 to be more than \$9.4 million, ranking first amongst New York's inland waters (CNYRPDB, 2004)!

Lake Characteristics

Length: 20.9 miles (33.6 km)

Maximum width: 5.5 miles (8.8 km)

Average depth: 22.3 feet (6.8m)

Amount of water (at 367 feet): 370 billion gallons

Length of shoreline: 54.7 miles (88.0 km)

Time for water to flow through system: 235 days

Prevailing winds: westerly to north westerly

Background

Oneida Lake Watershed includes portions of 69 municipalities and 872,772 acres.

% Land in each watershed County	Acres / County (estimated)	# Farms / County	% Land in Agriculture	Estimated Population (2000) *
34% - Oneida	296,742	93	26	59,557
25% - Madison	218,193	169	44	50,607
16% - Onondaga	139,643	43	23	110,078
14% - Oswego	122,188	11	5	40,852
10% - Lewis	87,277	0	4	996
<1% - Cortland	8,729	0	<1	74

**Population was computed by HOCCPP from 2000 block-level Census data as reported in CNYRPDB, 2004.*

Overall, the watershed is 47.5% forested and 33.5% in agricultural production.

Approximately 29% of the total land area in the watershed is agricultural and is primarily located in Madison, Oneida, and Onondaga counties. There are 850 miles of trout streams in the Oneida Lake watershed, including 141 miles of stocked streams. Appendix A lists the municipalities within the watershed, per County (CNYRPDB, 2004).

The Use of the NYS Agricultural Environmental Management (AEM) Program to Work with Farms in the Oneida Lake Watershed

AEM is a voluntary, incentive-based program that helps farmers make common-sense, cost-effective, and science-based decisions to help meet business objectives while protecting and conserving the State's natural resources. Farmers work with local AEM resource professionals to develop comprehensive farm plans using a tiered process:

- **Tier 1** – Inventory current activities, future plans and potential environmental concerns.
- **Tier 2** – Document current land stewardship; assess and prioritize areas of concern.
- **Tier 3** – Develop conservation plans addressing concerns and opportunities tailored to farm goals.
- **Tier 4** – Implement plans utilizing available financial, educational, and technical assistance.
- **Tier 5** – Evaluate to ensure the protection of the environment and farm viability.

<https://www.nys-soilandwater.org/aem/index.html>

Annual Update Meeting with Soil & Water Conservation Districts

The Soil and Water Conservation Districts (SWCDs) hosted the second annual update meeting with the Oneida Lake Association Board of Directors on Friday, March 13, 2020. This meeting was at the Double Tree Hotel in East Syracuse, NY. The only other participant at the meeting besides representatives of Madison, Oswego, and Onondaga Counties SWCD representatives, was Mr. Tim Burtis, Legislator, Onondaga County, District #3.

Reports by County Soil and Water Conservation Districts (SWCD)

Cortland SWCD

No update available.

Lewis SWCD

No update available.

Madison SWCD

Farm Erosion Control



This Grade Stabilization Structure (near rock-rip rap) was installed in an existing pature area to to eliminate a severly eroding area that runs water during spring runoff and during severe storm events. Picture of revegetation of project site. Cost \$4,500 - Funding - FLOWPA and Farmer.

Chittenango Creek log jam clearing



Since 1996 Madison County SWCD has worked with the Towns of Sullivan, Manlius, and Cicero to maintain the Chittenango Creek Stream Channel between Fyler Road and State Route 31 by removing log jams and obstructions for purpose of flood prevention. In 2015 the Town of Cicero withdrew from the program. In 2019 no log jams were removed due to equipment and weather-related issues.

Madison County SWCD's no till drill



Madison county SWCD has a 15-foot no-till drill that it loans out to farms across the county to plant crops without plowing the soil resulting in reduced soil erosion and nutrient runoff.

Manure storage



2 - Manure storages were installed on a dairy farm in the watershed to help the farm better apply the nutrients in the manure closer to the growing season resulting in a significant reduction in nutrient runoff to the watershed. Cost - \$575,000 Funding – State EPF and Farmer.

Silage Leachate Control



Installation of a silage bag heavy use area on a dairy farm will allow the farm to better clean up spoiled feed thus reducing polluted runoff from entering a nearby stream. Run off from the new heavy use area will be directed to a vegetated area to treat the runoff. Vegetative Treatment Areas (VTA's) have been proven to be a great treatment system for this type of farmstead issue by reducing both nutrients and BOD from the bunk silo runoff. Cost - \$24,000 Funding – FLOWPA and Farmer.



Erieville Reservoir bank protection (before implementation). Note the severe erosion.



Reservoir bank after structural stabilization. – Cost \$39,250 Funding - Madison County and Town of Nelson.

Dyke Road Chittenango – culvert upgrade to reduce erosion and flooding issues – before installation – note side by side culverts prone to plugging and flooding.



Stream channel post construction with clear span arch culvert– Cost \$65,800 Funding – Madison County and Town of Sullivan.



Village of Munnsville Flood Mitigation Project.



Large stormwater detention pond. Under construction – pond will hold large volume of runoff water during storm events and slowly release the water over time to reduce erosion and flooding in the Village. Project under construction. Project cost \$25,000 – County and Town of Stockbridge.



Detention pond and dyke. Completed and functioning.



Severe erosion along a section of Canaseraga Creek was contributing significant amounts of sediment into the watershed. Project cost \$24,000 – County, SWCD and Landowner.



Structural stabilization and reconnecting the stream to the flood plain will dramatically reduce the amount of sediment coming from this location. Photo just prior to seeding and mulching of site.



Severe erosion along a tributary to Oneida creek was contributing large volumes of sediment to the stream. Cost - \$5,700 - County, Landowner.



Streambank after structural stabilization to reduce erosion.



Severe erosion along Limestone creek is resulting in large quantities of sediment entering the stream.



Upon further investigation it turns out this is not just streambank erosion but a landslide. Phase one was to relieve the pressure of the landslide by installing drainage on the slope with the intent of stopping the landslide. Then a streambank restoration project can be implemented. Cost - \$21,000 – county, landowner.

Onondaga SWCD

Livestock numbers estimated to be within the Onondaga County portion of the watershed.

107,000 chickens	3,704 dairy cows
660 sheep	425 beef cows
160 alpacas	120 horses
60 goats	

The following implementation has occurred in the Onondaga County portion of the watershed in 2019.
Planning

AEM Tier Level of Planning Achieved	Farm Acres	Farm Type	Town Farm is in	AEM GIS Number
IIIA	120	Beef	LaFayette	067-1059
II	110	Beef	Pompey	067-1065
I	2,426	Beef & Crop	Pompey	067-1067
IIIA	128	Sheep	Jamesville	067-1059
VB	75	Beef	Pompey	067-1041
VB	7	Alpaca	LaFayette	067-1042
VB	192	Beef	Pompey	067-1030
VB	78	Beef/Dairy Heifers	Jamesville	067-1001

Implementation

Acres Benefited	Farm Type	BMP(s) Implemented	AEM GIS Number	TOTAL Project Cost	Funding Source
300	Dairy	Phase I Archeological survey for manure nutrient storage	067-1003	\$2,522	NYS EPF Round 22
84	Sheep	13,236 L.F Exclusion fence, 2,200 L.F. water line & 4 troughs for pasture system	067-1059	\$47,372.15	NYS EPF Round 24, Onondaga County Ag Council, Landowner
27	Crop	Cover crops – 27 acres	067-1001	\$2,325.51	NYS Climate Resilient Farming Round 3, Landowner
29.5	Crop	Cover crops – 29.5 acres	067-1012	\$877.50	NYS Part C 2019

62.6	Crop	Cover crops – 62.6 acres	067-1010	\$5,505.04	NYS EPF Round 24, Landowner
34	Beef	1,500 LF water line, 2 troughs, and 4,400 LF fence for rotational grazing system	067-1016	\$16,474.30	NYS EPF Round 23, Onondaga County Ag Council, Landowner



Interior division fence installed as part of an 84-acre rotational grazing system on a sheep farm. Cost: \$39,037. Source: NYS Environmental Protection Fund



Woven wire perimeter fence installed as part of an 84-acre rotational grazing system on a sheep farm. Cost: \$39,037. Source: NYS Environmental Protection Fund



Fence installed to create a rotational grazing system on a beef farm. Cost: \$16,474.30. Source: NYS Environmental Protection Fund



Water trough installed as part of the same grazing system shown above.

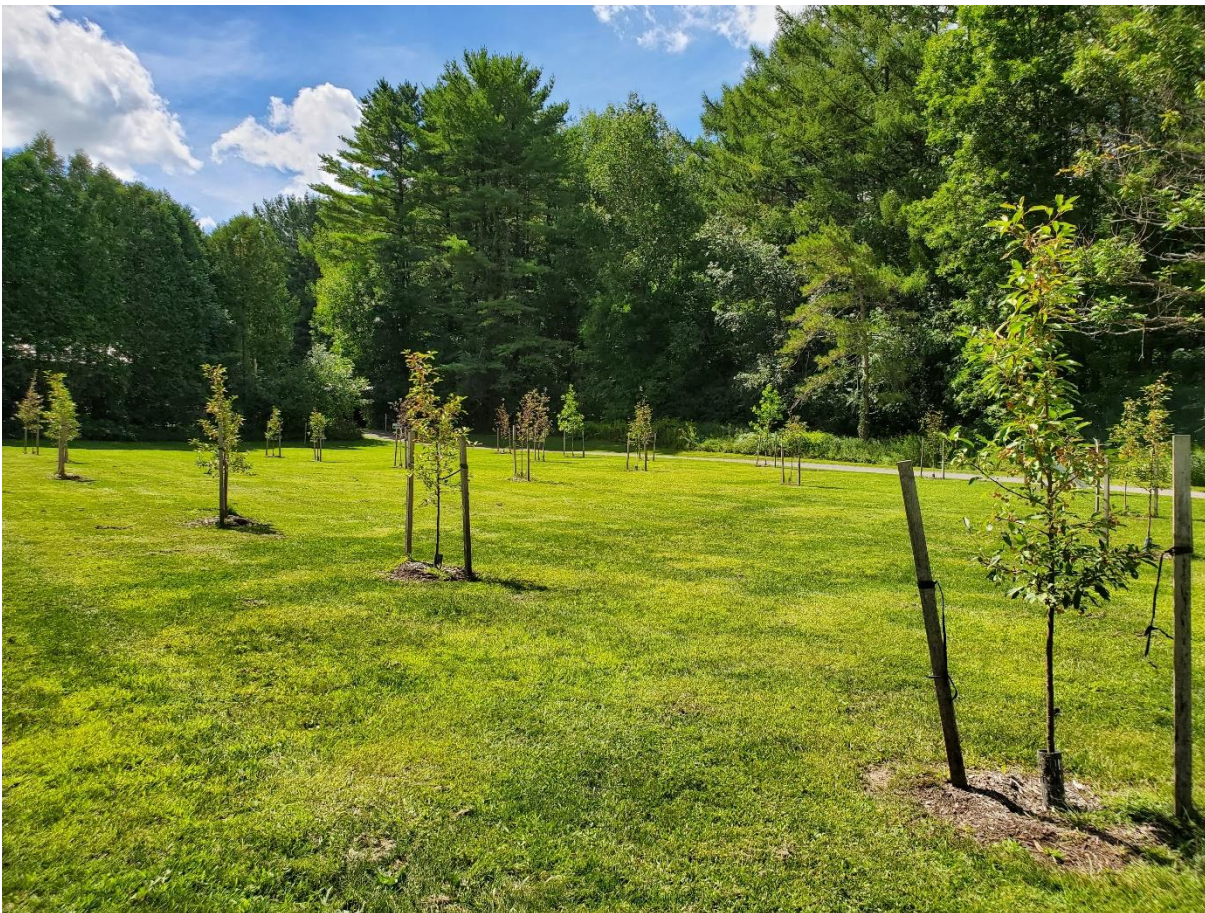




62.6 acres of Carbon Capture Cover Crops installed. \$5,5505.40 paid from NYS Environmental Protection Fund, Round 24 and the landowner.

Other Activities – Onondaga County SWCD

Project Type	Units	TOTAL Project Cost	Source of Funding
Hydroseeding of municipality-maintained road ditches	7.3 (miles)	\$16,196	NYS DEC WQIP Round 11 & local municipalities
Tree Replanting – Oneida Shores, Pratts Falls, Jamesville County Parks (to replace function & values by pre-emptively removing 704 ash trees (\$56,402) that could harm park patrons and/or damage critical infrastructure in the county as a result of Emerald Ash Borer)	795 pieces	\$85,212.82	Onondaga County EAB Project Fund & Great Lakes Restoration Initiative tree replanting grant
Provided funding to CNY Regional Planning & Development Board for Upstate Freshwater Institute to complete a monitoring program for Chittenango Creek, a major tributary to Oneida Lake in Onondaga County.	Additional Phosphorous data was needed	\$4,835.52	NYS SWCD Part C 2019



Community tree re-planting of non-Ash species at Pratt's Falls-Onondaga County Parks.

Oswego SWCD

Fanwort Control

Fanwort, an aquatic invasive weed, was found in Kasoag Lake, located in the town of Williamstown. In 2019, the Oswego County Soil and Water Conservation District (OCSWCD) arranged for the herbicide treatment of approximately 24 acres of this aggressive plant. This lake has direct drainage to Oneida Lake, making it important to monitor and control fanwort. The treatment was successful, and the lake association is planning a follow-up application is planned for 2020.



Fanwort Monitoring. District staff member utilizing GPS to inspect the 2019 control treatment and assess the need for follow up application.

Forest Management

The District is the lead agency in managing 2,200 acres of reforestation property for Oswego County. Approximately 550 acres is located within the watershed. In 2019, 35 acres of hardwood was planned and marked for harvest. The cuts implemented were thinning treatments and the selection of forestry practices was based on an inventory conducted in 2017. The District also plans all the Best Management Practices and oversees the harvest operations on Oswego County reforestation properties.



Timber Sale Marking. District staff member marking a tree as part of a thinning treatment.



Timber Sale Cleanup. As harvests are completed, the contractors are required to fix or install required Best Management Practices as well as level all skid trails and log landings to facilitate drainage.

Municipal Tree Planting

The OCSWCD worked with the villages of Cleveland and Central Square to arrange the planting of approximately 25 trees in the fall of 2019. District staff worked collaboratively with village representatives to select priority planting locations as well as the tree species for each site. The contractor for the project, selected through a bid process, was required to utilize two-inch caliper stock and proper planting procedures. Planting locations were primarily along streets but included parks and cemeteries as well.



Tree Planting. Several trees planted at the cemetery in Central Square during the fall of 2019.

In addition to the above highlights, the Oswego County Soil and Water Conservation District continues to offer forestry, agricultural and water quality assistance to municipalities and residents in Oswego County.

Oneida SWCD

No update available.

Conclusion

In 2019, more than \$932,236 of conservation activity occurred in the Oneida Lake Watershed. These efforts were to help keep the soil on the land, the nutrients in the soil, to protect water quality!

Appendix A – Municipalities within the Oneida Lake Watershed

Cortland County (3)

1. Town of Cuyler [*](#)
2. Town of Preble [*](#)
3. Town of Truxton [*](#)

Lewis County (6)

1. Town of Lewis
2. Town of Montague
3. Town of Martinsburg
4. Town of Osceola
5. Town of Turin

Madison County (17)

1. City of Oneida
2. Town of Cazenovia
3. Town of DeRuyter
4. Town of Eaton
5. Town of Fenner
6. Town of Lenox
7. Town of Lincoln
8. Town of Madison [*](#)
9. Town of Nelson
10. Town of Smithfield
11. Town of Stockbridge
12. Town of Sullivan
13. Village of Canastota
14. Village of Cazenovia
15. V. Chittenango
16. Village of Munnsville
17. Village of Wampsville

Oneida County (19)

1. City of Rome (inner & outer dist)
2. City of Sherrill
3. Town of Annsville
4. Town of Augusta
5. Town of Ava
6. Town of Camden
7. Town of Florence
8. Town of Kirkland [*](#)
9. Town of Lee
10. Town of Marshall [*](#)
11. Town of Verona
12. Town of Vernon
13. Town of Vienna
14. Town of Western [*](#)
15. T. Westmoreland
16. V. Camden
17. V. Oneida Castle
18. V. Sylvan Beach
19. Village of Vernon

Onondaga County (13)

1. City of Syracuse
2. Town of Cicero
3. Town of Dewitt
4. Town of Fabius
5. Town of Lafayette
6. Town of Manlius
7. Town of Onondaga
8. Town of Pompey
9. Town of Tully
10. Village of East Syracuse
11. Village of Fayetteville
12. Village of Manlius
13. Village of Minoa

Oswego County (11)

1. Town of Amboy
2. Town of Albion [*](#)
3. Town of Constantia
4. Town of Hastings
5. Town of Orwell [*](#)
6. Town of Parish
7. Town of Redfield
8. T. West Monroe
9. T. Williamstown
10. V. Central Square
11. V. of Cleveland