# Skaneateles Lake Watershed Program Annual Report 2024-2025
## City of Syracuse Department of Water
## April 10, 2025


**Prepared By:**

**Richard Abbott**

**Public Health Sanitarian**

**Department of Water**

Prepared by
Rich Abbott
Watershed Quality Coordinator

City of Syracuse Department of Water

Division of Skaneateles Lake Watershed Programs

# Table of Contents



# Appendices

# 1. AGRICULTURAL PROGRAM ANNUAL REPORT

## 1.1 Overview

The City of Syracuse continued to contract with the Onondaga County Soil and Water Conservation District for the Skaneateles Lake Watershed Agricultural Program (SLWAP) in FY 2024-2025. This year forty-one (41) watershed farms meet the Agriculture and Markets' definition of a "farm." Thirty-five (35) of these are enrolled in the program and five (5) farms do not wish to participate. Two (2) of the non-participating farms are self-implementing Best Management Practices from Whole Farm Plans developed by SLWAP. City watershed inspectors monitor one additional farm for compliance with Watershed Rules and Regulations and Environmental Conservation Law. The overall participation rate is eighty-five (85%).

The figures in this report show the current number of Whole Farm Plans applied to active agricultural land in the watershed. Twenty-four (24) farms are no longer in active production or do not meet the definition of a farm and have been eliminated from the status reports, resulting in an annual decline in the number of enrolled farms. For the most part, the farmland has been absorbed by other active farms. Progress has continued with Whole Farm Plans completed for thirty-five (35) farms, equaling 75.82 farm equivalents (one farm equivalent being 400 acres), and implementation is complete on twenty-nine (29) farms, equaling 66.38 farm equivalents. Approximately ninety-three percent (93%) of the farmland in the watershed is enrolled in the program.

Three barriers to pathogen movement, including exclusion from watercourses, are established on sixteen (16) of the twenty (20) active enrolled livestock farms in the watershed. Livestock farms in the 6-mile zone were planned and implemented by June 30, 2004, in accordance with the NYS DOH requirement. Soil erosion and nitrogen and phosphorous runoff have been reduced by considerable amounts watershed-wide, based on standard estimating techniques (See Appendix B).

SLWAP staff conducted comprehensive reviews of all implemented Whole Farm Plans from January to March 2025. Farm operators received a letter in advance detailing which data to have prepared for the review, streamlining the process. Farm survey data collected during each review is presented in the "Skaneateles Lake and Watershed 2024 Annual Report," City of Syracuse Department of Water – Water Quality Management, April 2025, submitted separately to the NYSDOH.

A rental program for soil conservation tools was instituted in 2009. The City provided SLWAP with funds to purchase a John Deere conservation planter, a Great Plains no-till drill, and an AerWay minimal tillage system. The first two of these tools can plant corn and beans and apply fertilizer, seed buffer strips and filtration areas, reseed pasture and improve wildlife habitat areas. The third, the A robertbrandt@syr.gov erWay, allows for injecting liquid manure directly into the soil up to eight inches deep, reducing volatilization and the likelihood of manure-laden storm runoff leaving a field after a manure treatment. The AerWay was sold in the fall of 2012 because of exceedingly limited rental. In the summer of 2017, SLWAP sold the 6-Row John Deere 1750 Conservation Planter and the 10' Great Plains 1006 No-Till Drill and purchased a new 12-foot Esch 5512 No-Till Drill. The drill can plant small grains, cover crops, small seeds, soybeans, and buffer strips. In 2023, it was determined that the drill needed replacing due to wear and tear. A new Esch 5612 no-till drill was delivered in July 2024. The drill was utilized on a total of 364 acres of cropland between the watershed and Onondaga County in 2024. Since 2009, four (4) farms have purchased conservation implements. Two (2) farms have purchased the 30-foot AerWay manure incorporation tool, one (1) farm purchased a 30-foot Great Plains drill, and one (1) farm purchased a 12-row planter that utilizes some of the conservation technology.

SLWAP is implementing Phase II of its program as outlined in the "Task Force Recommendations for the Continuation of the Skaneateles Lake Watershed Agricultural Program," which was accepted by Mayor Matthew J. Driscoll in January 2005. This document outlines Phase II of the Skaneateles Lake Watershed Agricultural Program and gives recommendations for procedures such as Whole Farm Plan revisions, BMP repairs, farm expansions, planning emphasis, and continuation of financial incentives.

As in other areas of New York State, every year a portion of watershed farmland is converted into residential lots to finance family needs or is sold outright for development. In 2024, of the eleven (11) new housing starts in the watershed, none were on active farmland. Eight (8) permits were issued for major additions and renovations on the lake front and another ten (10) were issued for non-lake front properties. Demand for farmland continues to be high, as some farms expand to remain profitable or increase their land base to spread manure at state-approved rates. In this watershed, many smaller farms are purchased by larger and/or new operations at the retirement of lifelong farmers. To demonstrate this point, sixty-two (62) operations met the Agriculture & Markets definition of a farm in FY 1995-96. This year only forty-one (41) operations meet that definition. Consolidation or change of operations by new owners necessitates revisions to (or sometimes brand-new) Whole Farm Plans. SLWAP is addressing these changes as they arise. Priority is given to changes that have a high probability of impact to water quality near the City's water intakes.

The Water Department's Watershed Quality Coordinator is the current City representative on the Skaneateles Lake Watershed Agricultural Program Review Committee (WAPRC). The Watershed Quality Coordinator also coordinates efforts between SLWAP and the monitoring of conservation easements on SLWAP participating farms. SLWAP Policy #18 has allowed for permanent integration of easement restrictions on agricultural practices and buffers into the SLWAP Whole Farm Plans. The integration is complete.

## 1.2 Conservation Reserve Enhancement Program

The USDA Syracuse, New York Conservation Reserve Enhancement Program (CREP, a joint City/SLWAP/USDA project) has resulted in a program total of 148.4 acres planned and 146.5 acres of sensitive areas implemented and protected around Skaneateles Lake. No additional acres were implemented in 2024. SLWAP coordinates the program in the Skaneateles Lake Watershed and the federal government makes short-term rental payments as an incentive to keep the sensitive lands out of production for ten to fifteen years. The City uses its contract with SLWAP to promote interest for CREP and provide technical services and the local cost share. In return, USDA provides additional funds to increase the standard per-acre rental rate for removing lands from agriculture. NRCS District Conservationists plan and implement projects, and USDA Farm Service Agency employees handle the paperwork and rental payments.

This program supplements the City's permanent land conservation efforts in the watershed. The federal contract with the City calls for a combined federal and City obligation of approximately $900,000 over 15 years, with $650,000 coming from USDA and approximately $250,000 from the City of Syracuse. With the reauthorization of the Farm Bill in 2008, the City contract was extended by Ordinance #146-2008 for an indefinite period. Future funding will be contained in the 5-year federal Farm Bills.

A proposed budget for SLWAP for FY 2025-26 has been received and contract renewal is expected on July 1, 2025. For additional program details, see the SLWAP Annual Progress Report—March 2024 - February 2025, in Appendix C. See progress maps for SLWAP and CREP at the end of this section.

# 2. LAND PROTECTION PROGRAM FINAL DOCUMENTATION

The Land Protection Program requirements that appear in Section 5-1.30(c)(7)(j) of the Filtration Avoidance Conditions expired on June 30, 2008. The final of nine easements closed on 4/27/2009, and the NYSDEC Water Supply Permit for the program (DEC ID# 7-9907-00037/00001) expired on July 8, 2009. The final data on acquisitions and other conditions of item (j), above, appear in the "Skaneateles Lake Watershed Land Protection Program and the Skaneateles Lake Watershed Agricultural Program Annual Report for Fiscal Year 2009-10, April 2010." During 2012, a portion of the Withey conservation easement property was sold to another SLWAP program farmer, making eleven (11) owners of City of Syracuse conservation easement properties in the Skaneateles Lake Watershed.

# 3. PUBLIC EDUCATION PROGRAM ANNUAL REPORT

## 3.1 Public Education

The City continues to fund public education through contractual relationships with the Cornell Cooperative Extension of Onondaga County (CCE of Onondaga County) and the Onondaga County Soil and Water Conservation District, supplemented by the in-kind services of City staff to assist other agencies or groups in research or presentations. Below are activities or publications included in the contracts with CCE of Onondaga County and the OCSWCD for 2024 and 2025 that are within this report period. Previous years' reports describe many other public education efforts. (See the SLWAP annual report, Appendix B and the CCE of Onondaga County annual report, Appendix C for details of those programs' educational activities for FY 24-25).

The CCE of Onondaga County continued to promote water quality education in the Skaneateles Lake Watershed under contract to the City. The City has renewed its contract with the CCE of Onondaga County for the calendar year 2025.

In 2024, the CCE of Onondaga County concentrated its education efforts on the following activities:

- Shoreline and steep slope restoration
- Non-point source pollution
- Landscaping for water quality
- Invasive species management
- Stormwater management
- Land stewardship
- Harmful algae blooms
- Rain gardens
- Riparian buffers

Two hundred and twenty-six (226) people attended virtual workshops and speaking events sponsored or supported by CCE of Onondaga County over the year.

### *Press Articles*

Educators worked with various local media to promote the Skaneateles Lake Watershed Water Quality Education Program. CCE of Onondaga County contributed to five articles and videos that appeared in local publications in 2024.

### *Annual Watershed Resident Newsletter*

In 2024 CCE of Onondaga published Summer and Winter editions of the Skaneateles Wave Review. The newsletters included information about the programs sponsored by the City in the watershed. Featured articles included the *Skaneateles Lake Watershed Nine Element Plan Update, Landscape Management to Protect Water Quality, Harmful Algal Blooms - From Research to Mitigation,* and *Land Trust Completes Largest Project to Date Within the Skaneateles Lake Watershed.* (A copy is included at the end of the report before the Appendices.)

### *Electronic Communications*

An electronic listserv was set up for the program in 2011. The e-mail list was generated from prior participants in CCE of Onondaga County educational activities and from government agency and non-profit e-mail contacts provided by the City. The Skaneateles Lake e-mail list includes over 700 residents, municipal officials, partners, and businesses.

### *Miscellaneous Brochures*

The following brochures are still distributed at CCE of Onondaga County events: "How to Build a Rain Barrel: A step-by-step guide for building and installing a homemade rain barrel," "Water Deflectors: Managing Surface Water and Reducing Erosion on Unpaved Roads," "Catch the Rain—A Citizen's Guide to Aquatic Plant Management, "What Homeowners Need to Know About Emerald Ash Borer," Wasp Watcher: How to find the wasp that hunts Emerald Ash Borer."

### *Skaneateles Lake Watershed Website*

Through a collaborative effort of CCE of Onondaga, local municipalities, SLWAP and the City, the Skaneateles Lake Watershed Website www.skanlakeinfo.org was completed and launched on July 1, 2020. The website features water quality data, information on harmful algal blooms, and links to agencies involved in the watershed. The website was viewed by a total of 11,447 visitors in 2024.

### *SLWAP Newsletter*

The "Watershed Journal," a publication of the Skaneateles Lake Watershed Agricultural Program, published approximately four times per year, is e-mailed and/or mailed to the agricultural community of the watershed, allied agencies, and farm businesses. A digital version is available to interested agencies and to those requesting it.

### *SLWAP Annual Meeting*

The December meeting featured guest speakers Mike McMahon, EZ Acres Farm, and Keven Erb, Program Manager, University of Wisconsin – Madison, Division of Natural Resources Institute. Mr. McMahon's presentation was titled "*Farm Trucks and Trucking Practices: How to be a Good Neighbor"*. Mr. Erb's presentation focused on agricultural drain tiles, covering the history of field tiling, identifying drain tiles from aerial photos and drain tile mapping. The meeting was attended by 34 people. One-third of the farm operators attended the meeting, representing 57 percent of the land area in the Watershed.

## 3.2 Water Department Staff Participation and Training

Activities for the Water Quality Management Division staff are as follows:

### *Participation*

The Watershed Quality Coordinator is a member of the Watershed Agricultural Program Review Committee, representing the City of Syracuse Department of Water.

### 3.2.1 Training & Conferences

The following Environmental Construction Solutions on-demand and live webinars were attended by the Watershed Quality Coordinator in 2024: The webinars focused on innovative new technologies related to stormwater management and water quality.

- ***Slip Slidin' Away – Sediment Transport Processes in Headwater Streams – October 29, 2024***
- ***Streambank Erosion and Phosphorus Loading to Surface Waters – October 29, 2024***
- ***River Hydraulics and Sediment Transport – November 4, 2024***
- ***Slope Stabilization – Keller North America Webinar Series – November 4, 2024***
- ***Don't Fence Me In – Silt Fence Alternatives– November 8, 2024***
- ***What Does an Active Year of HABs Mean for Our Water Quality – November 12, 2024***
- ***How To Stabilize Your Streambank: A Beginner's Guide | CRWP Speaker Series – November 19, 2024***
- ***OSWA Webinar: Using the Runoff Reduction Method to manage Stormwater on Development Projects– November 25, 2024***
- ***Fine Sediment and its Impacts on Physical Processes and Biologic Populations in the Trinity River– November 27, 2024***
- ***Stop Erosion: Low Tech Erosion Control Masterclass Webinar– December 3, 2024***
- ***Restoring Streams Naturally with Large Wood – December 13, 2024***

# 4. OTHER MECHANISMS OF WATER QUALITY PROTECTION

## 4.1 Cooperative Agreements

The City entered into no new cooperative agreements for watershed protection in the past year.

## 4.2 Data Gathering and Management Program

The GIS position has been filled continuously since January 10, 2001. Creation and development of Geographic Information System (GIS) data sets continued to support watershed and Water Department programs and facilitated watershed program analysis.

Work Completed:

Coverages/Databases updated or expanded:

- Farms with Whole Farm Plans or BMP revisions implemented in FY 2024-25
- Monitoring reports created for the nine watershed conservation easements
- Water distribution features (fire hydrants, valves, etc.) within the City updated with GPS points
- Documented major water infrastructure improvements, including water main replacement projects on several major streets

Coordination/Cooperation with others:

To support construction and maintenance of the water distribution system, property development, the Skaneateles Lake Watershed Protection Program and SLWAP, digital data and/or maps were provided to:

- Water Department staff
- Other utilities (such as National Grid, Onondaga County WEP)
- Contractors working on the water system
- Developers designing or building within the City

In 2024, GIS was used to create a Service Line inventory to catalog and track water service lines to homes, per NYSDOH & EPA requirements. An online reporting tool was made to allow residents to photograph the water service entering their home so that Water Department staff could identify the pipe materials and add them to the Department's records. In the coming years, all services lines of lead or galvanized material will be replaced, a project that will utilize GIS as the system of record.

The groundwork was laid in 2024 for implementing a city-wide Enterprise GIS. Once this system becomes operational, more City users and the public will have access to up-to-date maps and data.

## 4.3 Watershed Rules and Regulations

The City conducts inspections to determine compliance with Watershed Rules and Regulations. Refer to the "Skaneateles Lake and Watershed 2024 Annual Report, Volume L," for detailed information on inspection and enforcement. The City met its filtration avoidance condition to revise its Watershed Rules and Regulations on the date of their promulgation by the State of New York, September 1, 2004. Subsequently, minor amendments were promulgated on July 6, 2005. The NY State Register Quarterly Index, January – December 2005 lists that this Administrative Rule was finalized on July 6, 2005 (reference # HLT – 48 04-00012). The DEC SEQR project number was #P7002107-00012; NYS DEC Region 7.

To view a list of significant dates and requirements for the promulgation process, refer to the Skaneateles Lake Watershed Land Protection Program and the Skaneateles Lake Watershed Agricultural Program Annual Report for Fiscal Year 2006-07, or 2007-08. The Watershed Rules and Regulations (Title 10, Public Health, Chapter III, Subchapter A, Part 131.1, and City of Syracuse) are available on the online New York State Code of Rules and Regulations at http://www.dos.state.ny.us/info/nycrr.html and on the City of Syracuse web page under "Departments" and "Water Department," at http://www.syracuse.ny.us.

# 5. COORDINATION WITH GOVERNMENT AGENCIES, NONPROFITS, AND MUNICIPALITIES

### *Multiple Agency Coordination*

A group that includes representatives from NYSDOH, OCHD, NYSDEC, the City of Syracuse Department of Water, the SLWAP, watershed townships and others continue to share information on pressing watershed events, complaints, and their resolutions.

### *New York State Department of Environmental Conservation (NYSDEC)*

The NYSDEC General SPDES Permit for Confined Animal Feeding Operations (CAFOs) has enhanced the City's voluntary agricultural program by adding an extra incentive for operations to follow their Whole Farm Plans. Eight (8) of the approximately forty-one (41) farms eligible for SLWAP are considered CAFOs under the current standards. Of those, only one (1) has its farm headquarters within the watershed. All operations that meet the definition already have Whole Farm Plans and meet the requirements of the "Agricultural Waste Management Plans" called for in the state permit. SLWAP employees are no longer the lead nutrient planners for any CAFOs in the watershed. They continue, however, to attend CAFO reviews of watershed farms to provide input and support to the CAFO review.

### *Town of Skaneateles Lake Monitoring Committee*

Based on the findings of the Town of Skaneateles Lake Monitoring Committee's Lake Monitoring Plan, the Town approved funding for sampling, which was carried out by Upstate Freshwater Institute (UFI) from April through October 2007 and 2008. The two consecutive years of data established a baseline for the following parameters: phosphorous, water clarity, chlorophyll a, and dissolved oxygen profiles. UFI prepared a 2008 report on the results. Since the data from the first two years was very consistent, the committee proposed a 3-year cycle for repeat monitoring. Recent monitoring reports available at the Skaneateles Town Hall include *Water Quality and Limnoligical Monitoring of Skaneateles Lake-2019* and *Winter-Spring Monitoring of Skaneateles Lake Tributaries-2020.*

### *Land Trusts*

The Finger Lakes Land Trust (FLLT) and Central New York Land Trust (CNYLT) continue to emphasize the Skaneateles Lake Watershed as a priority focus area for land conservation and water quality protection.

In 2024 the FLLT acquired 101 acres of open space in the town of Skaneateles. The property is located near the headwaters of Shotwell Brook and comprises three designated zoning districts: Highway Commercial Districts (HC), Industrial/Research/Office District (IRO) and Rural Farming and Forest (RF). The HC and IRO Districts include 1,384 feet of road frontage. Establishing the Shotwell Brook Conservation Area will involve restoring and enhancing wetlands on the property, planting native trees and shrubs, establishing native grassland, controlling non-native, invasive pest species and creating walking trails.

CNYLT did not purchase conservation easements or acquire land in the Skaneateles Lake Watershed in 2024.

### *Watershed Management Approach to Controlling Hemlock Woolly Adelgid (HWA)*

HWA was identified in the Skaneateles Lake Watershed in 2014. Once infested with HWA, mature hemlock trees die within four to 20 years. The hemlock loss and replacement with hardwood species has the potential to impact water quality by altering nutrient cycling in the watershed and changing water temperature and water quantity going into the lake over the course of the year. Hemlocks' deep shade and often streamside habitat helps keep streams cool, and their evergreen shade keeps snow on the ground into the spring, providing cold runoff into groundwater farther into the growing season. Because hemlocks draw the most water during spring and fall, and relatively little in the summer, they also help stabilize stream flows.

HWA has been found on both shores of Skaneateles Lake in the southern portion of the lake. As of February 2020, the northernmost points where HWA has been found are around Fire Lane 22A on the western shore, and Ten Mile Point on the eastern shore. (For the most up to date information, please visit the NY iMapInvasives map at nyimapinvasives.org/data-and-maps). To minimize the spread of HWA, the City of Syracuse Water Department has collaborated with the Onondaga County Soil and Water District, Cornell University, CCE of Onondaga County and several volunteers residing with the watershed. In May 2015, 100 Eastern Hemlock trees were planted within this region of the watershed to grow populations of biological controls to resist the spread of HWA.

Three insects that feed on HWA (biocontrols) have been released in the Skaneateles Watershed in 2015 and 2016. These are a beetle referred to as 'Little Larry', Laricobius nigrinus, and two species of silver fly, Leucopis piniperda and L. argenticollis. All three species are imported from their native range in the Northwestern US where they are natural predators of HWA. Establishment has not been verified in the Skaneateles watershed for any of the three species, but establishment can take many years to be detected.

To enhance and support this biocontrol management option, in November of 2017 a new, $1.2 million biocontrol laboratory was established on the Cornell University campus, focusing on researching and rearing biological controls to stop the spread of HWA. The lab is funded through NYSDEC's monies from the NYS Environmental Protection Fund and is headed by a Cornell entomologist.

Biological control is a long-term solution for HWA, but landowners with trees that are currently infested are strongly encouraged to consider treatment of their trees. Treatment is relatively inexpensive and lasts for three - seven years. More information on HWA management options can be found on the NYS Hemlock Initiative website, nyshemlockinitiative.info.

In 2018, the agencies included HWA-specific iMap-Invasives training in their HWA workshop. IMap-Invasives is an on-line, GIS-based data management system used to assist citizen scientists and natural resource professionals working to protect our natural resources from the threat of invasive species. Attendees learned how to identify and report HWA infestations and, of equal importance, the absence of infestations around the Skaneateles watershed. Since the training, workshop participants on their own have logged over three dozen entries in the database project shared between CCE of Onondaga and the NYSHI. Including first reports of known infestations in the watershed, this citizen science effort has largely contributed to the NYSHI research is proving to be an efficient use of agency resources and aids our partners at the state PRISMs in following early detection, rapid response protocol.

### *Skaneateles Watershed Municipal Partnership*

The municipalities and organizations working in the watershed created the SkanLakeInfo.org website in 2020 in response to frequent requests from constituents, businesses, and visitors for information about the lake. Participating municipalities include the towns of Niles, Scott, Sempronius, Spafford, the Village and Town of Skaneateles, and City of Syracuse. The City of Syracuse funded creation of the website through the Skaneateles Lake Watershed Education Program and its work with CCE of Onondaga County.

The goal is to bring together in a single source the wide range of information frequently sought by people who live or work in the watershed, as well as those who boat on, recreate in or care about Skaneateles Lake and promoting a healthy future for the lake and watershed. SkanLakeInfo.org has sections on watershed rules and regulations; agriculture; soil and erosion control; septic systems; landscaping; timber harvesting; frequently asked questions; road salt use; and City watershed programs. It presents regularly updated data on lake temperatures, elevation, and dam discharges and has maps of the watershed and protected parcels. The site also provides information on Harmful Algae Blooms (HABs) and invasive species, critical environmental issues facing the lake.

In 2024 the Skaneateles Watershed Municipal Partnership scheduled four online meetings to exchange information related to individual townships and discuss water quality concerns. The meetings also focused on updating SkanLakeInfo.org web pages with news related to Skaneateles Lake research, recently completed watershed projects and announcements for upcoming workshops and events.

# 6. STAFFING AND FUNDING

## 6.1 Current Staffing Levels

***City of Syracuse***

| | |
|---|---|
| Geographic Information System Specialist | 0.17 |
| Watershed Quality Coordinator | 1.00 |
| Sanitarian | 1.00 |
| Assistant Corporation Counsel | 0.02 |
| Total FTE | 2.19 |

***SLWAP Staff -- Liverpool, New York***

| | |
|---|---|
| Program Leader | 0.25 |
| Resource Conservation Specialists | 1.00 |
| Conservation District Technician | 1.00 |
| Conservation District Technician | 0.50 |
| Total FTE | 2.75 |

***Onondaga Soil and Water Conservation District – Liverpool, New York***

| | |
|---|---|
| Executive Director | 0.25 |
| Accountant I | 0.50 |
| Secretary | 0.50 |
| Salary/Benefits Coordinator (Part-Time) | 0.20 |
| Watershed Inspector (6-Month Position) | 0.50 |
| Total FTE | 1.95 |

***CCE of Onondaga Water Quality/Agriculture Education Program Staff***

| | |
|---|---|
| Team Coordinator (Water Quality) | 0.24 |
| Resource Educator (Agriculture) | 0.04 |
| Subject Educator (Water Quality) | 0.99 |
| Subject Educator (Water Quality/Forestry) | 0.00 |
| Social Media Platform & IT | 0.07 |
| Administrative Assistant (Water Quality) | 0.08 |
| Total FTE | 1.42 |

## 6.2 Watershed Program Funding

| Expenditures | Actual FY 23-24 | Estimated 24-25 | Proposed 25-26 |
|---|---|---|---|
| Onondaga Co, SWCD Contract Services: | $622,000 | $883,100 | $885,100 |
| Watershed Education Program: | | | |
| CCE of Onondaga Co, Contract Services | $89,361 | $89,500 | $96,178 |
| GIS Expenses | $11,000 | $11,000 | $12,000 |
| Miscellaneous Expenses | ---------- | ---------- | ---------- |
| Subtotal Contractual Expenses | $722,361 | $735,500 | $848,178 |
| City of Syracuse Staff (Direct Salary Expenses): | | | |
| Water Department Staff | $114,352 | $135,992 | $139,255 |
| Legal Staff | $1,055 | $1,000 | $1,000 |
| Surveying Staff | $1,323 | $2,000 | $2,000 |
| Subtotal City Staff Expenses | $116.730 | $138,992 | $142,255 |
| Other Expenditures: | | | |
| Onon. SWCD Grant Program Activities- Fund Secured | $81,052 | $73,282 | $130,000 |
| CCE of Onondaga County Grant Supported Activities | ---------- | ---------- | ---------- |
| Subtotal Other Expenditures | $81,052 | $73,282 | $130,000 |
| Total Program Expenditures | $920,143 | $947,774 | $1,008,755 |
| Funding Sources: | | | |
| City of Syracuse Operating Budget | $874,304 | $992,089 | $1,001,281 |
| Other Funding | ---------- | ---------- | ---------- |
| Total Funds Available | $874,304 | $992,089 | $1,001,281 |

# 7. LIST OF ACRONYMS

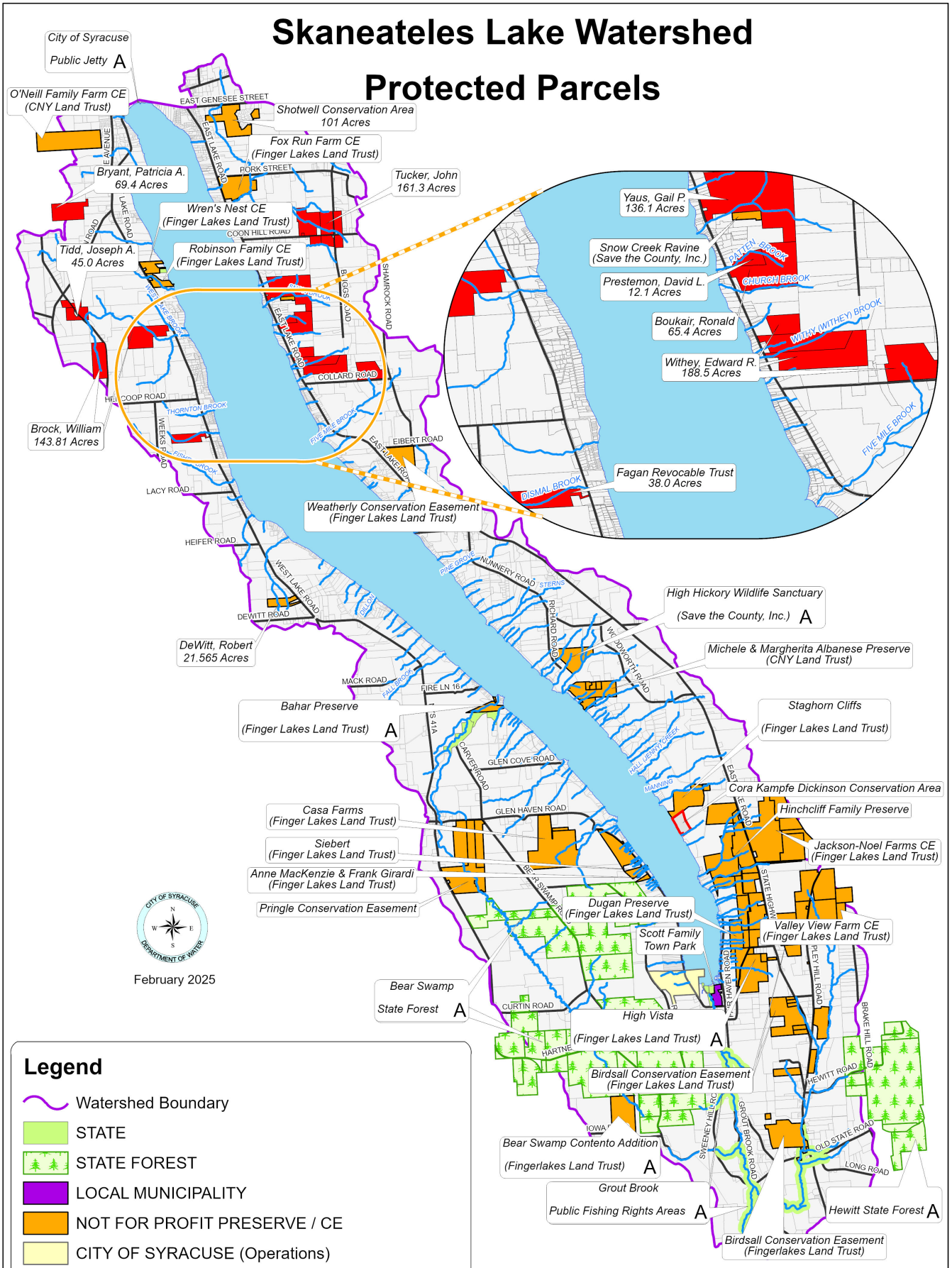
| | |
|---|---|
| BMP | Best Management Practice |
| CAFO | Confined Animal Feeding Operation |
| CCE | Cornell Cooperative Extension |
| CEH | Council on Environmental Health (Onondaga County) |
| CNY | Central New York |
| CNYLT | Central New York Land Trust |
| CNY RPDB | Central New York Regional Planning & Development Board |
| CREP | Conservation Reserve Enhancement Program |
| CSLAP | Citizens Statewide Lake Assessment Program |
| EQIP | Environmental Quality Incentives Program |
| FE | Farm Equivalent |
| FLI | Finger Lakes Institute |
| FLLT | Finger Lakes Land Trust |
| FLLOWPA | Finger Lakes-Lake Ontario Watershed Protection Alliance |
| FPIG | Farmland Protection Implementation Grant |
| FTE | Full Time Equivalent |
| GIS | Geographic Information System |
| GPS | Global Positioning System |
| HABs | Harmful Algae Blooms |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health |
| NYSDOT | New York State Department of Transportation |
| OCHD | Onondaga County Health Department |
| OCSWCD | Onondaga County Soil and Water Conservation District |
| OEC | Onondaga Earth Corps |
| OEI | Onondaga Environmental Institute |
| PDH | Professional Development Hour |
| SGEIS | Supplemental Generic Environmental Impact Statement |
| SLA | Skaneateles Lake Association |
| SLWAP | Skaneateles Lake Watershed Agricultural Program |
| SPDES | State Pollution Discharge Elimination System |
| SWCS | Soil and Water Conservation Society |
| UFI | Upstate Freshwater Institute |
| USDA | United States Department of Agriculture |
| USDA NRCS | United States Department of Agriculture, Natural Resources Conservation Service |
| US EPA | United States Environmental Protection Agency |
| USTF | Upstate Safety Task Force |
| WAPRC | Watershed Agricultural Program Review Committee |
| WQIP | Water Quality Improvement Project |

# Appendices

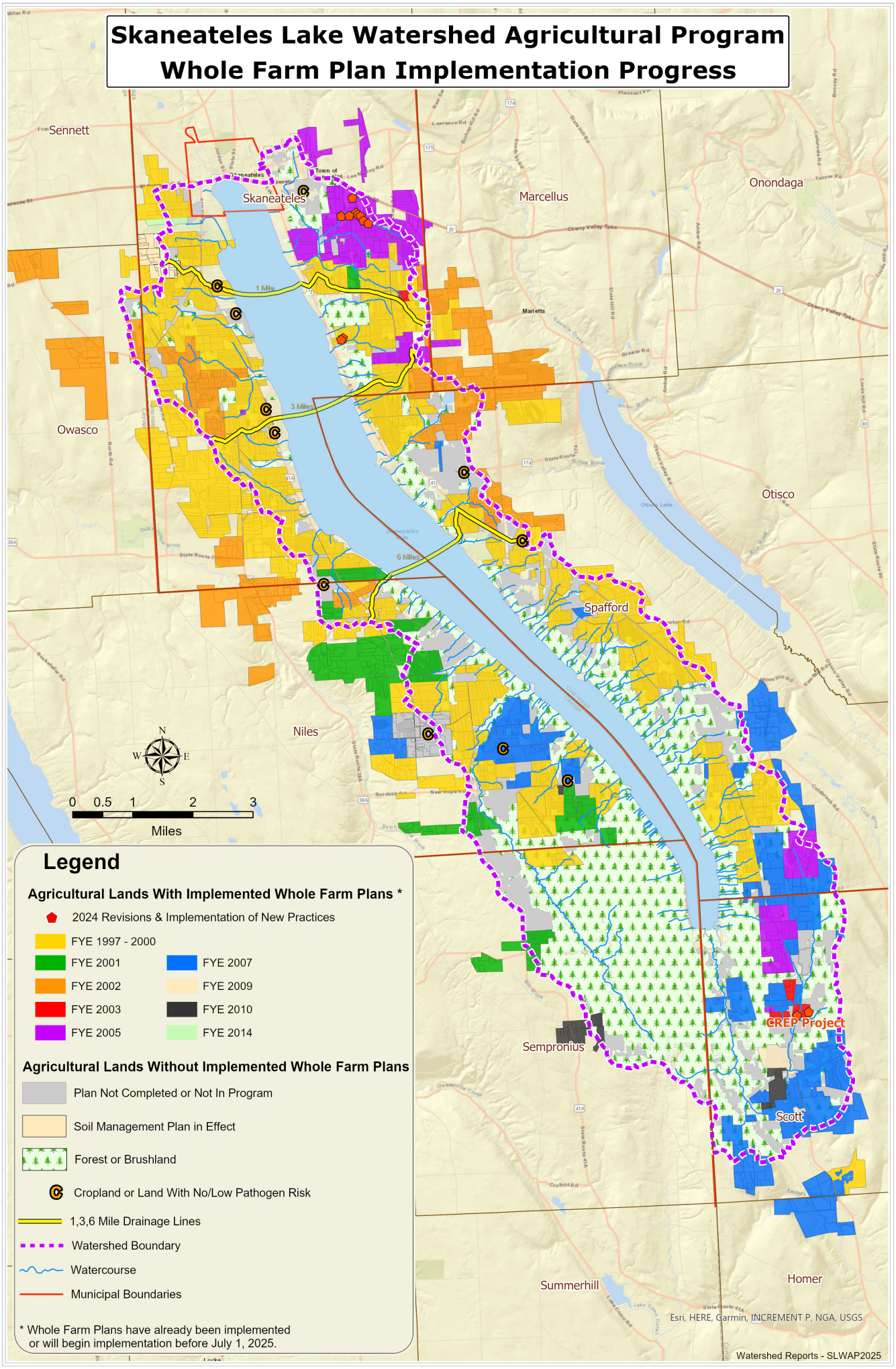
# **Appendix A** – Maps

# Skaneateles Lake Watershed

# Protected Parcels



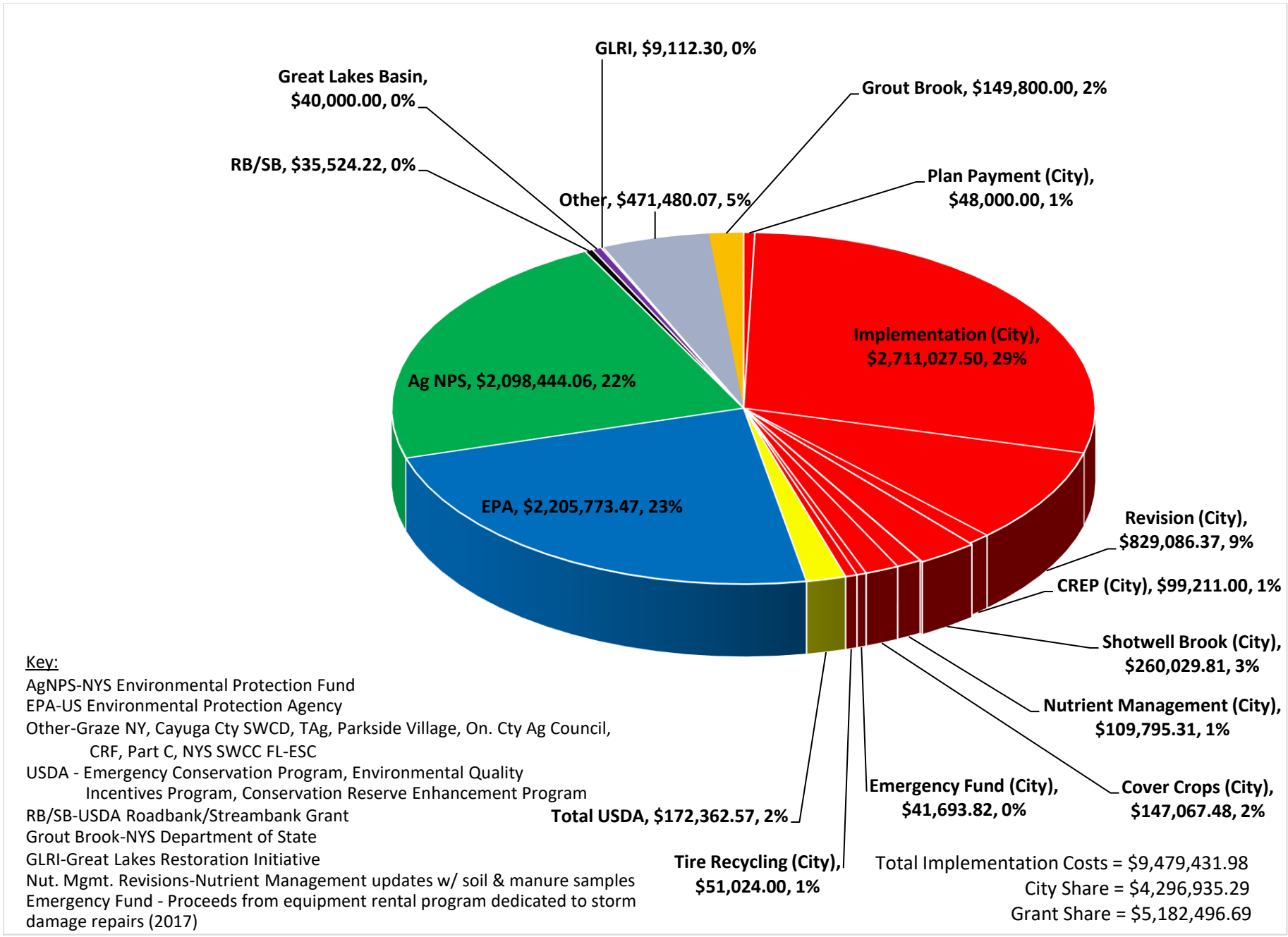
# Skaneateles Lake Watershed Agricultural Program
# Whole Farm Plan Implementation Progress



# **Appendix B** - Skaneateles Lake Watershed Agricultural Program Progress Report

# SLWAP Implementation Costs 1/1995 Through 2/28/2025

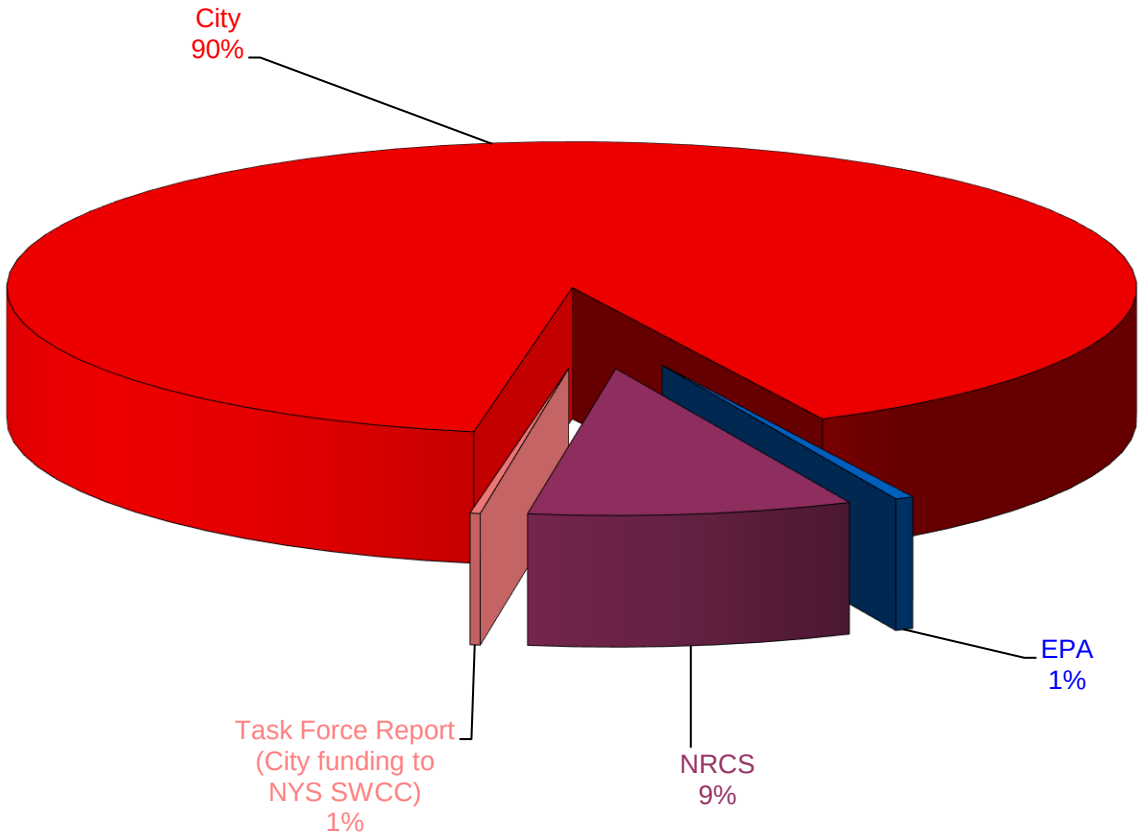
**Note: 0% is equivalent to less than 1%. Please use available financial data for calculations.**




Key:
AgNPS-NYS Environmental Protection Fund
EPA-US Environmental Protection Agency
Other-Graze NY, Cayuga Cty SWCD, TAg, Parkside Village, On. Cty Ag Council, CRF, Part C, NYS SWCC FL-ESC
USDA - Emergency Conservation Program, Environmental Quality Incentives Program, Conservation Reserve Enhancement Program
RB/SB-USDA Roadbank/Streambank Grant
Grout Brook-NYS Department of State
GLRI-Great Lakes Restoration Initiative
Nut. Mgmt. Revisions-Nutrient Management updates w/ soil & manure samples
Emergency Fund - Proceeds from equipment rental program dedicated to storm damage repairs (2017)

Total Implementation Costs = $9,479,431.98
City Share = $4,296,935.29
Grant Share = $5,182,496.69

# SLWAP Operating Costs 1/1994 Through 2/28/2025




**Total Operating Costs = $12,070,901.54**
**City Share = $10,856,617.59**
**Grant Share = $1,214,283.95**

**Key:**
**NRCS - USDA Natural Resource Conservation Service**
**EPA - US Environmental Protection Agency**
**NYS SWCC - NYS Soil and Water Conservation Committee**

Note: 1% may actually be less than 1%. Please use available financial data for calculations.

Please note: figures denoted as 1% are actually less than 1%.

**Onondaga County Soil and Water Conservation District**

**6680 Onondaga Lake Parkway**
**Liverpool, NY 13088**

Phone: (315)-457-0325 E-mail: info@ocswcd.org
Fax: (315)-457-0410 Web: www.ocswcd.org

# Progress Report –

# Skaneateles Lake Watershed Agricultural Program

# March 2024 – February 2025

## I. Introduction

The Onondaga County Soil and Water Conservation District (OCSWCD) signed a contract with the City of Syracuse initiating the Skaneateles Lake Watershed Agricultural Program (SLWAP) in September of 1994. SLWAP was created as part of the filtration avoidance criteria established by the NYS Department of Health for the City of Syracuse in accordance with the 1986 Safe Drinking Water Act. On October 1, 1994, the OCSWCD entered into agreement with our conservation partners to implement the program. These partners included: the SWCD's of Cayuga and Cortland counties; the Cornell Cooperative Extension Associations of Onondaga, Cayuga and Cortland counties; and the USDA Natural Resources Conservation Service (NRCS).

In addition to the conservation partners, a Watershed Agricultural Program Review Committee (WAPRC) consisting of seven watershed farmers and one representative of the City of Syracuse was formed. The primary function of WAPRC is to give guidance, develop and recommend SLWAP policy for approval by SWCD district boards, and review and recommend approval of Whole Farm Plans to district boards that are developed by SLWAP.

The objective of SLWAP is to carry out a voluntary, cost-effective whole farm planning and implementation program for the watershed's agricultural community that will reduce the risk of contamination of the lake from agricultural nonpoint sources. Priority agricultural nonpoint sources of pollution include pathogens, nutrients and sediment. Whole farm plans must not only meet the water quality objectives of the program; they must also meet business objectives of the farming enterprise to be successful. Plans are developed by a multi-agency team, which includes the farm manager, and utilizes a tiered approach to whole farm planning. The whole farm plan recommends Best Management Practices (BMPs) to be implemented on the farm to address priority water quality concerns. According to NYS Soil and Water Conservation Districts Law, BMP "means a practice or combination of practices determined to be the most effective, economically feasible and practicable means of preventing or reducing pollution generated by nonpoint sources." BMP implementation is paid for through the SLWAP with principal funding provided by the City of Syracuse and other outside sources.

The program team began developing plans in March of 1995 by taking participants through Tiers I and II. The first whole farm plan was completed in February 1996. SLWAP now has participants' at all five tiers of the whole farm planning process.

## II. Participation

There are currently 35 farms enrolled in the program that meet the definition of a "farm". *For the purpose of the SLWAP, a farm is defined as "land used in a single farming operation for the production for sale of crops, livestock or livestock products of an average (over the past two years) gross sales of $10,000 or more."* This represents an 85% participation rate in the SLWAP. Five (5) farms that meet the definition of a "farm" do not want to participate in the program but are visited annually to discuss any issues/opportunities for SLWAP to provide technical assistance. Two of these non-participating farms have whole farm plans developed, and two farms have chosen to self-implement Best Management Practices identified in the plan. Twenty four (24) of the original farms are either no longer in active production or no longer meet the definition of a farm; "land used in a single farming operation for the production for sale of crops, livestock, or livestock products of an average (over the past two years) gross sales value of $10,000 or more." Typically, a portion (or all) of the land base associated with these farms is being utilized by other agricultural operations in the watershed and the land is included in that farm's whole farm plan.

Of the land in the watershed in agricultural production, approximately 93% has been enrolled in the program. It is important to note that some farmers have retired and have sold or leased their land to another watershed farm. This land has stayed in agricultural production within the watershed.

Efforts will continue to enroll those farms that have yet to sign up with the program. A continued goal of the program is to eventually involve 100% of the active farm operations in the watershed.

## III. Planning Status (Tiers I, II, III & IV)

Through February 2025:

- 36 farms have completed Tier I (farm inventory and identification of potential water quality concerns).
- 36 of these farms have completed Tier II (verification of water quality concerns).
- 34 farms have completed whole farm plans (Tier III) for their operations (74.82 Farm Equivalents). Note: One farm equivalent is equal to 400 acres of agricultural land, which includes forested land. (Some farms have been replanned to incorporate the management of the new owners: Allan and Ronk).

- 29 farms have completed Tier IV plan implementation (66.38 Farm Equivalents). Two (2) additional farms have self-implemented portions of whole farm plan prepared by SLWAP.

Planning Progress by Fiscal Year – Whole Farm Plans Completed*

| FY | Planning Time (months) | Plans | Updates to Plans | New Acres Planned | Updates to Previously Planned Acres | Farm Equivalents |
|---|---|---|---|---|---|---|
| 95-96 | 6 | 5 | | 1,200 | | 5.56 |
| 96-97 | 12 | 11 | | 3,747 | | 13.87 |
| 97-98 | 12 | 7 | | 4,618 | | 13.79 |
| 98-99 | 12 | 4 | | 5,580 | | 19.81 |
| 99-00 | 12 | 5 | | 2,866 | | 8.76 |
| 00-01 | 12 | 4 | | 1,735 | | 7.92 |
| 01-02 | 9 | 5 | | 2,628 | | 8.43 |
| 02-03 | 11 | 2 | | 1,470 | | 4.08 |
| 03-04 | 11 | 4 | | 257 | | 4 |
| 04-05 | 7 | 1 | | 188 | | 1 |
| **,*** | | | | | | |
| 05-06 | 12 | 2 | | 489 | | 2 |
| 06-07 | 12 | 3 | | 1,367 | | 5.25 |
| 07-08 | 12 | 2 | | 466 | | 2.14 |
| 08-09 | 12 | 2 | | 286 | | 2 |
| 09-10 | 12 | 4 | | 1,016 | | 4.65 |
| 10-11 | 12 | 3 | | 520 | | 3 |
| 11-12 | 12 | 0 | 3 | - | 137 | 3.39 |
| 12-13 | 12 | 0 | 1 | 37 | 0 | 1 |
| 13-14 | 12 | 1 | 0 | 89 | 0 | 1 |
| 14-15 | 12 | 1 | 1 | 60 | 1048 | 3.62 |
| 15-16 | 12 | 0 | 1 | 0 | 125 | 1 |
| 16-17 | 12 | 0 | 3 | 15 | 108 | 3 |
| 17-18 | 12 | 0 | 2 | 0 | 3032 | 8.22 |
| 18-19 | 12 | 0 | 2 | 0 | 279 | 9.25 |
| 19-20 | 12 | 2 | 0 | 217 | 0 | 2 |
| 20-21 | 12 | 0 | 1 | 0 | 24 | 1 |
| 21-22 | 12 | 1 | 0 | 210 | 0 | 1 |
| 22-23 | 12 | 1 | 1 | 81 | 0 | 1 |
| 23-24 | 12 | 0 | 2 | 0 | 55 | 3.62 |
| 24-25 | 12 | 0 | 2 | 0 | 50 | 9.25 |
| TOTAL | | 70 | 19 | 29,142 | 4,858 | 154.61 |

* Note: Data in this report has been updated to reflect the number of Whole Farm Plans that are currently being applied to agricultural land that is in active production, within the watershed. During the last 29 years, some farms have gone out of business and some of that land has been absorbed by other farmers (new or existing). Therefore, many of the values that are now being reported are lower than in previous reports. By way of our database, an historical record of all farms who have participated in the SLWAP has been maintained.

** Note: Two farms already accounted for in previous fiscal years required additional planning to account for changes in the operation. This additional planning effort was equivalent to 2.65 Farm Equivalents and 642 acres of agricultural land. This data was not recorded for the 04-05 Fiscal Year.

*** Note: Planning team suspended Whole Farm Planning for four months to assist implementation team.

## IV. Implementation Status (Tier IV)

Through February 2025, SLWAP has fully implemented whole farm plans for 29 farms (66.38 farm equivalents). During the past year revisions were planned and implemented to existing BMPs on four farms and three private landowner sites (15.14 farm equivalents). BMP implementation (survey/design/build) occurred on two new farms (2 farm equivalents). SLWAP is now primarily in a maintenance phase. Throughout the 2024 construction season, we anticipate BMP implementation to occur on at least one new farm and revisions to BMPs on four existing farms and one private landowner (stream project).

Best Management Practices (BMPs) that have been constructed on farms in the watershed include:

| BMP | Quantity Implemented |
|---|---|
| Pathogen Management Systems | 27 |
| Barnyard Runoff Management Systems | 30 |
| Temporary Manure Nutrient Storage/Composting Systems | 24 |
| Nutrient Management Systems (~ AEM Tier 4) | 31 |
| Alternative Water Supply | 44 |
| Buffer Strips | 39.69 acres |
| Access Road Improvement Sites | 74 |
| Diversions | 29,798 feet |
| Fencing | 140,649 feet |
| Milking Center Waste-Water Treatment & Disposal Systems | 15 |
| Short Duration Grazing Systems | 13 |
| Strip-cropping on Contour | 1,375 acres |
| Water & Sediment Control Systems (WASCOBs) | 70 |
| Waterways – grass, stone lined, root wads | 51,067 feet |
| Critical Area Protection – vegetation control | 394 acres |
| Critical Area Protection – streambank stabilization | 13,183 feet |
| Nutrient Management Reviews (annually) | 26 |
| Mortality Composting Systems | 10 |
| Cover Crops (cumulative acres - 2024) | 1,270* |

**Cover Crop planning tool utilized on these acres, and is equivalent to a NYS*

| | |
|---|---|
| Conservation Cover in Wheat, grass, hay (cumulative acres–‘24) | 814 |
| Roof Water Dripline (ft) -2019 | 23 |
| Road Ditch Stabilization Projects w/ Heavy Armoring (#) | 2 |
| Tire Recycling (# tires since 2019) | 63,729 |
| Hydroseeded Road Ditch-Cleaned by Municipalities (‘24 Miles) | 2.7 |

Measurable results from the implementation of these BMPs include:

- Per the Chesapeake Bay model for NYS, a forest buffer applied along a pasture can provide up to a 57.57% reduction in sediment loading. The model also reports that a forest buffer applied along a pasture can provide up to a 39.43% reduction in Phosphorous loading (no value provided for Nitrogen from this model).

- The SLWAP and District have participated with Greenfield Farms for two years (2021 and 2022) to monitor tile outlet water and water coming from a wooded stream nearby the crop field. Overall, Total Dissolved Phosphorous (TDP) was higher coming out of the woods than out of the tile outlet. There were only three times that tile outlet water had higher concentrations of TDP than stream water sampled coming out of the woods. In all but three instances, Nitrogen Oxides (NOx) were higher in stream water sampled coming out of the woods as compared to tile outlet water.

  In conclusion, water quality in agricultural tile lines can be of high quality if the farmer has a focus to build and maintain soil health, like Greenfield Farms has! This means establishing and maintaining vegetative buffers on the downslope side between your fields, streams and ditches. Planting cover crops annually also enhances soil health!

  Hire a qualified agricultural nutrient management planner to develop a plan. Strictly adhere to the nutrient management plan (NMP)! A NMP will determine the nutrients your fields need for the intended crop growth. It is important to only apply the amount of nutrients needed. If you are an animal farmer, work with your NMP and/or your local Soil and Water Conservation District to sample your manure to determine the amount of nutrients in that manure. Then have a planner develop a NMP so that you can maximize the nutrient benefits of your manure. One local farmer in the Skaneateles Lake watershed “estimates $180 per acre saved due to efficient manure management. “For my 1,400 acres that receive manure nutrient applications, that’s over $250,000 in savings to my farm’s bottom line every year!”

  Other BMPs in the agricultural tool box to help protect water quality and to build soil health include, but are not limited to:

| | |
|---|---|
| -Buffers | -Protected/enhanced wetlands |
| -No-till planting | -Filter Strips |
| -Terrace | -Grassed Waterways |
| -Strip Cropping | -Crop Rotation |
| -Bio Reactors | -Residue & tillage management |
| -Cover Crops | -Diversions |

-Water & Sediment Control Basins (WASCOBs)

Research has shown that better drained soils have better growing seasons. Tile drained soils provide the farmer greater flexibility when timing fertilizer and manure applications. This allows animal farmers to have more flexibility to stay off fields during higher risk times (rain and/or snow melt events). And, tile drained fields generally provide longer periods to harvest crops and spread manure. All of which means cover crops can be planted sooner in the fall!

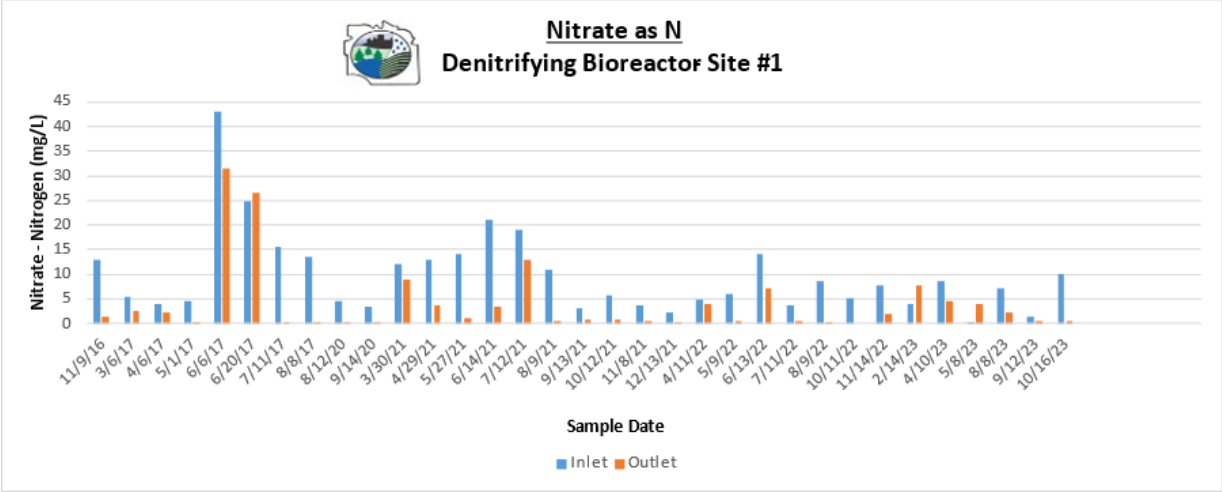
- Cornell University in cooperation with Onondaga County Soil and Water Conservation District and funding from the USDA-Natural Resources Conservation Service (NRCS) Conservation Innovation Grants Program have been working with a watershed farm, since 2016, to reduce nitrate-rich farm runoff that could be discharged via tile (subsurface) drains to waterways.

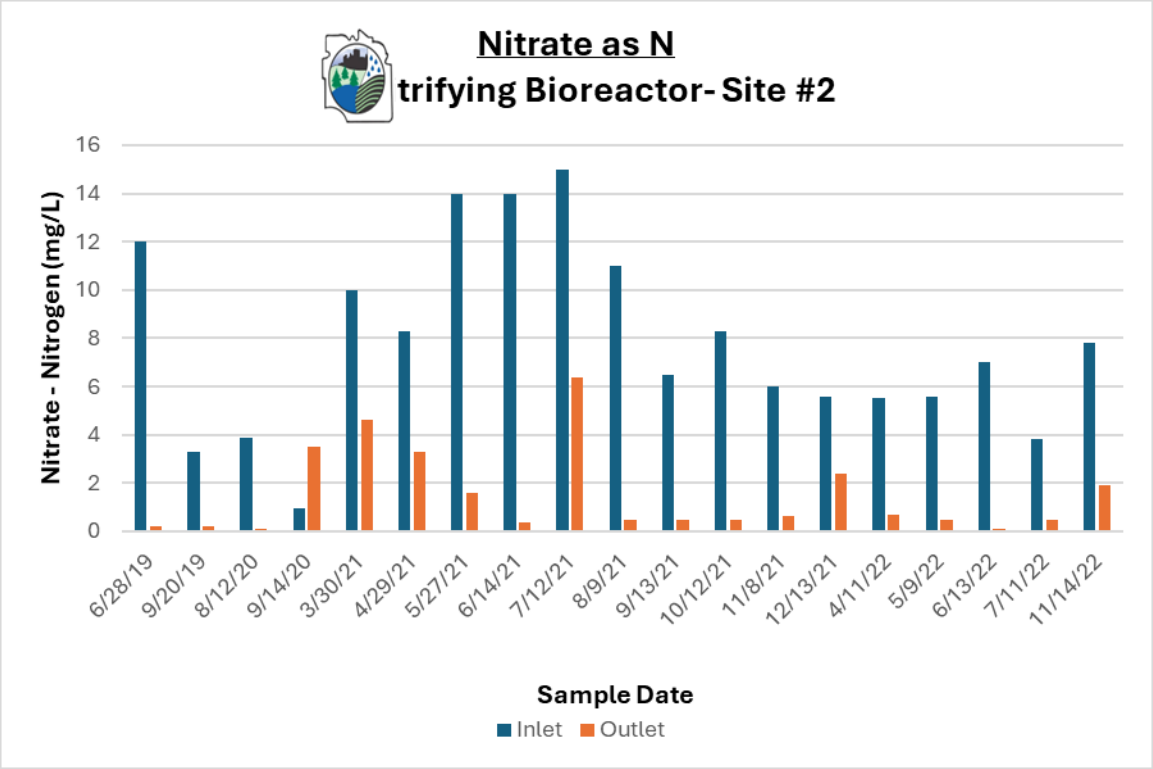
  Denitrifying bioreactors, also called wood chip bioreactors, utilize a carbon source in the form of wood chips which support denitrifying bacteria, converting nitrates into nitrogen gas that is released to the atmosphere. Tile drainage water is diverted by a water control structure through the bed of wood chips This practice does not require land to be pulled out of production and does not inhibit the normal operation of subsurface drainage systems. Monitoring of previously installed bioreactors in the Susquehanna and Finger Lakes watersheds has shown a 57% reduction in nitrogen that enters our streams.

  The performance of the denitrifying bioreactors is being monitored to determine if these can become part of the NRCS best management practices and to further develop a Conservation Practice Standard for New York to design and implement them. The cost of implementation is quite reasonable, typically less than $10,000, since woodchips are readily available and the diversion structures to control the flow of the water through the bioreactor are less than $1000 each. Operation and maintenance costs are also low because they work passively underground (Figure 3). Since the denitrifying bacteria are always hungry, as long as there is a supply of nitrate and some woodchips to decompose, they are expected to continue to work. The decomposition of the woodchips is very slow because the intent is to keep the woodchip bed saturated and in an anaerobic, oxygen deficient type of environment where the nitrate-consuming bacteria thrive best.

Results in 2017 have shown a 43% (2017 – high of 42.9 ppm on inlet side and low of <0.5 ppm on outlet side) to 68% (2021 – high of 21 ppm inlet side to low of <0.5 ppm on outlet side) reduction in Nitrate as N in one bio reactor during the months of June and early July and an 85% (2021 – high of 15 ppm on inlet side to low of <0.5 ppm on outlet side) reduction in Nitrate at N in a second bio reactor during that same time period.

Regular sampling and analysis of the inlet and outlet are crucial for understanding the effectiveness of the bioreactors. OCSWCD has been actively monitoring the performance of the bioreactors since 2017. There was an absence of sampling in the summer of 2023 because there were low precipitation rates at the time of sampling and both outlets were dry. The yearly analysis and graphing of the data indicate that, while there may not be a specific trend observable, both bioreactors are still effective and there is no immediate need to replace the woodchips. It's essential to continue sampling to detect any potential changes or issues that may arise in the future. This frequency allows for close monitoring of the bioreactors' performance and ensures timely detection of any problems that may require intervention, such as replacing woodchips if necessary and contributing to the sustained performance of the bioreactors over time.






- The SLWAP has also participated in graduate level research projects with SUNY College of Environmental Science and Forestry. Those research projects included:

  Pradhanang, Soni. 2009. Monitoring and Modeling of Water Quality in Streams of Skaneateles Lake Watershed, NY. 185 p.

  Abe, Noaya. 2006. Dissertation. Studies in Resources Economics: Scrap Tire Management and Watershed Management for Water Source Protection. 321 p.

- When a farm goes out of business, there is a "vacuum" in the watershed. Typically, there are 3 to 5 farms bidding to purchase the outgoing farm to keep that land base and the BMPs in active agricultural production.

- Fertilizer recommendations have been made for all 36 farms with a Tier III Whole Farm Plan. Nutrient savings in the watershed are achieved through better timing and placement of the nutrient application, as compared to traditional practices. Today, nutrient recommendations are based upon maximum economic yields, as determined by Cornell University's "Cropware" program. The end-result of using Cropware is that nutrients are applied at a scientifically-balanced rate as opposed to a producer "guessing" as to what a crop needs to grow.

- Crop rotations and BMPs have helped reduce soil erosion by an average of 3,770 tons/year.

- Three barriers to pathogen movement (heard health, following barnyard maintenance and manure spreading schedules at agronomic applications on approved fields, and excluding livestock from water courses), are established on 18 out of 21 "active" livestock farms enrolled in the watershed agricultural program. Progress is being made to establish the three barriers to pathogen movement on all remaining livestock farms.

- According to the Procedure for Estimating Agricultural Nonpoint Source Phosphorus Runoff (Lake Champlain Basin Program – USDA/NRCS and University of Vermont), BMPs implemented through the SLWAP will prevent approximately 19,525 pounds of phosphorus/year from entering Skaneateles Lake. BMPs responsible for the reduction include Barnyard Runoff Management, Milking Center Waste Water Treatment & Disposal Systems, Animal Waste Management Systems, and Short Duration Grazing Systems.

There are currently three remaining livestock farms in the watershed that require some amount of implementation to complete their whole farm plan goals. Implementation has commenced on these farms.

## V. Whole Farm Plan Annual Evaluation (Tier V)

Tier V of the Tiered Approach to Whole Farm Planning is the annual review, evaluation, operation, maintenance, update and potential revision of completed whole farm plans. SLWAP has been developing and implementing plans since 1995, therefore the evaluation of previously completed plans is critical. It is important to determine if the plan agreed to by the farmer is effectively being followed and protecting water quality as designed. Tier V provides the opportunity to revise and update the plan as needed and reinforces the objectives of the plan with the farm manager. Most plans require revisions in crop rotations and an update to the nutrient management plans (i.e. fertilizer recommendations and manure spreading schedules). Accordingly, Whole Farm Plans are "living" documents that are always changing.

In January 2013, SLWAP initiated a more-in-depth annual evaluation of whole farm plans for farms in the watershed with completed plans. Specifically, all the BMPs from the long-form of the whole farm plan were plotted on an aerial photo base GIS map. Staff went farm-to-farm to identify and evaluate BMP installations on the farm. Staff also continued to hold one-on-one meetings to collect information necessary to update the plans. In addition, this meeting allows SLWAP to determine how well the plan and the BMPs are being operated and maintained. It has helped staff to anticipate any new revision projects that will be needed to protect water quality. Reviews were conducted between January and

March 2019. Any new revision projects will be added to the existing data base and will be planned and implemented as revision projects are completed and removed from the existing database, subject to the availability of unencumbered funds.

The Annual Farm Consumption Reviews of the recent years have been most comprehensive, stream-lined reviews ever completed in recent history of the watershed program. The data collected was extremely accurate and took into account amounts of items such as livestock housed, manure applied, fertilizer applied, etc. for land that the farms owned and/or operated both inside of and outside of the watershed. The farmers were provided with an "annual review refresher letter" as to what data was necessary to collect and present during the annual review to stream-line future annual reviews.

In the winter of 2016, SLWAP utilized services of an Intern from Onondaga Community College (OCC) to graphically analyze data from past Farm Consumption Reviews. The results were inconclusive, so the project was redone by a new OCC intern to achieve more accurate results and results were reviewed by the SLWAP Whole Farm Planner. The goal of the project was to observe trends in livestock numbers, manure volumes spread, production acreage, fuel, and pesticide usage. These data were last updated in 2020.

## VI. Conservation Reserve Enhancement Program (CREP)

In 2001, the USDA Secretary of Agriculture approved a Conservation Reserve Enhancement Program (CREP) for Syracuse and the Skaneateles Lake Watershed. This USDA program focuses on removing highly erodible cropland, within 800 feet of eligible water bodies and marginal pasture found adjacent to open water bodies (riparian areas), from active agricultural use. Participating Landowners are compensated by USDA's Farm Service Agency (FSA) with land rental payments, multiple incentive payments, maintenance fees, and cost share for the installation of associated BMPs. Land entered into the Skaneateles Lake Watershed CREP must be included in a whole farm plan. All pasture acreage enrolled in the program must be established with trees and shrubs, while any cropland entered can be established with either grasses or woody vegetation. All BMP's through CREP must be maintained for the life of the contract (ten to fifteen years). The intent of establishing a vegetative cover is to effectively reduce/remove pathogens, nutrients, and sediments from field and pasture runoff, while providing high quality wildlife habitat. The agreement between USDA and Syracuse allows for a total of 1000 acres to be enrolled in CREP, with a combined contribution of $900,000 over 15 years ($250,000 from Syracuse and $650,000 from USDA).

No farms enrolled land into CREP in 2024. A continued effort is being made to identify potential farms for CREP enrollment and then to sell these farms on the conservation benefits of CREP participation. To this end, SLWAP and the Onondaga County Soil & Water Conservation District posted a USDA-authored article on the benefits of participating in CREP on their websites as well as in both programs'

quarterly newsletters. The efforts have not yet resulted in any new CREP enrollments in either the Skaneateles Lake watershed.

| Year | # of CREP Farms Planned | Acres of CREP Planned | Farms Implemented | Acres Implemented | # Farms / Acres – *Enhanced* | # Farms / Acres – Re-enrolled |
|---|---|---|---|---|---|---|
| 2024 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2023 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2022 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2021 | 0 | 0 | 0 | 0 | 1 / 1.2 | 1 / 1.2 |
| 2020 | 0 | 0 | 0 | 0 | 0 | |
| 2019 | 0 | 0 | 0 | 0 | 1 / 1.4 | |
| 2018 | 0 | 0 | 0 | 0 | 2 / 8.4 | |
| 2017 | 0 | 0 | 0 | 0 | | |
| 2016 | 0 | 0 | 0 | 0 | | |
| 2015 | 0 | 0 | 0 | 0 | | |
| 2014 | 0 | 0 | 0 | 0 | | |
| 2013 | 0 | 0 | 0 | 0 | | |
| 2012 | 0 | 0 | 0 | 0 | | |
| 2011 | 0 | 0 | 0 | 0 | | |
| 2010 | 1 | 0.7 | 1 | 0.7 | | |
| 2009 | 0 | 0 | 2 | 3.3 | | |
| 2008 | 3 | 5.8 | 1 | 2.5 | | |
| 2007 | 2 | 5.9 | 2 | 6.7 | | |
| 2006 | 0 | 0 | 1 | 6.3 | | |
| 2005 | 4 | 84 | 3 | 74 | | |
| 2004 | 2 | 9 | 3 | 18 | | |
| 2003 | 3 | 21 | 2 | 13 | | |
| 2002 | 1 | 22 | 1 | 22 | | |
| **TOTAL** | **16** | **148.4** | **16** | **146.5** | **4 / 11 ac** | **N/A** |

Using the Chesapeake Assessment Scenario Tool (CAST), which is a web-based nitrogen, phosphorous and sediment load estimator tool that streamlines environmental planning, the CREP acres in the watershed provide the following environmental benefits, listed in the table below.

| CAST N Reduction Estimate (lbs/yr) | CAST P Reduction Estimate (lbs/yr) | CAST Sediment Reduction Estimate (lbs/yr) | MT/yr CO2e Sequestration Estimate |
|---|---|---|---|
| 1,529 | 22 | 355,491 | 83 |

CREP projects in the watershed include:

-CP 22 / Riparian Forest Buffer
-CP 21 / Filter Strip
-CP 8A / Grassed Waterway

## VII. Soil Conservation Tools in the Watershed

In the summer of 2017, the SLWAP sold the 6-Row John Deere 1750 Conservation Planter and the 10' Great Plains 1006 No-Till Drill that was purchased in 2009 by the City of Syracuse. It is important to note that the City's goal of the program was to provide these implements for usage on farms (at a nominal fee). Ideally, the farm would be satisfied with the results of the implements on their land and then would purchase this type of conservation implement when they update their equipment in future years. The program was very successful.

Since the City of Syracuse purchased these implements in 2009, four farms operating large acreages have purchased the conservation-type implements. Two farmers have purchased the 30-foot AerWay manure incorporation tool (these two large farms work a combined 5,500 acres of tillable land, which accounts for approximately 20% of the tillable land in the watershed), one farm has purchased a 30-foot Great Plains drill and one farm has purchased a 12-row planter that utilizes some of the conservation technology.

A new 12-foot Esch 5512 no-till drill was purchased during the summer of 2017. The drill is two-foot wider to help the farmers plant more ground with each pass. A unique feature of the drill is that it has a folding draw bar so that it is only 8.5 feet wide when trailering down the road between farms. This was a great advancement for safety of the staff member that delivers the implement to farms.

The drill can plant small grains, cover crops, small seeds, soybeans, and buffer strips. It has 5.5-inch row spacing, two seed boxes, and requires a 100-horse power tractor to operate.

In 2023, it was determined that the drill needed replacing due to wear and tear. A new Esch 5612 no-till drill was delivered in July 2024.


**Implement Usage Summary**

In 2024, the Esch was utilized on 364 acres of cropland between the watershed and Onondaga County. SLWAP staff advertised these implements to SLWAP producers utilizing the following means: printer flyers, website, and by posting a video of the equipment being used on YouTube.

SLWAP staff, the City of Syracuse, WAPRC, and Onondaga County SWCD District Board of Directors review the rental rates annually for each equipment rental season. The rental rates will remain affordable enough so that farmers will continue to try the equipment, be satisfied with the results, and "will purchase these types of implements when their current implements wear out." The 2023 rental rate stayed the same at $15/acre with a $100 delivery fee.

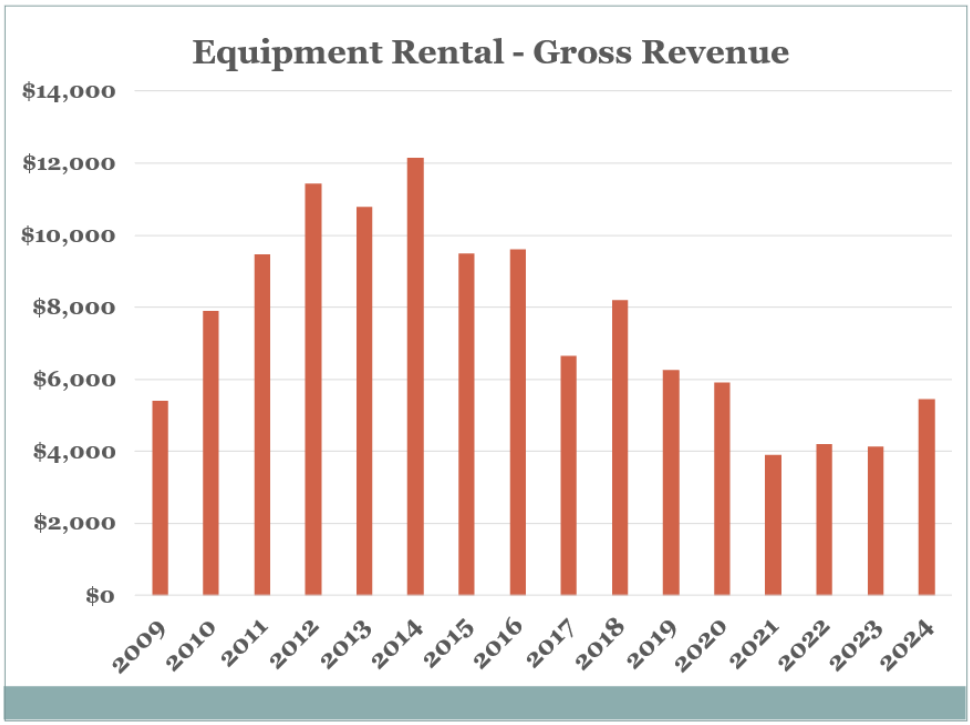
**New Technology Applied - Cover Crop Drone Seeding Project**

Beginning in August, the Skaneateles Lake Watershed Ag Program (SLWAP) contracted with Auburn Ag Products to apply over 8,000 pounds of annual ryegrass cover crop seed on over 320 acres of standing corn silage fields in the Skaneateles Lake watershed. We used a large Hylio AG-130 drone with a hopper/spreader capable of applying seed on 0.8 acres per flight. The cover crop seeding project is in the second year of a 3-year NYS Climate Resiliency Farming grant. Eight Skaneateles Lake watershed farms volunteered to test this technology for the project. Our experience is that advancing drone technology has promising

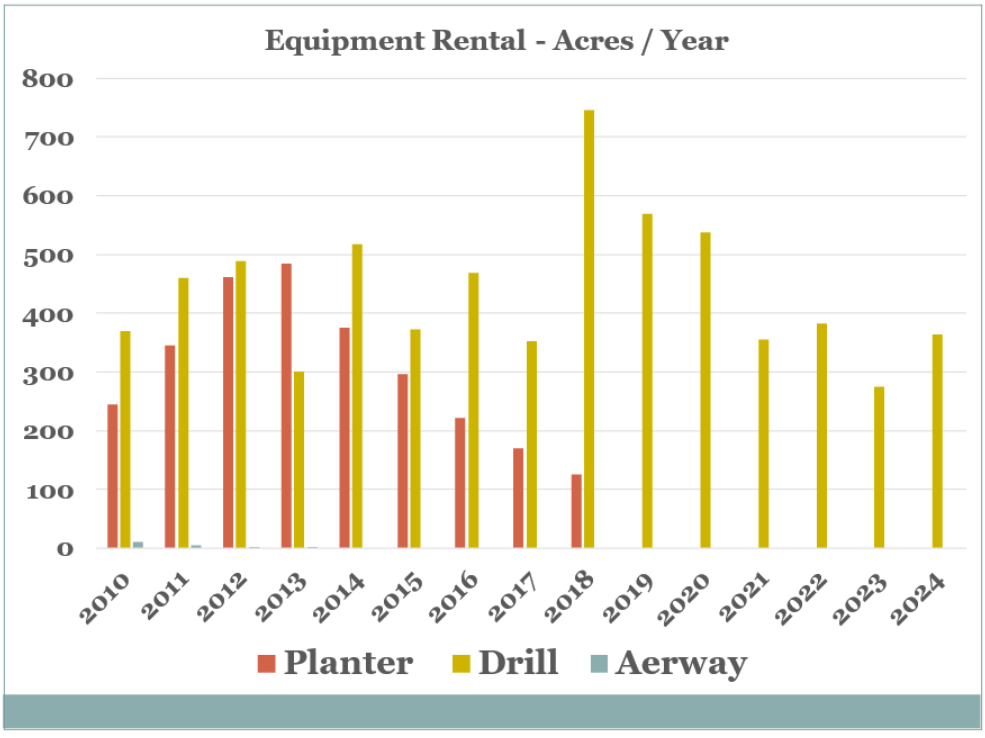
uses on the farm as we learn how to use it effectively. The new models of drones will more than double the capacity and dramatically improve efficiency.
Annual ryegrass is shade tolerant, so it will germinate and establish under the canopy of corn leaves. It has a successful history of being applied by aircraft in the Midwest about 6 weeks before the crop is harvested. Rainy weather conditions can delay corn harvest or delay cover crop planting after the corn harvest. Without cover crop protection, the soil is vulnerable to erosion from storm and spring runoff events during the dormant season.

The agricultural fields selected for this project are in high priority watersheds of Skaneateles Lake that has a high impact on the quality of drinking water for over 200,000 city residents. Planting of cover crops with drone technology will allow for a quick establishment of a 'green carpet' of growing plants as enhanced protection for this great resource. Cover crops also increase infiltration of water into the soil profile to reduce storm water runoff potential from the fields. Another benefit is that cover crops increase soil aggregates and organic matter which increases overall soil health. This is a win-win for the farm and the environment.

A bar graph showing gross revenue from the equipment rental program is presented below.




A bar graph showing implement usage is presented below. *(Please note: Aerway usage is reported as number of users per year. Aerway sold in fall of 2012).*



## VIII. Funding Assistance

A component of the SLWAP contract with the City of Syracuse is to secure additional funding sources to assist with whole farm planning and implementation.

Three outside funding sources were applied for in 2024. Two applications were funded for a total of $558,995 to supplement City funds. They are as follows.

| | |
|---|---|
| -$319,753 | CAFO 1 – Silage Leachate & Treatment |
| -$239,242 | CAFO 1 – Manure Transfer & Application |

As new project opportunities arise, SLWAP staff will certainly apply for grant funding to continue to offset implementation cost to the City.

The total of grant funds secured by SLWAP for implementing projects on the land since the beginning of the program is $7,482,530.80.

## IX. Awards & Recognition

### New York State Senate Empire Award

On April 30, 2024, Mike and Edie McMahon of E-Z Acres Dairy Farm in Homer, NY were awarded with the "New York State Senate 2024 EMPIRE AWARD"! It was presented by NYS Senator Lea Webb (52 Senate District) at her office in Binghamton, NY. This is the NYS Senate's highest award of achievement and was presented to E-Z Acres for it's history of environmental stewardship and community engagement. Congratulations to the entire team at E-Z Acres for this award and recognition for their outstanding efforts!


NEW YORK STATE SENATE
2024 EMPIRE AWARD
honoring
McMahon's Ez Acres
Dairy Farm
In recognition of outstanding contributions and dedication to the growth, prosperity and betterment of their community and New York State
presented by
SENATOR LEA WEBB
52nd SENATE DISTRICT


Senator Webb
CELEBRATES EARTH MONTH

**Aldo Leopold Conservation Award (NYS)**

On August 11, 2022, New York State Agriculture Commissioner Richard A. Ball joined the Sand County Foundation to announce that Greenfield Farms of Skaneateles was selected for the 2022 New York AEM-Leopold Conservation Award. The distinguished award honors a farm for its extraordinary efforts to promote and protect the environment through the preservation of soil and water quality while ensuring farm viability for future generations.

Greenfield Farms. The best view of Skaneateles Lake from anywhere in the watershed!

**Environmental Steward of the Year**

The SLWAP recognizes outstanding cooperators in the watershed agricultural program throughout the years .Below is a table of past recipients.

Award recipients are listed below.

| Year | Farm Name | Farm Type |
|---|---|---|
| **2019** | **City of Syracuse Watershed Agricultural Program** | **Water Purveyor** |
| **2018** | **Ireland Farms** | **Crop** |
| **2015** | **Birdsall Farm** | **Beef** |

| | | |
|---|---|---|
| **2014** | **John F. Tucker & Sons** | **Dairy/Crop** |
| **2013** | **McMahon's E-Z Acres** | **Dairy** |
| **2008** | **Congressman James T. Walsh** | **Government** |
| **2006** | **Fesko Farms** | **Dairy** |
| **2005** | **Weeks Farm** | **Crop/Beef** |
| **2004** | **Greenfield Farms** | **Crop** |

**U.S. Outstanding Dairy Farm Sustainability Award Recipients**

Award recipients are listed below.

| Year | Farm Name |
|---|---|
| **2020** | **Young's Twin Birch Dairy Farm** |
| **2018** | **McMahon's E-Z Acres Dairy Farm** |

**Municipal Partner of the Year**

Award recipients are listed below.

| Year | Farm Name |
|---|---|
| **2021** | **Town of Spafford / Highway Department** |
| **2015** | **Onondaga County / Highway Department** |

## X. Information & Education Activities

SLWAP has established an Information & Education program designed to support, reinforce and expand planning, implementation and revision efforts. A summary of Information & Education activities is listed below:

- Watershed Journal – our program's newsletter, is designed to keep all farmers in the watershed up to date with program activities. Our articles focus on various water quality BMPs, timely reminders on BMP Operation and Maintenance, a calendar of environmentally oriented meetings and seminars in the area, and the results of farmer experiences with various BMPs. The journal publication is published four times a year and sent out by US Mail and electronically. Distribution is ~1,700 copies.

- The SLWAP web page is integrated with the Onondaga County Soil and Water Conservation District home page. Updates are made to the site periodically and current newsletters are available on the website. The web address is www.ocswcd.org. During peak viewership we receive in excess of 400 hits per day.

- The Skaneateles Lake Watershed Agricultural Program Watershed Agricultural Program Review Committee had five meetings in 2023. (Jan. 30, Mar. 1, Jun. 21, Sept. 21, Dec. 13)

- Program Manager Burger attended numerous regularly scheduled and special meetings of the Skaneateles Lake Municipal Website Committee meeting. (Jan. 23, Apr. 18, Jun. 20, Sept. 19, Dec. 12)

- Program Manager Burger attended the State of the City address at the City Center (Jan. 18)

- Six annual reports sent to NYS Department of Agricultural and Markets for 2024 activity. February 15, 2025. The Annual Report of the Treasurer was submitted by April 15, 2025

- SLWAP Program Manager Burger and SLWAP Conservation District Technician Chris Travis participated in Legislative meetings w/ NYS elected officials in Albany (March 4 & 5)

- SLWAP and the District provided refreshments for the Manure Safety Day training for farmers on the safe spreading of manure nutrients in central NY, and spill response recommendations (Mar. 8)

- Burger participated in Skaneateles Municipal Officials meeting (Mar. 8, Oct. 18)

- Staff members attended annual training at Water Quality Symposium to enhance staff skills and study new approaches (and BMPs) to address environmental concerns on farms in the watershed. March 12-15, 2024

- Burger participated in NYS DEC Shotwell Brook Plan meeting (Apr. 5)

- Burger participated in the Onondaga County Emergency Preparedness meeting (Apr. 25, May 15). The District and SLWAP are part of the Emergency Operation Center (EOC) team in the event natural disasters or other emergencies effect farms in the County and the watershed. We maintain a binder for each watershed of each farms ability to sustain (for how long) and what their limiting factors to sustainability will be, post-storm.

- Burger participated in the Skaneateles Lake 9-Element Plan role out meeting to the public (May 21)

- Program Manager Burger and Seasonal Aide Josh Lefkowicz attended Water Fest in Cortland to promote accomplishments of the ag program (Jun. 1)


- Burger and staff presented to an international audience “Success Story From NY Watershed Ag Programs” on July 17 at “Manure Expo” in Auburn, NY and then staff participated in a manure nutrient response cleanup with their Ag Spill Response Team (July 18)

- Burger attended on-line USDA CREP training (Aug. 1)

- Burger and Coleman-Gridley attended garden harvest at Dr. King Elementary School Urban Farm Garden and discussed with the young farmers our roles and jobs as part of the City of Syracuse's Skaneateles Lake Watershed Agricultural Program (Aug. 14)

- Jensen led the Thousand Farms soil health initiative at Greenfield Crop Farms, Anyella's Vineyard and Twin Birch Dairy Farm (Aug. 15)

- Burger attended planning meetings for the new "GROW Agricultural and Food Systems Exhibit" at The Museum of Science and Technology in Syracuse (Aug. 22)


- Staff participated in ONFarm Fest (Sept. 21) @ Anyella's Vineyard, Twin Birch Dairy Farm and Brady CSA Farm (in the City)


- Burger attended Onondaga County Dept. Emergency Management Disaster Preparedness Committee meeting and Hazard Mitigation Plan update meeting (Oct. 1)

- Submitted Annual Plan of Work to NYS Dept. Agriculture and Markets for 2025 SWCD conservation efforts (Nov. 1)

- On December 12th, the Skaneateles Lake Watershed Ag Program held its 30th annual meeting at Anyela's Vineyard in Skaneateles. One third of the farms in the Skaneateles Lake watershed were present representing 57 percent of the watershed land base. The 34 guests listened to Program Manager, Mark Burger present the "Year in Review". Kevin Erb of the University of Wisconsin-Madison Extension spoke via Zoom on mapping of existing drain tile systems in crop fields and reducing farm equipment road damage. Mike McMahon presented good neighbor practices for farm trucks. A hot soup and sandwich luncheon was catered by Clover's and The Patisserie catered a generous sampling of cookies.

  Mike McMahon, chairman of the Watershed Ag Program Review Committee, presented a celebration of life for Mr. James 'Skinny' Greenfield, a longtime friend and fellow committee member from

Skaneateles, highlighting his 31 years of service to the farmers in the watershed and his community.

## XI. Conclusion

The SLWAP remains a successful model of the Agricultural Environmental Management approach to whole farm planning. The program has been an excellent opportunity for farmers in the Skaneateles Lake watershed to voluntarily work towards water quality protection while keeping agriculture viable within the watershed. Secondary benefits of the program include preservation of open space and continued maintenance of a safe and reliable food supply.

The Ag program's mission is to deliver a cost-effective, innovative program to the farming community and to maintain the high drinking water quality standards of Skaneateles Lake. The Skaneateles Lake Watershed Agricultural Program is a cooperative effort between the City of Syracuse, the Soil & Water Conservation Districts and Cornell Cooperative Extension associations of Onondaga, Cortland and Cayuga counties, the USDA Natural Resources Conservation Service, and Skaneateles Lake watershed farmers. Principal funding is provided by the City of Syracuse.

# **Appendix C** - CCE Water Quality Education Program for the Skaneateles Lake Watershed

# Skaneateles Lake Watershed Water Quality Education Program
# Program Report for January - December 2024

## Workshops and Events

| *Date(s)* | *Event Name* | *# of Participants* | *Location(s)* |
|---|---|---|---|
| 4/18 | Lawns and Landscapes for Protecting the Lake | 26 | Online (Zoom) |
| 6/15 | Stabilizing Steep Slopes to Stop Soil Erosion in Skaneateles Lake: Highlighting a Project by the Central New York Land Trust | 5 | CNY Land Trust Property, 2989 Bacher Rd, Skaneateles |
| 7/11 | Landscaping for Water Quality - Making Way for Meadows | 22 | Baltimore Woods Nature Center, Marcellus |
| 8/15 | Rain Gardens: One Solution to Stormwater Pollution and Pollinator Protection | 23 | Skaneateles Library and Gatehouse Garden, Skaneateles |
| 10/9 | Harmful Algal Blooms – From Research to Mitigation: Sharing the latest updates for Skaneateles Lake | 53 | The Lodge, Skaneateles Falls |

## Trainings and Stewardship Opportunities

| *Date(s)* | *Event Name* | *# of Participants* | *Location(s)* |
|---|---|---|---|
| 2/28 | Landscaping for Water Quality and iMapInvasives Training for Master Gardener Volunteer Training | 38 | Online |
| 4/25 | National Grid SLA Earth Week: Panel Discussion on Sustainable Gardens, Invasive Species, and Stormwater Resiliency at Home | 47 | Online |
| 8/26 | Rain Gardens: Soaking up Storm Water to Protect Skaneateles Lake – A Case Study | 12 | Horticulture Building, NYS Fairgrounds, Syracuse |

## Municipal/Organizational Support

| *Date(s)* | *Constituent/ Meeting* | *# of Participants* | *Location(s)* |
|---|---|---|---|
| 2/9, 3/8, 4/12, 5/29 | Skaneateles Municipal Stakeholders Website Meetings | 6-8 | Online (Zoom) |
| 5/1, 6/5, 6/30, 7/10, 8/14, 9/4, 10/2, 11/6 | Skaneateles Lake Association (SLA) Lake Ecology Team Meetings and Annual Meeting on 6/30 | 30 | Online (Zoom) and Annual Meeting at Lourdes Camp |

| | | | |
|---|---|---|---|
| 1/19, 1/30, 4/10, 5/21, 6/21 | Nine Element Plan Watershed Advisory Committee Meetings and Public Meetings (1/30 and 5/21) | 10-20 and 50 - 70 | Online (Zoom) and The Lodge in Skaneateles Falls for 5/21 public meeting |
| 6/28 | Shotwell Brook Meeting | 20 | Online |
| 10/17 | CCE Onondaga Annual Meeting | 30 | Camp Brockway, Pratts Falls Park, Manlius |

**Community Outreach**

| *Date(s)* | *Event Name* | *# of Participants* | *Location(s)* |
|---|---|---|---|
| 1/4, 1/9, 1/10, 3/8 | SUNY ESF Job Shadow | 3 | Online (Zoom) and CCE Onondaga Office |
| 4/20 | Baltimore Woods Earth Day | 24 youth 29 adult | Baltimore Woods, Marcellus |
| 7/9, 8/8 | 4-H Stream Systems and Water Quality Program | 50 total - 25 each week | Camp Brockway, Pratts Falls Park, Manlius and Oneida Shores Park, Brewerton |
| 9/17, 9/18 | Conservation Field Days | 280 youth total – 140 each day | Emerson Park, Auburn |
| 9/21 | WEP Fest | 24 youth 43 adult | Metro Wastewater Treatment Plant, Syracuse |
| 10/18 | Environmental Field Days | 120 | Green Lakes State Park |

**FEATURED on Local News Sources: Video, Online, Print**

| *Date* | *Title* | *Newspaper/ Channel* | *Format* |
|---|---|---|---|
| 4/5 | *Lawns and landscapes presentation planned for April 18* | Eagle News Online | Online Article |
| 8/2 | *A Look at Rain Gardens* | Eagle News Online | Online Article |
| 9/20 | *Harmful Algal Blooms – From Research to Mitigation* | Morning Ag Clips | Online Article |
| 9/27 | *CCE presentation to explore harmful algal blooms* | Eagle News Online | Online Article |

| | | | |
|---|---|---|---|
| 10/7 | *Interview on Harmful Algal Blooms* | WSYR | Televised Interview |

**CCE Onondaga Water Quality E-newsletters: MailChimp**

| *Date* | *Title* | *Reach* |
|---|---|---|
| 1/29 | Skaneateles Education Program January Updates 2024 | 242 |
| 2/21 | Skaneateles Education Program February Updates 2024 | 244 |
| 3/26 | Skaneateles Education Program March Updates 2024 | 245 |
| 4/16 | Skaneateles Education Program April Updates 2024 | 258 |
| 5/14 | Skaneateles Education Program May Updates 2024 | 238 |
| 6/13 | Skaneateles Education Program June Updates 2024 | 235 |
| 7/3 | Skaneateles Education Program July Updates 2024 | 253 |
| 7/10 | Skaneateles Education Program 2024 Summer WAVE Newsletter | 226 |
| 7/22 | Skaneateles Education Program - Cortland Septic System Program | 239 |
| 8/9 | Skaneateles Education Program August Updates 2024 | 245 |
| 8/14 | Skaneateles Education Program Rain Gardens Reminder | 220 |
| 9/19 | Skaneateles Education Program September Updates 2024 | 258 |
| 10/8 | Skaneateles Education Program October Updates 2024 | 253 |
| 11/26 | Skaneateles Education Program November Updates | 260 |
| 12/18 | Skaneateles Education Program December Updates 2024 - WAVE Newsletter | 266 |

**Skaneateles Lake Watershed Website Analytics**

| *Month* | *Visits* | *Unique Visitors* | *Page views* |
|---|---|---|---|
| January | 396 | 311 | 559 |
| February | 384 | 296 | 615 |
| March | 464 | 369 | 719 |
| April | 803 | 627 | 1,130 |
| May | 1,218 | 1,008 | 1,530 |
| June | 1,488 | 1,193 | 1,903 |
| July | 1,655 | 1,328 | 2,196 |
| August | 1,809 | 1,477 | 2,422 |
| September | 1,499 | 1,175 | 2,044 |
| October | 959 | 753 | 1,326 |
| November | 370 | 308 | 504 |
| December | 402 | 291 | 588 |

**Water Quality Social Media Posts**

| *Month* | *Facebook Posts (#)* | *Twitter Posts (#)* | *Instagram Posts (#)* |
|---|---|---|---|
| January | 1 | 0 | 0 |
| February | 2 | 3 | 2 |
| March | 4 | 5 | 3 |
| April | 3 | 3 | 3 |
| May | 5 | 4 | 4 |

| | | | |
|---|---|---|---|
| June | 1 | 1 | 1 |
| July | 2 | 2 | 2 |
| August | 2 | 0 | 1 |
| September | 3 | 2 | 2 |
| October | 2 | 1 | 1 |
| November | 1 | 1 | 1 |
| December | 1 | 1 | 1 |

**Consumer Calls and E-mail Inquiries**

| Month | # of calls/e-mails |
|---|---|
| January | 1 |
| February | 1 |
| March | 5 |
| April | 3 |
| May | 2 |
| June | 9 |
| July | 3 |
| August | 2 |
| September | 5 |
| October | 4 |
| November | 1 |
| December | 1 |

**Program Evaluations, Surveys, and Feedback**

| *Date* | *Evaluation/Survey Title* | *Attendees* | *Responses* | *Response Rate (%)* |
|---|---|---|---|---|
| 4/18* | *Program Evaluation: Lawns and Landscapes for Protecting the Lake* | 26 | 7 | 27% |
| 7/11* | *Program Evaluation: Landscaping for Water Quality - Making Way for Meadows* | 22 | 5 | 23% |
| 8/15* | *Program Evaluation: Rain Gardens: One Solution to Stormwater Pollution and Pollinator Protection* | 23 | 5 | 22% |
| 10/9 | *Program Evaluation: Harmful Algal Blooms – From Research to Mitigation: Sharing the latest updates for Skaneateles Lake* | 53 | 19 | 36% |

* Surveys were electronic

Report compiled and submitted by Camille Marcotte, CCE Onondaga, on 3/5/2025.

Cornell Cooperative Extension
Onondaga County

6505 Collamer Road
East Syracuse, NY, 13057
t. 315 424-9485
f. 315 424-7056
e. onondaga@cornell.edu
www.cceonondaga.org

# Water Quality Education Program for the Skaneateles Lake Watershed - 2024 Report

Cornell Cooperative Extension of Onondaga County provides environmental education and outreach to four primary groups within the Skaneateles Lake Watershed, including:

1. Residents and property owners within the watershed,
2. Rural landowners managing agricultural, forested or open space land within the watershed,
3. Municipal leaders and officials of the towns, villages and counties within the watershed, and
4. Community groups, lake associations, and other organizations that currently act as stewards of the lake and watershed or may potentially in the future.

Education and outreach are provided by CCE Onondaga Natural Resources Team Educators. In 2024, Educators covered topics including invasive species, landscaping for water quality, shoreline and steep slope restoration, stormwater management and rain gardens, riparian buffers, non-point source pollution, land stewardship, harmful algal blooms, and overall water quality protection efforts. These topics were developed and delivered by educators in the following ways:

## Workshops and Events

- **Lawns and Landscapes for Protecting the Lake** (April 18th, Zoom): This program focused on lawns. Frank Rossi from Cornell University talked about how lawn-owners can implement lawncare practices that protect water quality. For the more adventurous, Krissy Boys from Cornell Botanic Gardens shared about their native lawn project to inspire property owners to transition from a traditional lawn to a native lawn. 26 attendees
- **Stabilizing Steep Slopes to Stop Soil Erosion in Skaneateles Lake: Highlighting a Project by the Central New York Land Trust** (June 15th, 2989 Bacher Rd, Skaneateles): The Central New York Land Trust recently completed a riparian restoration project in Spafford to protect water quality in Skaneateles Lake. This large project encompasses almost 94 acres of previously logged and damaged land. Part of this project included native trees, shrubs, grass and wildflower plantings to prevent soil erosion on the steep slopes and provide habitat and food for wildlife. Attendees learned more and saw the project themselves at this program, presented by Paul Porter, Director of Stewardship at CNY Land Trust. 5 attendees
- **Landscaping for Water Quality - Making Way for Meadows** (July 11th, Baltimore Woods Nature Center, Marcellus): Experts from SUNY-ESF, the Skaneateles Lake Association (SLA), and Baltimore Woods teamed up for Cornell Cooperative Extension's Landscaping for Water Quality series. SLA Executive Director, Frank Moses and SUNY ESF Restoration Science Center's Director of Conservation on Private Lands Initiative,

Sam Quinn provided a brief presentation on how meadows as lawns, stream, and shoreline buffers can support better water quality while thwarting impacts from storm runoff, as well as other benefits of meadows like protecting biodiversity. The presentation was followed by a short hike through newly established meadows with Sam and Baltimore Woods Land Steward David DuBois. 22 attendees

- **Rain Gardens: One Solution to Stormwater Pollution and Pollinator Protection** (August 15th, Skaneateles Library and Gatehouse Garden, Skaneateles): Rain gardens help slow the flow of stormwater, often carrying pollutants, so that it can be filtered and help to protect water quality, including in Skaneateles Lake, the drinking water source for Syracuse and other communities. At this program, attendees learned more about how to install a rain garden on their property to create a "sponge" to soak up polluted water in the watershed. Rain gardens, filled with native perennial plants, are food and home for declining insect populations – including pollinators. Attendees also learned more about how rain gardens can support pollinators presented by Molly Jacobson, Pollinator Ecologist with the SUNY ESF Restoration Science Center. After these brief presentations, attendees walked over to the demonstration garden, which is in front of the City of Syracuse Water Department building, for a short garden tour, pollinator identification, and time for questions and answers and discussion. 23 attendees
- **Harmful Algal Blooms – From Research to Mitigation: Sharing the latest updates for Skaneateles Lake** (October 9th, The Lodge, Skaneateles Falls): This event shared an update on Harmful Algal Blooms (HABs), including research and mitigation. The event began with short presentations by featured speakers and was followed with a question and answer panel. Featured speakers included: Dr. Greg Boyer who presented on the state of the science of HABs; Dr. Dave Matthews who presented on factors that influence HABs - insights from water quality modeling; and the NYSDEC (Tony Prestigiacomo) who presented on water quality and watershed progress updates. Other speakers included Aaron McKeon (CNY Regional Planning and Development Board) and Frank Moses (Skaneateles Lake Association). 53 attendees

**Trainings and Stewardship Opportunities**

- **Landscaping for Water Quality and iMapInvasives Training for the Master Gardener Volunteer Training** (February 28th, Online): CCE Water Quality Educator provided a presentation and shared educational resources on landscaping techniques to protect water quality for Master Gardener Volunteer trainees. The second half of the presentation focused on invasive species and iMapInvasives as a citizen science tool for reporting and tracking invasive species. 38 attendees
- **National Grid SLA Earth Week: Panel Discussion on Sustainable Gardens, Invasive Species, and Stormwater Resiliency at Home (**April 25th, Online): This presentation for National Grid staff (local and nationwide) focused on stormwater resiliency at home. This included sharing resources and actions that homeowners can take, like landscaping for water quality, installing a rain barrel, and lawncare best management practices. 47 attendees
- **Rain Gardens: Soaking up Stormwater to Protect Skaneateles Lake – A Case Study** (August 26th, Horticulture Building at the NYS Fairgrounds, Syracuse): This brief presentation shared the case study of the Skaneateles Gatehouse Garden – the

demonstration rain garden in the Village of Skaneateles in front of the City of Syracuse Water Department building. The presentation went through the history of the rain garden, its restoration in 2023, and general tips on installing a rain garden. 12 attendees

**Municipal and Organizational Support**

Municipal Stakeholders Meetings are meant to encourage communication and collaboration between the municipalities and organizations within the Skaneateles Lake Watershed towards protecting and maintaining water quality. CCE Onondaga participated in several stakeholder and municipal meetings in 2024 (below). Additional one-on-one meetings were held with municipal stakeholders and partner organizations as needed throughout the year.

- **Skaneateles Lake Association (SLA) Lake Ecology Team Meetings** (May 1st, June 5th, July 10th, August 14th, September 4th, October 2nd, and November 6th, Zoom and June 30th Annual Meeting at Lourdes Camp) CCE Water Quality Educator attended regular meetings for the SLA Lake Ecology Team focused on preventing nonpoint source pollution and harmful algal blooms in Skaneateles Lake, and other water quality related initiatives. About 30 attendees on average
- **Skaneateles Municipal Stakeholders Meetings:** CCE Water Quality Educator shared updates and analytics on the Skaneateles Lake Watershed website and received feedback and input from municipal stakeholders. Efforts to promote, publicize, and update the website were also discussed, as well as additional initiatives the group could undertake. A list of meetings by date is included below (all meetings were held via Zoom):
    - February 9th, 8 municipal leaders and decision makers attended
    - March 8th, 7 municipal leaders and decision makers attended
    - April 12th, 8 municipal leaders and decision makers attended
    - May 29th, 6 municipal leaders and decision makers attended
- **Nine Element Plan Watershed Advisory Committee (WAC) Meetings and Public Meetings** (WAC Meetings: January 19th, April 10th, June 21st, Zoom and Public Meetings: January 30th on Zoom and May 21st at The Lodge in Skaneateles Falls): CCE Onondaga attended the Nine Element Plan Watershed Advisory Committee meetings and public meetings to provide feedback on the plan's process and recommendations. Additionally, at the in-person May 21st meeting, CCE Onondaga provided a table with educational information on water quality and Skaneateles Lake. About 10-20 attendees at the WAC meetings and 50 – 70 attendees at the public meetings.
- **Shotwell Brook Meeting** (June 28th, Online) The New York State Department of Environmental Conservation and the New York Office of General Services held a virtual stakeholder meeting to discuss the Resilient New York flood and sediment transport study project for Shotwell Brook. The study is designed to help stakeholders identify mitigation projects and their location(s) that can be pursued for further design and ultimate construction to improve the stability of Shotwell Brook and limit sediment discharge to Skaneateles Lake. The meeting focused on receiving feedback from stakeholders on the Interim Final Report.
- **CCE Onondaga Annual Meeting** (October 17th, Camp Brockway at Pratt's Falls Park, Manlius): CCE Water and Ecology Educator provided a display with general information on the Skaneateles Lake Education Program and water quality topics. 30 attendees

## Community Outreach

Typically, to expand reach, increase water quality awareness, and promote stewardship in the watershed community and amongst water supply consumers, CCE educators provide education and outreach, mostly through tabling, on water quality topics. Topics include, but are not limited to watersheds, nonpoint source pollution and water quality, HABs and other contaminants, and best practices for homeowners and landowners.

- **SUNY ESF Job Shadow** (January 4th, January 9th, and January 10th, Zoom and March 8th - in office): Connected with SUNY ESF students and shared information on current job duties and water quality work. Answered questions about water quality field and current position. 3 students
- **Baltimore Woods Earth Day** (April 20th, Baltimore Woods, Marcellus): CCE Onondaga tabled at this Earth Day event, providing information and hand-outs on water quality and natural resource topics, and a hands-on interactive watershed activity. 24 youth and 29 adults reached
- **4-H Stream Systems and Water Quality Programs** (July 9th, Camp Brockway at Pratt's Falls Park, Manlius and August 8th at Oneida Shores Park, Brewerton): CCE Onondaga 4-H youth learned about watersheds, stream systems and different measures of water quality (like velocity, temperature, pH, phosphorus), as well as aquatic life that exist in our waterbodies (macroinvertebrates). The youth were able to get into the stream and do some hands-on water quality testing and macroinvertebrate sampling. 25 youth participated each week for a total of 50 youth
- **Conservation Field Days** (September 17th and 18th, Emerson Park, Auburn): Youth from different schools in the area learned about watersheds through a hands-on activity at this outdoor event organized by Cayuga County Soil and Water Conservation District. 140 youth participated on each day for a total of 280 youth
- **WEP Fest** (September 21st, Metro Wastewater Treatment Plant, Syracuse): CCE Onondaga tabled at this water-quality event, providing information and hand-outs on water quality and natural resource topics, and a hands-on interactive watershed activity. 43 adults and 24 youth
- **Environmental Field Days** (October 18th, Green Lakes State Park): Youth from different schools in the county learned about watersheds through a hands-on activity at this outdoor event. 120 youth participated

## Skaneateles Lake Wave Reviews

The *Skaneateles Lake WAVE Review* is a newsletter by CCE Onondaga that includes updates and information from important watershed agencies and organizations. The newsletter is delivered to watershed residents in print, as well as shared online through CCE's listservs. In 2024, CCE Onondaga published two editions of the Skaneateles WAVE Review newsletter on July 10th, 2024 (summer) and December 20th, 2024 (winter). The winter newsletter was printed through Zoom Printing, Inc. and mailed directly to 2,456 watershed properties.

Summer Skaneateles Lake WAVE Review Newsletter: Topics for the summer edition included:

- Landscape Management to Protect Water Quality by Cornell Cooperative Extension Onondaga County

- Finger Lakes Land Trust Completes Largest Project to Date Within the Skaneateles Lake Watershed by Finger Lakes Land Trust
- Skaneateles Lake Watershed 9E Plan - Third Public Meeting - May 21, 2024 by Central New York Regional Planning and Development Board
- Waste Ag Tire Recycling Facility Tour by Onondaga County Soil and Water Conservation District
- Helpful Contacts and Resources for Watershed Residents

Winter Skaneateles Lake WAVE Review Newsletter: Topics for the winter newsletter included:

- Harmful Algal Blooms - From Research to Mitigation: Sharing the latest updates for Skaneateles Lake by Cornell Cooperative Extension Onondaga County
- Land Trust Acquires 101 Acres Just Outside the Village of Skaneateles by Finger Lakes Land Trust
- In Remembrance of Jim Greenfield by Onondaga County Soil and Water Conservation District
- Helpful Contacts and Resources for Watershed Residents

**Other Print Media**

With the restoration of the Skaneateles Lake demonstration rain garden located at the City of Syracuse Water Department building in the Village of Skaneateles, CCE staff and a Master Gardener volunteer updated the rain garden brochure for further education and outreach purposes. The new version of Rain Gardens: An Introduction includes photos of the restored educational garden, easier to read text, helpful diagrams, and a modern design.

**FEATURED in local media (print/online/video)**

To promote programming in 2024, Educators worked with various news outlets and tracked the Skaneateles Lake Education Program. Educational events and CCE Onondaga were highlighted/featured in 5 articles and news media created, published, and/or broadcasted by outside publications and news platforms:

- *"Lawns and landscapes presentation planned for April 18"* (April 5th, Eagle News Online): Online Article
- *"A Look at Rain Gardens"* (August 2nd, Eagle News Online): Online Article
- *"Harmful Algal Blooms – From Research to Mitigation"* (September 20th, Morning Ag Clips): Online Article
- *"CCE presentation to explore harmful algal blooms"* (September 27th, Eagle News Online): Online article
- *Interview on Harmful Algal Blooms* (October 7th, WYSR): Televised Interview

**Electronic Communications**

Throughout 2024, periodic newsletters and announcements were distributed through the CCE Onondaga Skaneateles Lake mailing lists informing stakeholders of ongoing educational programming and stewardship opportunities in the Skaneateles Lake Watershed. The Skaneateles

Lake e-mail list includes over 700 residents, municipal officials, partners, and businesses. Educators also shared information and upcoming events digitally via the CCE Onondaga website, Skaneateles Lake Watershed website, and CCE Onondaga Facebook, Twitter and Instagram accounts.

**E-Newsletters**

Summarized by e-mail subject, date sent, number of recipients/opens/and link clicks, and a brief description of content. E-mails are all sent through MailChimp to the Skaneateles Lake Watershed listserv. E-mail archives can be accessed by right-clicking hyperlinked e-mail subjects below.

- Skaneateles Education Program January Updates 2024 (January 29th). This newsletter shared information on the second Skaneateles Nine Element Plan meeting, 2023 harmful algal blooms notification season summary, and NYSDEC annual spring seedling sale. It was sent to 475 recipients, with 242 opens and 44 clicks on links for more information.
- Skaneateles Education Program February Updates 2024 (February 21st). This included the recording from the second Nine Element Plan meeting in January, information on the Finger Lakes Land Trust's event on phosphorus and lake health, details for the Hemlock Woolly Adelgid winter mapping challenge, upcoming municipal trainings, and EPA's Harmful Algal Blooms, Hypoxia, and Nutrients Research Webinar Series. It was sent to 474 recipients, with 244 opens and 31 clicks on links for more information.
- Skaneateles Education Program March Updates 2024 (March 26th). This email provided information on CCE Onondaga's Lawns and Landscapes for Protecting the Lake event. Also included were a reminder about Finger Lakes Land Trust's phosphorus and lake health event and links to recent updates on the Skaneateles Lake Watershed website. It was sent to 474 recipients, with 245 opens and 24 clicks on links for more information.
- Skaneateles Education Program April Updates 2024 (April 16th). This email shared a reminder for the Lawns and Landscapes for Protecting the Lake program and information on the Stabilizing Steep Slopes to Stop Soil Erosion in Skaneateles Lake: Highlighting a Project by the Central New York Land Trust event. Also included was information on aquatic plant monitoring, save the dates for the final Nine Element Plan public meeting and CCE Onondaga Rain Gardens event. It was sent to 475 recipients, with 258 opens and 12 clicks on links for more information.
- Skaneateles Education Program May Updates 2024 (May 14th). This newsletter shared information on the Stabilizing Steep Slopes to Stop Soil Erosion in Skaneateles Lake event. Also included were details on the final Nine Element Plan public meeting, the recording from the Lawns and Landscapes for Protecting the Lake program, information on Lake Friendly Living Awareness month and CCE Onondaga Rain Gardens event, information on preventing aquatic invasive species, and municipal funding resources. It was sent to 479 recipients, with 238 opens and 11 clicks on links for more information.
- Skaneateles Education Program June Updates 2024 (June 13th). Shared a reminder for the Stabilizing Steep Slopes to Stop Soil Erosion in Skaneateles Lake event. Also shared information on a Finger Lakes Land Trust event, the recording and information from the third Nine Element Plan public meeting, announcement of NYHABs online reporting system opening, information on the August CCE Onondaga Rain Gardens event, and

municipal funding resources. It was sent to 478 recipients, with 235 opens and 9 clicks on links for more information.

- Skaneateles Education Program July Updates 2024 (July 3rd). Shared information on upcoming programs, including: the Making Way for Meadows and Rain Gardens events and a Finger Lakes Land Trust event. It was sent to 470 recipients, with 253 opens and 9 clicks on links for more information.
- Skaneateles Education Program 2024 Summer WAVE Newsletter (July 10th). Shared a reminder for the Making Way for Meadows program and shared the Summer 2024 WAVE newsletter. It was sent to 468 recipients, with 226 opens and 14 clicks on links for more information.
- Skaneateles Education Program - Cortland Septic System Program (July 22nd). Shared information on the Septic System Maintenance Program events held by Cortland County Soil and Water Conservation District. It was sent to 468 recipients, with 239 opens and 9 clicks on links for more information.
- Skaneateles Education Program August Updates 2024 (August 9th). This newsletter shared a reminder for the CCE Onondaga Rain Gardens program, the summer edition of the NYS Hemlock Initiative's Hemlock Tribune, information on HABs and Skaneateles Lake, and how to use the MyCoast tool to document heavy rains and flood events. It was sent to 472 recipients, with 245 opens and 21 clicks on links for more information.
- Skaneateles Education Program Rain Gardens Reminder (August 14th). Shared a reminder for the CCE Onondaga Rain Gardens program and a save the date for the October HABs program. It was sent to 470 recipients, with 220 opens and 6 clicks on links for more information.
- Skaneateles Education Program September Updates 2024 (September 19th). This email shared information on the HABs event, HABs and Skaneateles Lake, details about the CCE Onondaga Annual Meeting, and the new Drinking Water page on the Skaneateles Lake Watershed website. It was sent to 477 recipients, with 258 opens and 45 clicks on links for more information.
- Skaneateles Education Program October Updates 2024 (October 8th). This edition included information on the CCE Onondaga HABs event and Annual Meeting, and DEC survey about road salt usage. It was sent to 477 recipients, with 253 opens and 15 clicks on links for more information.
- Skaneateles Education Program November Updates (November 26th). This edition shared links to CCE Onondaga's video library of recordings of past educational programs, agriculture updates including additions to the Skaneateles Lake Watershed website, information on wells and well safety resources and courses, reminder about the date cut off for lawn fertilizing, and information on inspecting home oil storage tanks for leaks. It was sent to 483 recipients, with 260 opens and 24 clicks on links for more information.
- Skaneateles Education Program December Updates 2024 - WAVE Newsletter (December 18th). This edition included the Winter WAVE newsletter. It also provided information on the Environmental Bond Act draft guidelines for infrastructure projects that protect drinking water from harmful algal blooms. It was sent to 482 recipients, with 266 opens and 34 clicks on links for more information.

**Skaneateles Lake Watershed Website**

Starting in 2019, CCE Onondaga began putting together a website for the Skaneateles Lake watershed. The website contains sections on: watershed rules and regulations; boating; agriculture; soil and erosion control; septic systems; wells; landscaping; timber harvesting; frequently asked questions; road salt use; and city watershed programs. It presents regularly updated data on lake temperatures, elevation, and dam discharges and has maps of the watershed and protected parcels. The site also provides information on Harmful Algae Blooms (HABs) and invasive species, both critical environmental issues facing the lake. The website was completed and launched July 1, 2020. New content added in 2024 included:

- Information on the Skaneateles Lake Watershed Agricultural Program (SLWAP) on the Agriculture page, including:
    - SLWAP Progress Report – March 2023 – February 2024
    - Pie chart with SLWAP operating costs from 1994 – February 28, 2024
    - Pie chart with SLWAP implementation costs from January 1995 – February 2024
    - Information on SLWAP farm participation
- A new Drinking Water page
- A chart on the Lake Data page showing average precipitation and lake elevation by month and total for both the 72-year average and 2023 year
- A link on the Skaneateles Watershed Map page to an interactive Skaneateles Watershed Map providing layers like streams, tax parcels and watershed boundary, allowing users to zoom in to identify watercourses and neighboring lot tax map numbers.
- Information on the Septic System Replacement Fund on the Septic Systems page

For more detailed information on website analytics, view the "Skaneateles Lake Watershed Website 2024 Analytics" report.

Information on website visits and pageviews for January 1, 2024 – December 31, 2024, are included below:

- Total visits: 11,447 (average visits per month: 953)
- Unique visitors: 9,136 (average number of unique visitors per month: 761)
- Total pageviews: 15,536 (average pageviews per month: 1,294)
- Top 5 most viewed pages:
    - Home (3,908 views)
    - Lake Data (3,006 views)
    - Boat Launch Locations (1,910 views)
    - HABs and Blue-Green Algae (1,706 views)
    - Harmful Algal Blooms: From Research to Mitigation event (396 views)

**Facebook, Twitter, Instagram and YouTube**

CCE educators posted a total of 27 Facebook posts, 23 Twitter posts, and 21 Instagram posts in 2024 regarding water quality issues of interest for the Skaneateles watershed. The average reach per Facebook post was 127, and the average amount of engagements (clicks, reactions, comments, saves and shares) per Facebook post was 4. The average reach per Twitter post was 28 views and the average amount of engagements (clicks, retweets, replies, follows and likes) per Twitter post was 2. On Instagram, the average number of engagements (likes/comments) per

post was 8, with an overall total of 145 likes for the year. Additionally, over 50 Instagram stories were posted throughout 2024 – available data shows 982 views over 30 stories, and 33 engagements across the over 50 stories. Total CCE Onondaga social media followers (potential reach for posts): 1,212 Facebook followers, 575 Twitter followers and 712 Instagram followers (as of March 4, 2025).

CCE Onondaga shifted to virtual programming at the onset of the COVID-19 pandemic and has since transitioned to a hybrid educational model. As a result, many programs are recorded and posted to the CCE Onondaga YouTube page. As of February 21, 2024, videos of programs have the following numbers of views:

- Stewardship in Skaneateles (2020 event): 170 views
- Landscaping for Shorelines (2020 event): 180 views
- Hemlock Woolly Adelgid Planning and Management in Skaneateles (2021 event): 150 views
- Transitioning Your Lawn to a Meadow (2021 event): 365 views
- What's a watershed video (filmed in 2021): 38 views
- Public Information Session for EarthTec Treatment of Harmful Algal Blooms in Skaneateles Lake (2021 event): 68 views
- Stream Systems 101 for Skaneateles (2021 event): 85 views
- Road Salt Impacts on Water Quality (2022 event): 197 views
- Helping our Hemlocks: An Update on Research and Actions to Protect Hemlocks in Skaneateles (2023 event): 140 views
- The Ups and Downs of Skaneateles Lake (2023 event): 741 views
- Introducing Shore Zones: Their Ecology and Management (2023 event): 86 views
- Keeping Up with The Joneses – How Neighbors Influence Shoreline Type (2023 event): 52 views
- Lawns and Landscapes for Protecting the Lake (2024 event): 26 views

**Consumer Calls and E-mail Inquiries for Water Quality/Skaneateles**

CCE educators also provide direct support to constituents who inquire about water quality issues and watershed protection for both the Skaneateles Lake watershed and greater Onondaga County. Consumer requests for information come to CCE as phone calls, e-mails, and sometimes drop-in visits. Educators provide information, support, and resources depending on the inquiry. All inquiries are provided with a response within 2 weeks. In 2024, the average number of consumer calls answered related to water quality and/or the Skaneateles watershed was about 3 inquiries per month; with 37 total consumer calls answered for the year.

**Program Evaluations, Surveys, and Feedback**

To continuously improve and grow our programming to effectively reach, engage, educate, and support our target audience and constituents, CCE educators develop and distribute confidential and anonymous surveys for program participants to fill out after programming, events, and workshops. Educators use the results to evaluate, update, and grow our programming and meet the needs of our constituents. Surveys were mainly distributed electronically in 2024.

- *Program Evaluation: Lawns and Landscapes for Protecting the Lake.* This electronic evaluation was distributed after the 4/18/24 webinar to record and evaluate feedback from the program. There were 26 attendees and 7 evaluation responses, for a response rate of 27%.
- *Program Evaluation: Landscaping for Water Quality - Making Way for Meadows.* This electronic evaluation was distributed after the 7/11/24 program to record and evaluate feedback. There were 22 attendees and 5 evaluation responses, for a response rate of 23%.
- *Program Evaluation: Rain Gardens: One Solution to Stormwater Pollution and Pollinator Protection.* This electronic evaluation was distributed after the 8/15/24 program to record and evaluate feedback. There were 23 attendees and 5 evaluation responses, for a response rate of 22%.
- *Program Evaluation: Harmful Algal Blooms – From Research to Mitigation: Sharing the latest updates for Skaneateles Lake.* This survey was distributed on paper after the in-person 10/9/24 program to record and evaluate feedback. There were 53 attendees and 19 evaluation responses, for a response rate of 36%.

**Salary Full-Time Equivalents used to deliver the program 2024**

| | |
|---|---|
| Team Coordinator (Water Quality) | 0.24 |
| Subject Educator (Water Quality) | 0.99 |
| Subject Educator (Water Quality/Forestry) | 0.00 |
| Resource Educator (Agriculture) | 0.04 |
| Social Media Platform & IT | 0.07 |
| Administrative Assistant (Water Quality) | 0.08 |
| Total FTE | 1.42 |

Report compiled and submitted by Camille Marcotte, CCE Onondaga, on 3/5/2025.

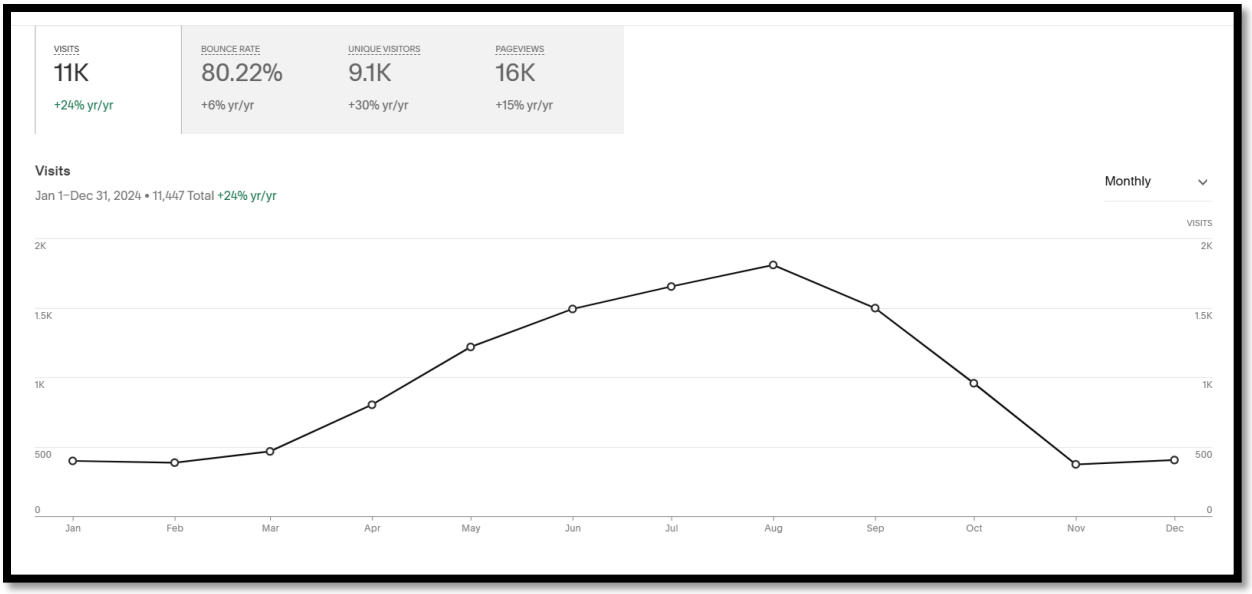
# Skaneateles Lake Watershed Website
# 2024 Analytics Report

## Highlights

- We had about 2,000 more website visitors in 2024 than in 2023.
- Seasonally, most of the website traffic is still during the summer. That means this is still a great time to update and promote the website (the sandwich board signs do make a difference!). The website cards would also be great to have publicly available especially during the summer months.
- The top three pages with the most views remain: the homepage, lake data, and boat launch locations.
- The most popular search keywords that returned clicks to our website are still related to lake data and boat launch information, as well as harmful algal blooms. Our average position for all queries is 25, so we dropped four places from 2023. This is where the website falls when people search in Google (so on average, we are the 25$^{th}$ site listed but are much higher for certain queries).
- The average time spent on a page is 2 minutes and 27 seconds, a 15 second increase from 2023.
- Website traffic increased from year/year, with a 24% increase in visits, a 30% increase in unique visitors, and a 15% increase in pageviews.
- Since launching the website on July 1, 2020, we have had 44,247 visits; 33,326 unique visitors; and 68,850 pageviews.

## Visits, Unique Visitors and Overall Pageviews

- Visits: The total number of visits in a selected time. Any hits within a 30-minute browsing session count as one visit.
- Unique Visitors: An estimate of the total number of actual visitors that reached the site.
- Pageviews: The total number of views (page requests) across all pages.




*This image graphically depicts the visits by month, showing the overall trend of website traffic peaking during the summer months.*

*This table shows the number of visits, unique visitors and pageviews for each month, as well as the yearly totals.*

| Month | Visits | Unique Visitors | Pageviews |
|---|---|---|---|
| **January** | 396 | 311 | 559 |
| **February** | 384 | 296 | 615 |
| **March** | 464 | 369 | 719 |
| **April** | 803 | 627 | 1,130 |
| **May** | 1,218 | 1,008 | 1,530 |
| **June** | 1,488 | 1,193 | 1,903 |
| **July** | 1,655 | 1,328 | 2,196 |
| **August** | 1,809 | 1,427 | 2,422 |
| **September** | 1,499 | 1,175 | 2,044 |
| **October** | 959 | 753 | 1,326 |
| **November** | 370 | 308 | 504 |
| **December** | 402 | 291 | 588 |
| **Yearly Total** | **11,447** | **9,136** | **15,536** |

# Acquisition

## Traffic Sources

- Direct: Direct represents when someone typed the URL directly into their browser, rather than coming to the site from another page. Links opened in a new window also count as Direct.
- Search: The Search channel represents organic traffic from Google and other search engines.
- Referral: Referral represents websites and blogs that link to the website that don't fit under other channels.

- Social: Social represents traffic to the site from social media platforms like Facebook, Twitter, Pinterest, LinkedIn, Instagram, and YouTube.
- Email: Email represents traffic from email marketing campaigns (like MailChimp).

*This table shows the traffic sources and corresponding numbers of visits, as well as the percentage of visits from that traffic source*

| Source | Visits |
|---|---|
| **Direct** | 5,872 (51.3%) |
| **Search** | 4,886 (42.2%) |
| **Referral** | 378 (3.3%) |
| **Social** | 255 (2.23%) |
| **Email** | 51 (0.45%) |

*This table shows the top devices (mobile, desktop, etc.) by both visits and users and percentages of each*

| Top Devices by Visits and Users | Visits |
|---|---|
| **Mobile** | 6,630 (58%) |
| **Desktop** | 4,657 (41%) |
| **Tablet** | 160 (1%) |

## Website Search Keywords (Google Search)

Clicks: 3,962

***The number of times a user clicked through to the website from a Google search result.***

Impressions: 116,666

***The number of times a user saw a link to the website in the Google search results.***

Click Rate: 3.4%

***The percent of times a user clicked through to the website after seeing it in Google search results.***

Average Position: 25

***The average position where the website appeared in Google search results.***

*This table shows search keywords that returned 50 or more clicks.*

| Search Keyword | Page | Clicks | Impressions | Click Rate | Average Position |
|---|---|---|---|---|---|
| **Skaneateles lake temperature** | Weekly Lake Data | 118 (2.98%) | 1,301 | 9.07% | 6.114 |
| **Skaneateles lake boat launch** | Boat Launch Locations | 88 (2.22%) | 561 | 15.69% | 2.007 |
| **Skaneateles boat launch** | Boat Launch Locations | 85 (2.15%) | 435 | 19.54% | 2.16 |

| | | | | | |
|---|---|---|---|---|---|
| **Algae bloom Skaneateles Lake** | HABS and Blue-Green Algae | 71 (1.79%) | 208 | 34.13% | 1.918 |
| **Skaneateles Lake algae bloom** | HABS and Blue-Green Algae | 66 (1.67%) | 174 | 37.93% | 1.776 |
| **Skaneateles Lake data** | Weekly Lake Data | 59 (1.49%) | 85 | 69.41% | 1 |

# Website Content

## Summary Statistics for Pages and Site Content

### Average Bounce Rate: 80.22%

The percent of visits that contained only a single pageview (calculated by the number of visits that contained only a single pageview divided by the total number of visits).

### Average time spent on a page: 2 minutes and 27 seconds.

This is the average amount of time a user spends on a single page before navigating to another part of the site.

### Exit rate: 71.89%

This metric is the percentage of views to a given page that did not result in any more pageviews on the website (left the website). This is helpful for identifying pages that cause visitors to exit the site.

## Top Viewed Pages

*This table shows the top ten viewed pages and the time spent on each page, as well as bounce and exit rates for each of the top ten viewed pages.*

| Page Name | Views | Time on Page (min:sec) | Bounce Rate (%) | Exit Rate (%) |
|---|---|---|---|---|
| **1. Home** | 3,908 | 2:00 | 73.90% | 70.65% |
| **2. Lake Data** | 3,006 | 2:39 | 82.76% | 78.14% |
| **3. Boat Launch Locations** | 1,910 | 2:45 | 78.34% | 75.08% |
| **4. HABs and Blue-Green Algae** | 1,706 | 3:59 | 85.13% | 80.66% |
| **5. Harmful Algal Blooms: From Research to Mitigation event** | 396 | 3:55 | 84.69% | 79.80% |

| | | | | |
|---|---|---|---|---|
| **6. Skaneateles Watershed Map** | 367 | 2:22 | 80.21% | 68.12% |
| **7. FAQ** | 306 | 1:38 | 82.61% | 48.37% |
| **8. Watershed Rules & Regs** | 221 | 1:45 | 76.12% | 58.30% |
| **9. Events** | 219 | 1:44 | 71.88% | 39.27% |
| **10. Microcystin Results** | 217 | 2:54 | 82.00% | 55.30% |

### New Content Added in 2024:

- Information on the Skaneateles Lake Watershed Agricultural Program (SLWAP) on the Agriculture page, including:
  - SLWAP Progress Report – March 2023 – February 2024
  - Pie chart with SLWAP operating costs from 1994 – February 28, 2024
  - Pie chart with SLWAP implementation costs from January 1995 – February 2024
  - Information on SLWAP farm participation
- A new Drinking Water page
- A chart on the Lake Data page showing average precipitation and lake elevation by month and total for both the 72-year average and 2023 year
- A link on the Skaneateles Watershed Map to an interactive Skaneateles Watershed Map providing layers like streams, tax parcels and watershed boundary, allowing users to zoom in to identify watercourses and neighboring lot tax map numbers.
- Information on the Septic System Replacement Fund on the Septic Systems page

## Form and Button Clicks

### Form Submissions (newsletter sign up):

- Total submissions = 24; Unique views = 3,504; and Conversion rate 0.7%

### Button clicks:

- Total for the year for all buttons was 606 clicks.

*This table shows specific details by button (clicks, unique views and conversion rate)*

| Button Name/Details | Clicks | Unique Views | Conversion Rate |
|---|---|---|---|
| **Interactive Skaneateles Watershed Map** | 95 | 294 | 30.6% |
| **Registration for HABs program (pop-up)** | 67 | 1,063 | 6.1% |
| **Nine Element Plan website** | 61 | 3,489 | 1.7% |
| **Register for HABs program** | 53 | 238 | 19.3% |

| | | | |
|---|---|---|---|
| **Register for lawns (pop-up)** | 50 | 580 | 8.5% |
| **Upstate Freshwater Institute monitoring buoy** | 44 | 2,382 | 1.9% |
| **Ups and Downs of Skaneateles Lake Webinar Recording** | 40 | 2,581 | 1.5% |
| **Draft Nine Element Plan** | 29 | 959 | 2.9% |
| **More information on Nine Element Plan (pop-up)** | 28 | 564 | 5.0% |
| **Intake extension project** | 26 | 1,102 | 2.1% |
| **Register for rain gardens program** | 22 | 89 | 22.5% |
| **HABs livestream link** | 20 | 180 | 8.9% |
| **Register for Making Way for Meadows program** | 19 | 64 | 26.6% |
| **Cortland Septic Systems program flyer (pop-up)** | 15 | 575 | 2.4% |
| **Register for lawns program** | 14 | 129 | 10.9% |
| **Winter WAVE newsletter** | 8 | 132 | 6.1% |
| **Take the Lake Friendly Land Care Pledge** | 7 | 135 | 4.4% |
| **HABs livestream link (pop-up)** | 3 | 29 | 10.3% |
| **More info on the Nine Element Public Meeting (pop-up)** | 3 | 68 | 4.4% |

Native plants and shrubs of the northeastern United States provide the most beneficial habitat for wildlife. They are also very low-maintenance, having evolved over thousands of years to endure the most extreme weather of their native habitat.

### Native plants well-suited to rain gardens:

- Swamp milkweed - *Asclepias incarnata*
- Marsh marigold - *Caltha palustris*
- White Turtlehead - *Chelone glabra*
- Common Boneset – *Eupatorium perfoliatum*
- Sweet Joe Pye Weed - *Eutrochium purpureum*
- Common Sneezeweed - *Helenium autumnale*
- Cardinal Flower - *Lobelia cardinalis*
- Great Blue Lobelia – *Lobelia siphilitica*
- Foxglove Beardtongue – *Penstemon digitalis*
- New England Aster – *Symphyotrichum novae-angliae*
- Golden Alexander – *Zizia aurea*

### Shrubs well-suited to rain gardens:

- Red Chokeberry – *Aronia arbutifolia*
- Buttonbush - *Cephalanthus occidentalis*
- Summersweet - *Clethra alnifolia*
- Winterberry - *Ilex verticillata*
- Silky Dogwood - *Cornus amomum*

## Resources

**CCE Rain Garden Guide:**
https://chautauqua.cce.cornell.edu/gardening/rain-gardens

**Audubon - Native Plants for Your Zip Code**
www.audubon.org/native-plants

**Lady Bird Johnson Wildflower Center** – Search New York plants by moisture requirements and sun/shade exposure:
www.wildflower.org/plants/

## Who We Are

**Cornell Cooperative Extension**
**Onondaga County**
6505 Collamer Road
East Syracuse, NY 13057

## Contact

Phone: 315-424-9485
Email: onondaga@cornell.edu

**cceonondaga.org**

**Cornell Cooperative Extension**
**Onondaga County**

*Updated in 2024.*


# Rain Gardens:

## An Introduction

## A rain garden helps your yard … and your habitat!

**Cornell Cooperative Extension** | **Onondaga County**

## What is a rain garden?

Normally much of the rainwater and melted snow that falls does not stay on a property, but runs off into storm drain systems, eventually going into our waterways.

A rain garden can slow and absorb stormwater runoff from roofs and downspouts, driveways, and other hard surfaces. It can be created in a low area of the yard where water pools after a rain, or a depression can be dug out specifically for the rain garden.

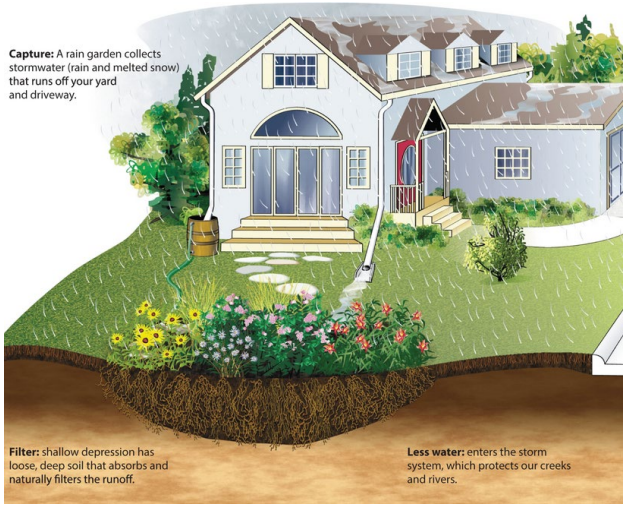
*Unchecked rainwater washes salt and harmful chemicals into lakes and streams*

### Unchecked rainwater:

- Carries pollutants and pet waste bacteria
- Causes erosion
- Causes flooding
- Affects health of fish and wildlife

### Rain gardens:

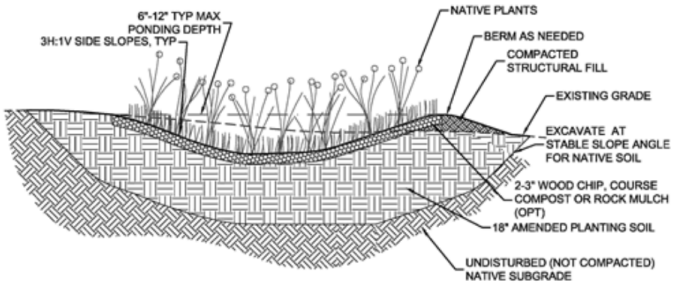
- Channel rainwater back into the ground
- Provide pollen and nectar for insects
- Provide food and habitat for birds and wildlife




## How to Create a Rain Garden

### Where to put it:

A rain garden should be located on a relatively flat surface that is depressed enough to catch rainwater and runoff. Slightly sloping sites may need a berm on the downhill edge of the garden to slow heavy rain runoff. It should be near a water source (ideally a downspout or rain barrel), but at least 12 feet from a building foundation, well, or septic system, and 45 feet from steeper slopes over 15% (or about nine degrees). The site should get full or partial sunlight.




## What size should it be?

Rain gardens can be any size, as long as the area is lower than the surrounding yard to ensure that the water flows into the depressed area to be absorbed. The smaller the garden, however, the less stormwater absorption it will provide. Typical rain gardens are usually anywhere from 100 to 300 square feet.

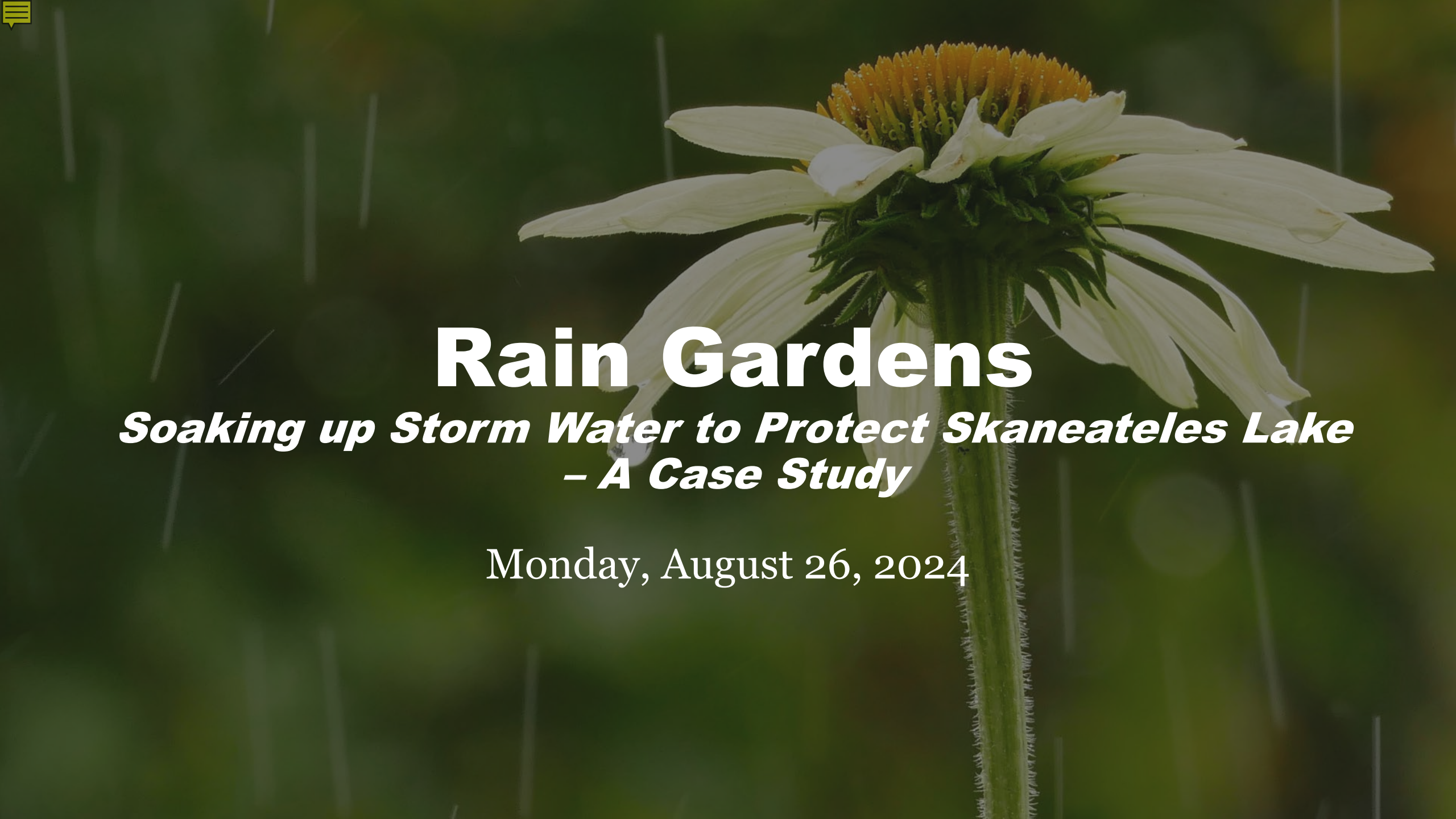
## How deep should it be?

If standing water is still in an area after 24 hours, the soil will need to be dug out and amended with sand or gravel to ensure good drainage. After the amended soil is replaced, a layer of mulch is added for periods of drought. A rain garden is usually from three to eight inches deep.

## Other considerations:

A rain garden will not eliminate wet areas; rather, it will redirect the rainwater and make better use of the excess, resulting in about 30% more water soaking into the ground.

Good drainage is crucial in the rain garden. Standing water year-round will create ideal conditions for mosquito breeding and algae growth.



# Rain Gardens

## *Soaking up Storm Water to Protect Skaneateles Lake – A Case Study*

Monday, August 26, 2024

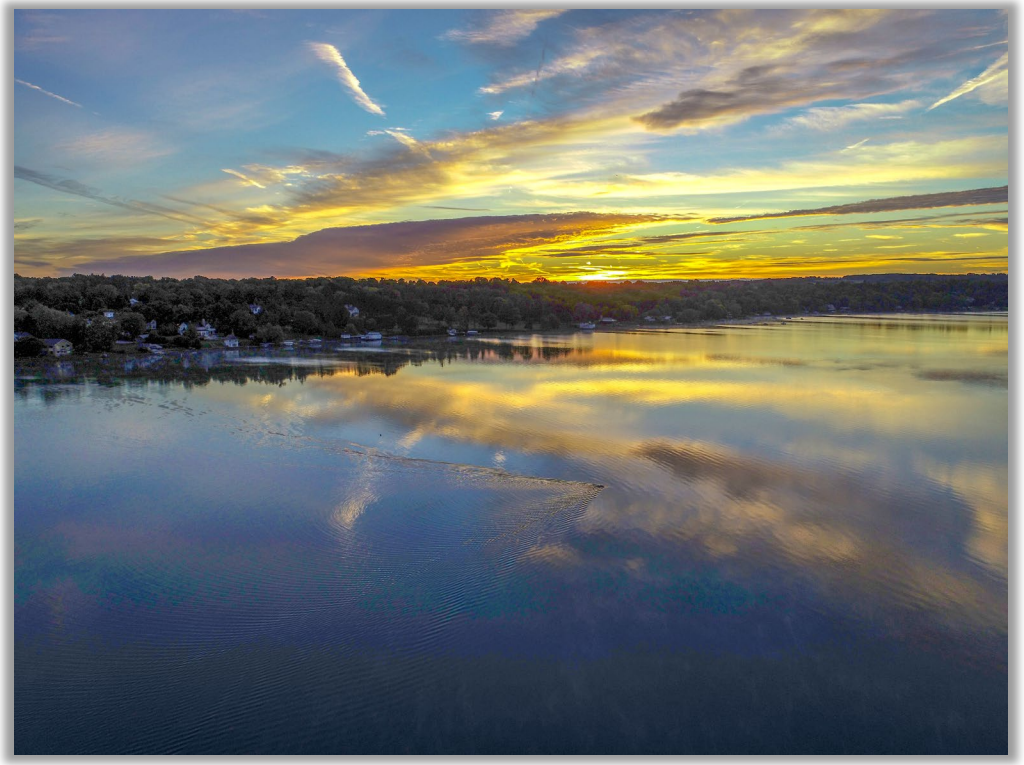
# Skaneateles Lake Education Program

Works to protect the water quality of Skaneateles Lake, funded by the City of Syracuse

What we do:

- Offer workshops and training
- Conduct outreach to stakeholders
- Provide resources and information
- Send updates on lake issues

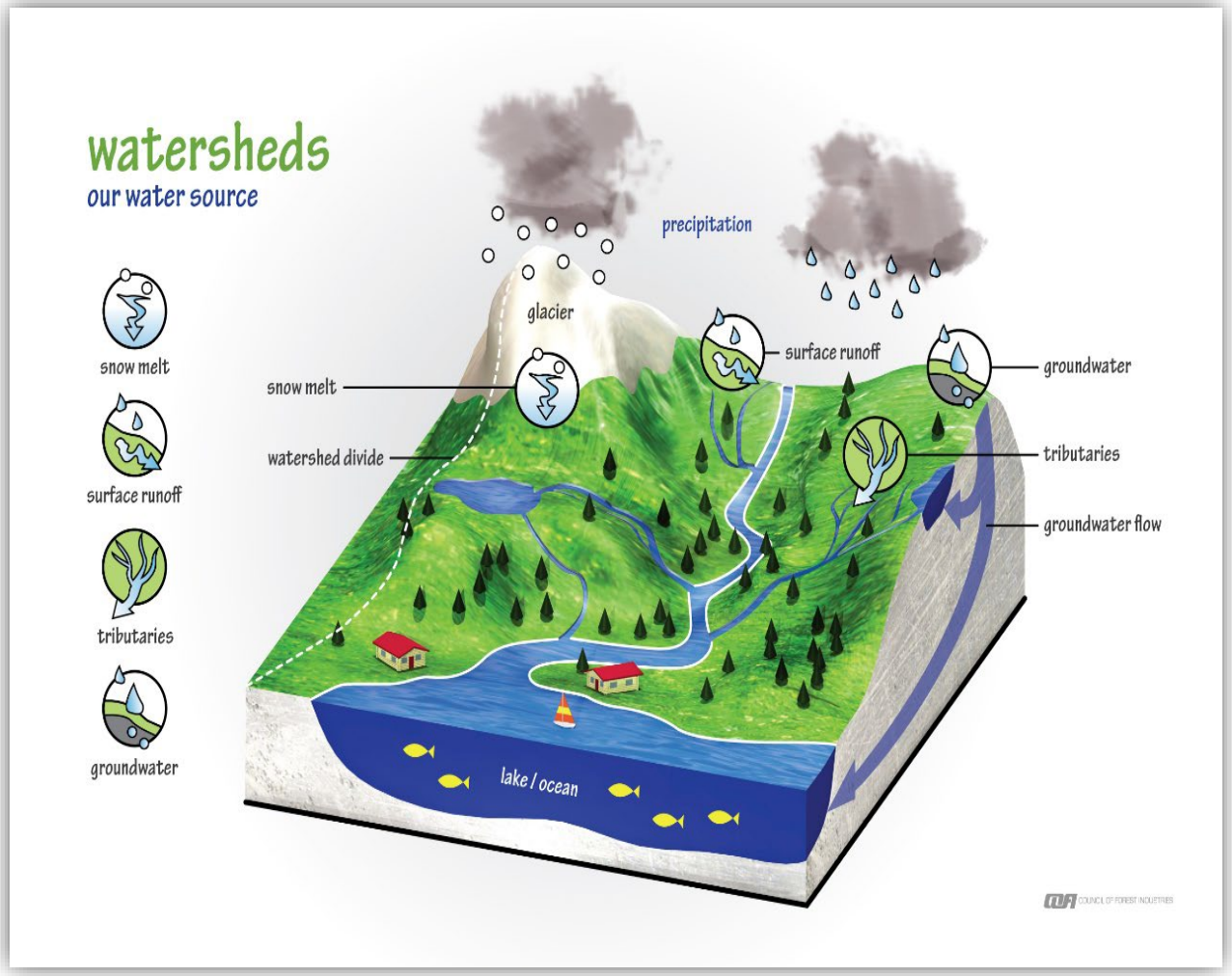
Website: www.skanlakeinfo.org




What is the problem?

# Watershed Connections

- What you do on your land affects water quality
- The amount and quality of the water that leaves ***all*** properties in a **watershed** has an impact on the water quality of that watershed
- A **watershed** is an area where all water above land and underground flows to a common place, like a stream or lake
- Everyone lives in a watershed!



# Lawns are deserts

- Don’t support biodiversity
- Most grass is not native and requires a lot of fertilizer, mowing, etc.
- Runoff from lawns can greatly impact water quality
- Grass has very shallow root systems

- Okay to keep a portion of yard as a lawn, but there are so many other options – like rain gardens!

# Runoff from a single lawn adds up!

Runoff can pick up pollutants and carry them into Skaneateles Lake like:

- Lawn chemicals
- Garden fertilizers
- Bacteria from pet waste
- Soil particles and sediment
- Automotive fluids and oil
- Road salt
- And more!


This can decrease water clarity, promote plant growth (including invasives), smother fish habitat, introduce bacteria from human/pet waste, contribute to harmful algae blooms (HABs)

# What is a rain garden?

# Rain Garden

- A shallow depression designed to collect, absorb and filter stormwater runoff from nearby surfaces, like roofs, driveways, sidewalks, etc.
- A rain garden could hold and filter approximately 30% more rainfall than the same area covered by a lawn

# Benefits of Rain Gardens

- Provide food and habitat for wildlife
- Attract and support pollinators
- Help with climate resilience – intense storms and drought (recharge)
- Hold onto the soil and preventing erosion
- Filter water before it enters waterbodies
- Enhance property values
- Often cost-effective and requires less maintenance
- Can be personally satisfying

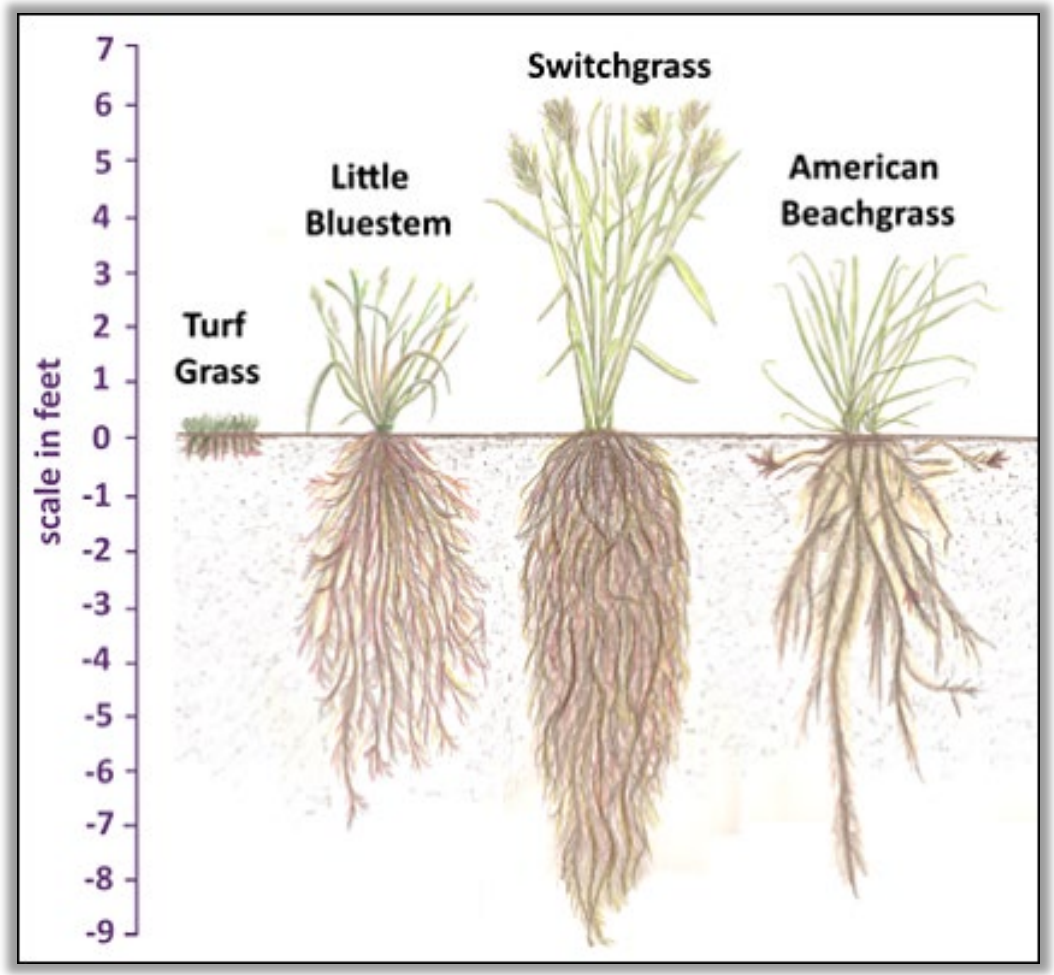

# How to install a rain garden

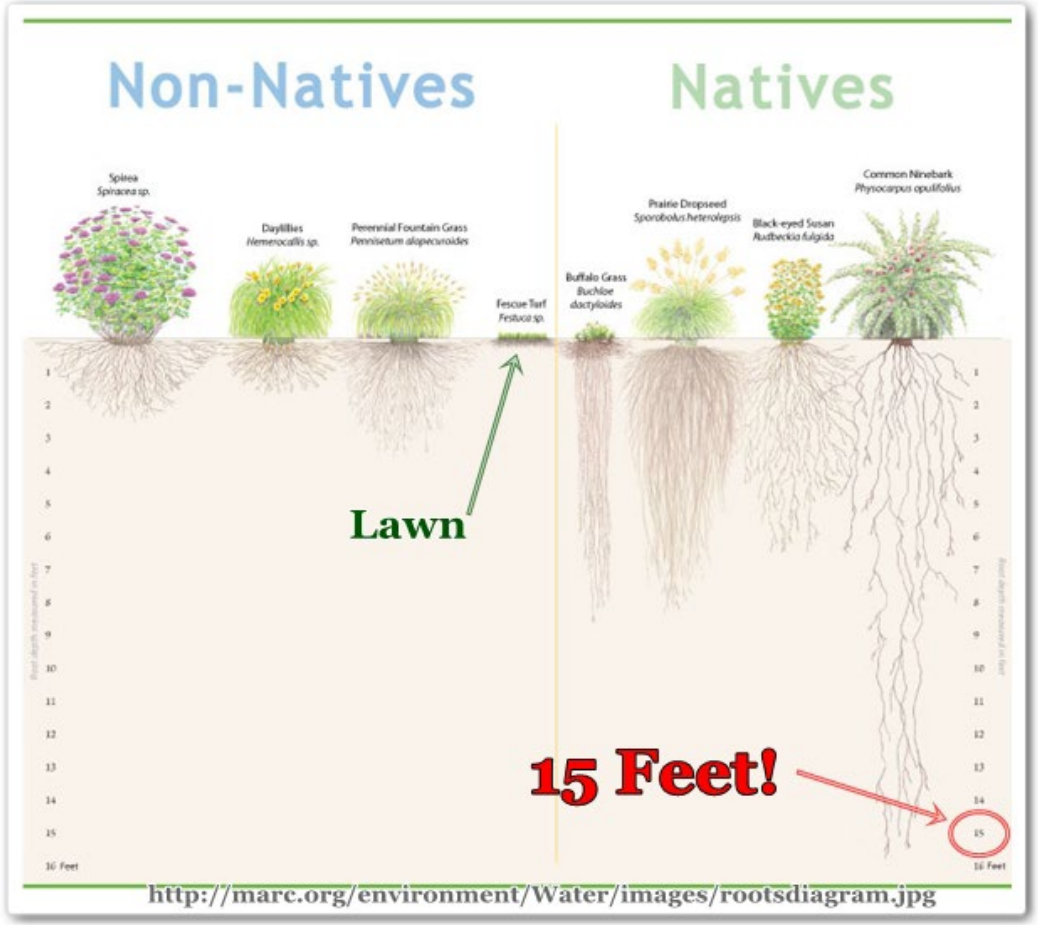
Cornell Cooperative Extension

# Steps

1. Find an area of your property where water often collects but does not consistently have standing water.
2. Should be full to partial sun and several feet away from structures/well/septic system.
3. Dig a shallow depression (can be anywhere from about 3 in – 12 in deep).
4. Install native plants that do well with varying moisture requirements.
5. Consider connecting the garden to a downspout if possible, or dig a channel to direct rainwater to the garden.
6. Enjoy!

# Plant Native Species!

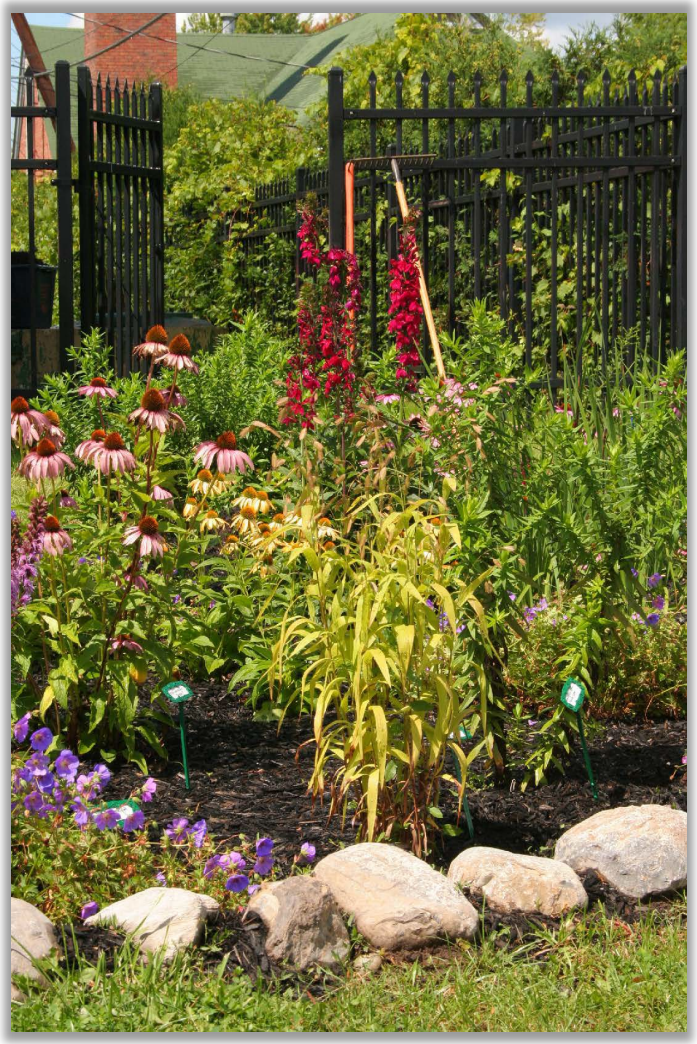


# “Gatehouse Garden” - Demonstration Rain Garden

- Collaborative effort between Master Gardeners and Skaneateles Program
- Restored what was installed in 2010
- Planted a variety of native species
- Ongoing education

# The Gatehouse Garden's Story



# How it started….and how it’s going!

# We started by trying to weed and thin

# Rain Garden Restoration Time

# Rain Garden – Summer, 2023

# Fixing the drainage swale…

# Native plants to use


**Common Boneset** (*Eupatorium perfoliatum*)


**Narrow-leafed Mountain Mint** (*Pycnanthemum tenuifolium*)

# Native plants that were already here

**Northern Sea Oats** *(Chasmanthium latifolium)*


**Purple Coneflower** *(Echinacea Purpurea)*

# More native plants in the garden

**Beebalm/ Wild Bergamot** *(Monarda fistulosa)*


**Culver's Root** *(Veronicastrum virginicum)*

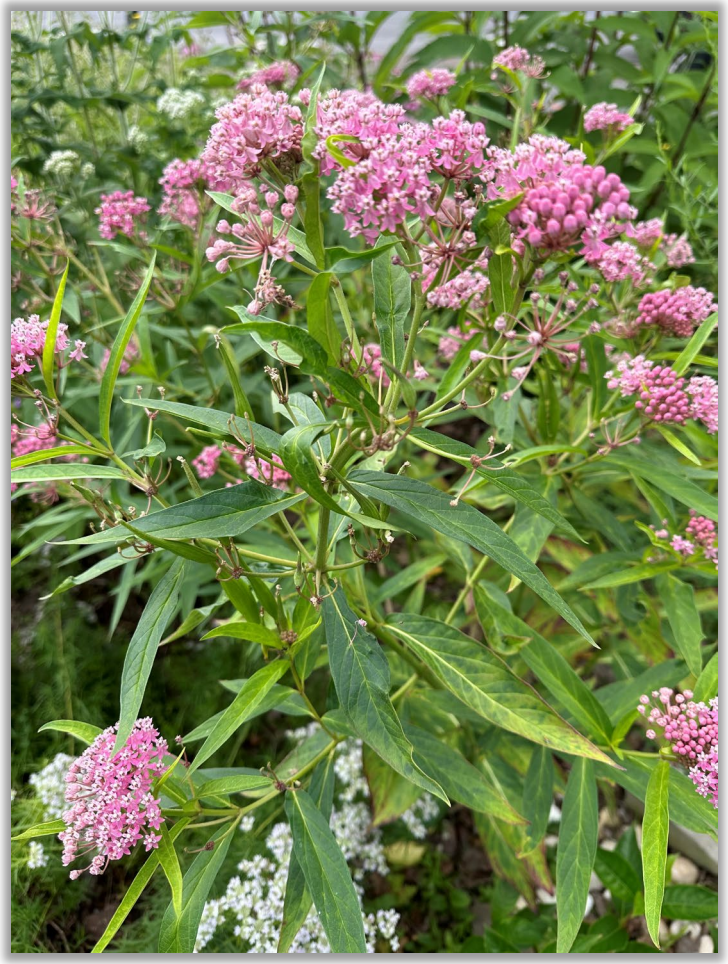
# Natives

**False Sunflower** *(Heliopsis helianthoides)*


**Blazing Star** *(Liatris spicata)*

# Natives

**Joe-Pye Weed** *(Eupatorium fistulosum)*



**Swamp Milkweed** *(Asclepias incarnata)*

# Natives


**Lanceleaf Coreopsis /Tickseed** *(Coreopsis lanceolata)*


**Wild Geranium** *(Geranium maculatum)*

# Other natives

**Buttonbush** *(Cephalanthus occidentalis)*

**Wrinkle-leaf Goldenrod** *(Solidago rugosa)* **and Stiff Goldenrod** *(Solidago rigida)*

# Maintenance

- Cleaning out the drainage swale and checking that regularly
- Weeding and keeping invasives at bay (mile-a-minute)
- Removing any trash and other items from the garden
- Watering if really needed
- Making sure ID tags are still in good condition

# Utilize CCE and Other Resources!

- **Landscaping for Water Quality in the Finger Lakes Region**
- ***New* Rain Gardens Brochure**
- **Cornell Botanic Gardens**
- **US EPA Rain Garden Resources**

# Questions?


**Camille Marcotte**

Water and Ecology Educator

CCE Onondaga County

ctm78@cornell.edu

(315) 424-9485 ext.232

www.cceonondaga.org

# Stabilizing Steep Slopes to Stop Soil Erosion in Skaneateles Lake

*Highlighting a Project by the Central New York Land Trust*

**JUNE 15, 2024**
**10 AM - 12 PM**

**The Central New York Land Trust recently completed a riparian restoration project to protect water quality in Skaneateles Lake. Join us to learn more and see the project for yourself at this program.**

**More info at:**
**www.skanlakeinfo.org/events/cnylt**

# Skaneateles Lake Watershed Wave Reviews

**Summer 2024 Edition**

Visit the Skaneateles Lake website for resources and tips on how to protect the water quality of Skaneateles Lake
www.skanlakeinfo.org

***In this Issue:***



*Brought to you by the City of Syracuse Department of Water*
*Ben Walsh, Mayor*

## Landscape Management to Protect Water Quality

*By: Camille Marcotte, Cornell Cooperative Extension Onondaga County*

Cornell Cooperative Extension (CCE) Onondaga County has planned several programs for watershed homeowners on managing different landscapes to protect Skaneateles Lake this summer.

First in April was a program on Lawns and Landscapes for Protecting the Lake. Speakers shared knowledge on lawncare best management practices for homeowners, as well as the Cornell Botanic Gardens' native lawn project. This program was recorded and can be viewed on the CCE Onondaga YouTube page: www.youtube.com/@cceonondaga/videos.

In June, we held a program on steep slopes, highlighting a riparian restoration project by Central New York Land Trust. This impressive project is already helping to prevent sediment loading into Skaneateles Lake.

Coming up, on August 15th, CCE Onondaga and partners will hold a program on Rain Gardens: One Solution to Stormwater Pollution and Pollinator Protection at the Skaneateles Library. Learn about installing a rain garden on your property and how rain gardens can support pollinators. This program will also feature a tour of the Skaneateles demonstration rain garden.

If you can't wait, CCE Onondaga has a newly updated Rain Gardens brochure, with information on how to install your very own rain garden available here: https://bit.ly/4ezZ3ZZ.

All events are listed on the Skaneateles website at: www.skanlakeinfo.org/events. We hope to see you there, and thank you to everyone who has already joined us for a program(s) this year!

*Walking the steep slopes of Central New York Land Trust's riparian restoration project with a view of Skaneateles Lake in the background*

*The Skaneateles Watershed Education Program works to protect the water quality of Skaneateles Lake, a treasured resource that serves as the primary drinking water source for Skaneateles and the City of Syracuse. The City of Syracuse has funded this program since its inception in 1996.*

Cornell Cooperative Extension
Onondaga County

# Finger Lakes Land Trust Completes Largest Project to Date Within the Skaneateles Lake Watershed

*By: Edie Jodz, Assistant Director of Communications, Finger Lakes Land Trust*

*Jackson-Noel Property, Photo Credit: Matt Champlin*

In late 2023, the Finger Lakes Land Trust (FLLT) protected 690 acres at Jackson-Noel Farms in Spafford, Onondaga County. With nearly two miles of scenic frontage on State Route 41, this is the largest conservation project completed in the Skaneateles Lake watershed since the establishment of New York State's Bear Swamp State Forest.

Owned by Bill Jackson and Jeri Noel Jackson, the property is now protected by three separate conservation easements held by the FLLT. The easements allow for continued agricultural use, require the maintenance of vegetated stream buffers, and conserve more than 200 acres of woodlands on the farm. The property includes a mosaic of fields and forests including steep hillside creeks containing 8,500 feet of streambank. Several creeks on the property flow directly into Skaneateles Lake, the unfiltered drinking water supply for 200,000 people, including the city of Syracuse.

Bill and Jeri grow high-quality organic hay sold locally and in the state of Virginia where they own an equestrian-related general store. Since purchasing their first farm parcel in 2016, they have taken great measures to amend soils on the property to grow orchard grass, timothy, clover, and rye.

The farm connects to a growing complex of conserved land within the Skaneateles Highlands including the FLLT's Hinchcliff Family Preserve, one of the organization's most beloved and well-visited nature preserves. With the completion of this latest project, the FLLT has conserved more than 3,516 acres within the Skaneateles Lake watershed. Funds for two of three perpetual conservation easements to protect the property came from the state's Farmland Protection Implementation Program (FPIG), administered by the New York State Department of Agriculture and Markets. Additional funding for the third easement came from contributions to the FLLT's Finger Lakes Forever capital campaign.

# Skaneateles Lake Watershed 9E Plan - Third Public Meeting – May 21, 2024

*By: Aaron McKeon, Central New York Regional Planning and Development Board*

The third public meeting for the Skaneateles Lake Watershed Nine Element (9E) Plan was held at The Lodge in Skaneateles Falls on Tuesday, May 21st. Eighty community members turned out to hear the latest information on the plan, which is currently in draft form. Town of Skaneateles Supervisor Chris Legg welcomed the audience and County Legislator Julie Abbott provided some background on the plan's history and purpose. Dr. Liz Moran from Anchor QEA and Dr. Dave Matthews from the Upstate Freshwater Institute discussed the plan's scientific findings and Aaron McKeon from the Central New York Regional Planning and Development Board talked about how the science informs the plan's recommendations, and the strategy for implementing those recommendations. The Draft 9E Plan is available online at: https://skaneateles9e.cnyrpdb.org/.

# Waste Ag Tire Recycling Facility Tour

*By: Eric Jensen, Resource Conservation Specialist, Onondaga County Soil and Water Conservation District*

Over the last four years Onondaga County SWCD and participating farms have shipped 56 trailer truckloads of waste ag tires, weighing 950 tons to a recycling company in Niagara Falls. On Friday April 26, 2024, Eric Jensen toured the Buffalo Fuel Corp/SGS Recovery Facilities in Niagara Falls, NY with the Facilities Operations Manager, Nick Bellina and his Assistant, Zack Thiel. The guided tour included all three of the Covanta (now Reworld) owned production facilities.

Ag waste tires start their journey at a farm, usually as old bunk cover tires which were used to hold down the plastic tarps protecting corn silage bunkers. The farm staff gathers the tires into a pile in preparation for transport. The SWCD staff coordinates with the farm and Buffalo Fuel Corp dispatch to determine a date and time to load the trailer truck. Once the trailer truck arrives, the ag waste tires are loaded onto the trailer truck by the farm staff. The load is immediately hauled to the SGS Recovery facility in Niagara Falls, NY.

The tires are offloaded (via the walking floors) into a pile for shredding. Large tractor tires are separated out and cut into four sections. The average tire (or tire section) is processed through a shredder three times until it is reduced to ¾" crumbs. Each shredding step screens the tire pieces into three streams: crumbs, 2", and larger than 2". The metal is also separated out at each step. The tire crumbs are sent to the alternate fuel processing facility to be mixed with other shredded non-hazardous industrial materials to be further processed two more times through different shredders with metal separation. The final product is an 'engineered fuel' used for energy in cement and lime kilns. Alternative fuels are 'zero waste-to-landfill and carbon negative'.

Unmanaged waste ag tires can provide an environment for mosquitoes to breed in the stagnant water that collects inside. These mosquitos pose a health concern since they can carry West Nile Virus, EEE, and other diseases. By removing the tires, the risk of disease is reduced. In addition, large tire piles are a risk if they catch fire and release thick black smoke and other pollutants through runoff during fire extinguishing efforts. We believe the extra effort to remove these ag tires and comply with NYS DEC regulations will provide lasting environmental benefits to the watershed and community.

For more information on waste ag tire recycling, contact the SLWAP & Onondaga County Soil & Water Conservation District office location at 6680 Onondaga Lake Parkway, Liverpool at (315) 457-0325.

*Nick Bellina, Zack Thiel, and Ian Kroening at SGS Recovery yard. Photo credit: Eric Jensen*


*Tire crumbs with other industrial waste mixing operations. Photo credit: Eric Jensen*

CCE Onondaga
6505 Collamer Road,
East Syracuse, NY
13057

# Skaneateles Lake Wave Reviews

NON-PROFIT ORG.
US POSTAGE
**PAID**
PERMIT NO. 3381
SYRACUSE, NY

**Stay connected!**

Join our Water Quality List-serve to receive digital WAVE Reviews, event announcements, and more. Skaneateles Watershed Residents and those looking to protect water quality in their community are encouraged to join.

List serve accessible through this direct link http://eepurl.com/bQ22XP or by visiting our website at www.cceonondaga.org and searching for our 'Skaneateles Lake' landing page.

**Don't forget to check out the new Skaneateles Lake Watershed website at www.skanlakeinfo.org**

## Important Contacts for the Skaneateles Watershed

**Cayuga County Health Department 315-253-1405**
**Cayuga County Soil & Water Conservation District 315-252-4171**
**Cornell Cooperative Extension of Onondaga County 315-424-9485**
**Cortland County Health Department 607-753-5036**
**Cortland County Soil & Water Conservation District 607-756-5991**
**NYS DEC Region 7 Environmental Permits (Onondaga & Cayuga) 315-426-7438**
**NYS DEC Region 7 Environmental Permits Sub-office (Cortland) 607-753-3095**
**NYS DEC Spill Prevention and Response 800-457-7362**
**NYS DEC Region 7 Water & Wastewater (Stormwater, Dam Safety, Flood Control) 315-426-7500**
**Onondaga County Health Department 315-435-3252**
**Onondaga County Soil & Water Conservation District 315-457-0325**
**Skaneateles Lake Watershed Agricultural Program 315-457-0325**
**Syracuse Water Department (Skaneateles) 315-448-8366**

This newsletter was created by Camille Marcotte of Cornell Cooperative Extension Onondaga County and Rich Abbott, City of Syracuse Water Dept. Special thank you to our partnering contributors.

**Skaneateles Lake Watershed Education Program**

Funding for Cornell Cooperative Extension programming in the Skaneateles Lake Watershed is provided by the City of Syracuse Department of Water.

# Skaneateles Lake Watershed Wave Reviews

**Winter 2024 Edition**

Visit the Skaneateles Lake website for resources and tips on how to protect the water quality of Skaneateles Lake
www.skanlakeinfo.org

***In this Issue:***



*Brought to you by the City of Syracuse Department of Water*
*Ben Walsh, Mayor*

## Harmful Algal Blooms - From Research to Mitigation: Sharing the latest updates for Skaneateles Lake

*By: Camille Marcotte, Cornell Cooperative Extension Onondaga County*

On October 9th, Cornell Cooperative Extension (CCE) Onondaga County planned and held an event sharing an update on Harmful Algal Blooms (HABs) for Skaneateles Lake, including research and mitigation. The event consisted of short presentations by experts, with a question and answer panel following. The event wrapped up with brief updates from community partners.

Featured speakers included Dr. Greg Boyer who spoke first about the state of the science of harmful algal blooms. Next was Dr. Dave Matthews who shared factors that influence HABs, including insights from water quality modeling. Finally, Tony Prestigiacomo from the NYS Department of Environmental Conservation spoke about water quality and watershed progress updates from the state level.

Following a question and answer portion, community partners shared updates on projects, initiatives, and resources related to HABs. Aaron McKeon from Central New York Regional Planning and Development Board spoke about a collaborative grant proposal for Hemlock Woolly Adelgid work. Skaneateles Lake Association (SLA) Executive Director, Frank Moses, spoke about SLA's HABs monitoring program and thanked volunteers who survey and report HABs. Lastly, CCE Onondaga Water Quality Educator, Camille Marcotte, shared the Skaneateles Lake Watershed website as a resource, which includes a link to the microcystin testing results and answers to frequently asked questions related to HABs. www.skanlakeinfo.org.

This program was recorded and will be available on the CCE Onondaga YouTube page: www.youtube.com/@cceonondaga/videos.


*Dave Matthews presents at the October 9th HABs event for Skaneateles Lake*

*The Skaneateles Watershed Education Program works to protect the water quality of Skaneateles Lake, a treasured resource that serves as the primary drinking water source for Skaneateles and the City of Syracuse. The City of Syracuse has funded this program since its inception in 1996.*

Cornell Cooperative Extension
Onondaga County

# Land Trust Acquires 101 Acres Just Outside the Village of Skaneateles

*By: Edie Jodz, Assistant Director of Communications, Finger Lakes Land Trust*

After several years of negotiations, the Finger Lakes Land Trust recently purchased 101 acres located just outside the village of Skaneateles. The parcel features more than 1,000 feet of frontage on Shotwell Brook—a significant tributary to Skaneateles Lake, and more than 1,000 feet on U.S. Route 20—the arterial road that serves as the eastern gateway to Skaneateles and the Finger Lakes.

The Land Trust intends to manage the property as a public conservation area with plans to develop two miles of walking paths, including a universally accessible loop trail. The site will also feature scenic overlooks and wildlife viewing areas with an interpretive kiosk and a parking area.

This property was identified as a priority for protection by both the Land Trust and the City of Syracuse Water Department due to its importance for water quality. Shotwell Brook enters Skaneateles Lake near the water intake for Syracuse's unfiltered drinking water supply. The land is also part of a growing complex of conserved land in this area, being adjacent to town-owned conservation land and in close proximity to a conservation easement acquired by the Land Trust last year.

Once part of a farm, the property consists of a mix of fields and young forest with two wetland areas. Before developing public access improvements, the Land Trust will first initiate ecological restoration efforts on the land through a partnership with the Partners for Fish & Wildlife Program of the U.S. Fish & Wildlife Service. This will involve restoring and enhancing wetlands; planting native trees and shrubs; establishing a native grassland; and reducing the presence of non-native invasive trees and shrubs.

Visit fllt.org/news to learn more.

*Photo Credit: Chris Ray*

# In Remembrance of Jim Greenfield

*By: Mark Burger, Executive Director, Onondaga County Soil and Water Conservation District*

The world lost a great friend, farmer and conservationist when Jim Greenfield passed on Sunday, September 29, 2024. Jim was one of eight "Founding Fathers" of the City of Syracuse's Skaneateles Lake Watershed Agricultural Program (SLWAP) in 1992.

Between 1992 and 1994, Jim and a few other farmers passionate for agricultural conservation, went door-to-door to educate and encourage neighboring farmers in the watershed to voluntarily participate in the City of Syracuse's agricultural conservation planning and implementation projects. Their goal: help protect the water quality of Skaneateles Lake. Jim and his team's efforts resulted in over 90% of the farmers in the watershed agreeing to join the SLWAP! It is easy to see why more than one person reached out to the Soil and Water Conservation District's office after Jim's passing and said "SLWAP has just lost their best farmer!"

It was by the hard work of the Greenfield family, which spanned three generations and required investing decades of hard work, that Greenfield Farms, LLC would be recognized in 2022 as the recipient of New York State's highest award for agricultural conservation, the Aldo Leopold Conservation Award!

Jim could and did work with just about everybody and would always refer to them as "Buddy." He also served his community for decades in many volunteer roles and capacities and was a "Pillar of the Community." He always went above and beyond to help his family, friends, and neighbors. As we continue to go forward each day, please look across this beautiful watershed and know that Jim has had a hand on its land and its people.

In closing, these words spoken by Aldo Leopold summarize Jim and his family's work in their community the best, "When the land does well for its owner, and the owner does well by his land – when both end up better by reason of their partnership – then we have conservation."

To Jim's family and friends we sincerely say, "THANK YOU FOR SHARING SUCH A GREAT MAN WITH US FOR 32 YEARS!"


*Photos of Jim Greenfield courtesy of Onondaga Soil and Water Conservation District*

CCE Onondaga
6505 Collamer Road,
East Syracuse, NY
13057

# Skaneateles Lake Wave Reviews

NON-PROFIT ORG.
US POSTAGE
**PAID**
PERMIT NO. 3381
SYRACUSE, NY

**Stay connected!**

Join our Water Quality List-serve to receive digital WAVE Reviews, event announcements, and more. Skaneateles Watershed Residents and those looking to protect water quality in their community are encouraged to join.

List serve accessible through this direct link http://eepurl.com/bQ22XP or by visiting our website at www.cceonondaga.org and searching for our 'Skaneateles Lake' landing page.

**Don't forget to check out the new Skaneateles Lake Watershed website at www.skanlakeinfo.org**

## Important Contacts for the Skaneateles Watershed

**Cayuga County Health Department 315-253-1405**
**Cayuga County Soil & Water Conservation District 315-252-4171**
**Cornell Cooperative Extension of Onondaga County 315-424-9485**
**Cortland County Health Department 607-753-5036**
**Cortland County Soil & Water Conservation District 607-756-5991**
**NYS DEC Region 7 Environmental Permits (Onondaga & Cayuga) 315-426-7438**
**NYS DEC Region 7 Environmental Permits Sub-office (Cortland) 607-753-3095**
**NYS DEC Spill Prevention and Response 800-457-7362**
**NYS DEC Region 7 Water & Wastewater (Stormwater, Dam Safety, Flood Control) 315-426-7500**
**Onondaga County Health Department 315-435-3252**
**Onondaga County Soil & Water Conservation District 315-457-0325**
**Skaneateles Lake Watershed Agricultural Program 315-457-0325**
**Syracuse Water Department (Skaneateles) 315-448-8366**

This newsletter was created by Camille Marcotte of Cornell Cooperative Extension Onondaga County and Rich Abbott, City of Syracuse Water Dept. Special thank you to our partnering contributors.

**Skaneateles Lake Watershed Education Program**

Funding for Cornell Cooperative Extension programming in the Skaneateles Lake Watershed is provided by the City of Syracuse Department of Water.


Syracuse
New York