

Soil and Water Conservation District 2024 Program Forecast

Presentation to the Tompkins County Water Resources
Council

May 20, 2024



Mission Statement



It is the mission of the Tompkins SWCD to aid citizens and units of local government in making sound decisions regarding the management of soil, water and related natural resources.



Tompkins County Soil and Water Conservation District 2024 Annual Plan of Work

Agricultural Environmental Management Program

Watershed Protection Program

Stormwater Coalition Program

Invasive Species Control Program

District Operations

Community Services

Outreach

Education

Coordination with other agencies and organizations



Agricultural Environmental Management

Core Concepts


- **Open to all farmers**
- **Voluntary, incentive-based**
- **Locally-led & delivered**
 - Farmers
 - Soil & Water Conservation Districts
 - Natural Resources Conservation Service
 - Cornell Cooperative Extension
 - Farm Service Agency
 - Watershed Groups
 - Environmental Organizations
 - Agri-Business

Based on natural resource needs and local AEM Strategic Plans

Tompkins County Agricultural Environmental Management (AEM) Strategic Plan 2021-2025




TOMPKINS COUNTY WATER QUALITY STRATEGY
2022-2024



Tompkins County Water Resources Council
Adopted: November 15, 2021

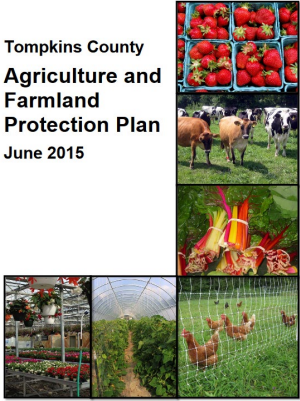
NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION DEPARTMENT OF HEALTH AGRICULTURE AND MARKETS

HARMFUL ALGAL BLOOM ACTION PLAN CAYUGA LAKE



www.dec.ny.gov

Tompkins County Agriculture and Farmland Protection Plan
June 2015






DWSP2 Plan


City of Ithaca Drinking Water Source Protection Program (DWSP2) Plan
City of Ithaca Water System

Prepared for
City of Ithaca
202 Water Street
Ithaca, New York

Final
September 2022


Barton & Loguidice  **CHUMAKER**  **H 2 M** 

FINAL




SEPTEMBER 2022


OWASCO LAKE WATERSHED NINE ELEMENT PLAN FOR PHOSPHORUS REDUCTION
PREPARED FOR CAYUGA COUNTY DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT



This plan was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund.



Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment
Established by the U.S. Environmental Protection Agency



Shawn M. Givis
Shawn M. Givis, Regional Administrator
U.S. Environmental Protection Agency
Region 3

Judith A. Eick
Judith A. Eick, Regional Administrator
U.S. Environmental Protection Agency
Region 2

DATE: 12/29/10



xxxx AEM Project

Farm Name	Springfield Acres		
Contact Name	Marge Simpson		
Address	742 Evergreen Rd. (Rt. 193) Bouvier, New York 10000		
Phone	777-777-7777		
Evaluator	Waylon Smithers	Phone:	777-999-9999
Date Prepared	07/23/05	Date Delivered	07/29/05

Worksheet Name and Number	Level of Concern (1-4)	Items of Concern	Evaluation & Recommendations
1. Watershed Site Evaluation		P losses from runoff and soil erosion are a concern for Springfield Creek and the Krusty Wildlife Management Area. N leaching and pathogens are a concern for rural residential wells. Odors, well	Details Captured on Tier 2 Worksheet

3. Manure Management	3	High runoff and leaching.	High runoff & leaching concerns on some fields. Develop a more efficient manure spreading schedule/nutrient management plan.
4. Barnyards	4	Manure runoff from barnyard.	Roof water mixes with barnyard manure No collection system for barnyard runoff Barnyard runoff should be reduced and treated
5. Silage Storage	4	Silage leachate.	No silage leachate collection system Harvest management level is high Install high flow/low flow silage leachate system
6. Process Wash Water	3	P from milking center wash water.	Septic tank and leachfield is of unknown design Connect milking center wash water into a pump out tank to be spread with manure
7. Management of Feed Nutrients	2	Cow comfort and feed use efficiency.	Calf and heifer facilities could be improved for more feed efficiency. More groups would allow more feed use efficiency. Continuing to increase use of homegrown forage. A calf greenhouse could improve cow comfort and grouping strategies.
8. Water-borne	2		Calf hutches leave manured bedding exposed to precipitation.

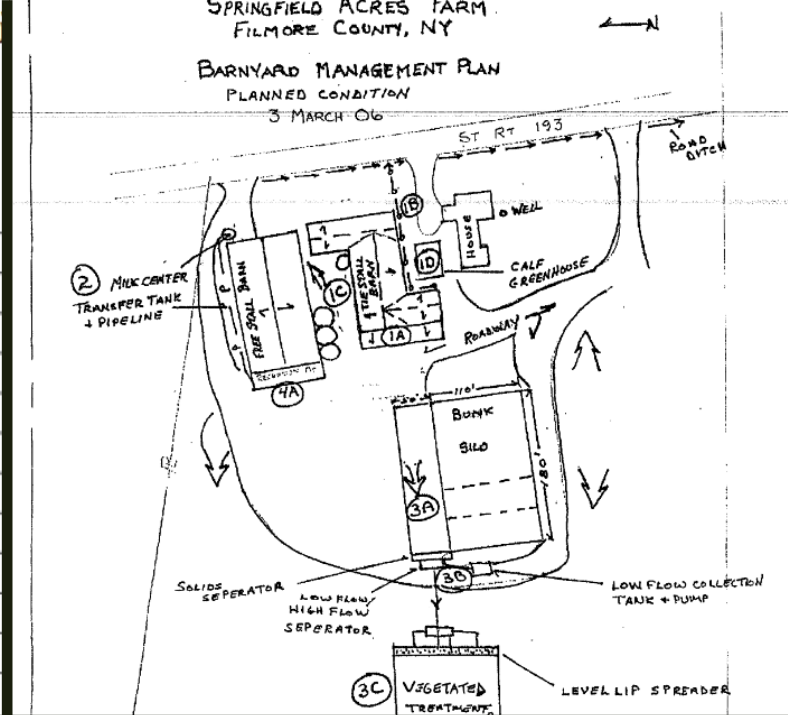
11. Waste Disposal	1		Recommendations from Cornier Cooperative Extension. -Animal mortalities are properly composted in an existing system. -Other wastes are handled by appropriate recyclers/handlers.
12. Pesticide Use	1		-Custom operator mixes and applies all pesticides, with exception for planter-based insecticides and fungicides. Labels are followed.
13. Pesticide Storage, Mixing, and Loading	1		-Custom operator mixes and applies all pesticides, with exception for planter-based insecticides and fungicides. Labels are followed and materials are stored properly.
14. Farmstead Water Supply Evaluation	1.5	Pathogens.	-Drilled well serves both farm and farmhouse. Backflow prevention on farm connections. Records of high quality water from semi-annual testing.
15. Stream and Floodplain Management	3	Proximity of cropland to adjacent streams.	-Considerable cultivation occurs within 35' of the Springfield Creek. -Banks are generally stable, with minimal within channel erosion. -Flooding frequency is rare/none on all fields. Due to concerns with Springfield Creek there are excellent buffer opportunities on

17. Forest Management	4	Runoff and sediment.	firewood, but no heavy logging and road development. -No forest management plan exists. A forest management plan would help to recognize the value of woodland assets and manage to improve the woodlot with minimal soil, streams, and habitat.
18. Livestock Odor Management	2	Air quality / Nuisance / Neighbor Relations	-Farm keeps neighbors updated about farm activities. -Significant distance from farmstead to nearest neighbor, so farmstead odor nuisance risk is minimal. -Manure storage plans will increase odor concerns during field applications. Future nutrient management plans will involve incorporation of manure when possible and limit applications after hay cuttings near neighboring houses. Planned manure storage will be behind barns and away from the road.
19. Pasture Management	3	Soil erosion, runoff, and pathogens / animal health	-Current dry cow pastures are poorly vegetated due to being undersized and overgrazed on unproductive soils.. -All water is in the barns; none in pasture. -Dry cows congregate in concentrated flow areas which appear during heavy rains, although > 3000 feet from Springfield Creek. A new prescribed grazing system would

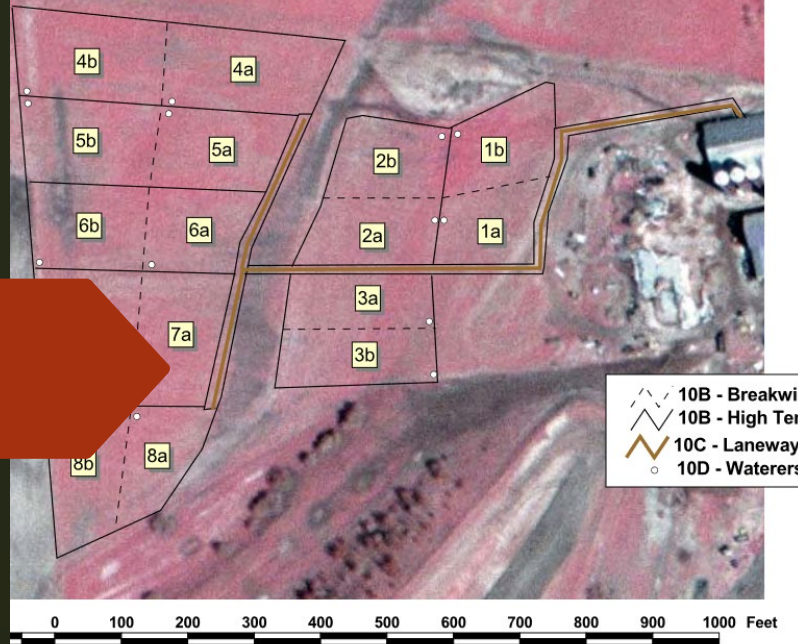
AEM Tier 2 Summary

Table of Contents

Number	Title
1	Farm Overview
2	Plan Summary
3	Farmstead
4	Cropland Conservation
5	Manure & Nutrient Management
6	Pasture Management
7	Pest /Pesticide Management
8	BMP Operation & Maintenance
9	Emergency Action Plan
10	Record Keeping & Supplemental Materials



Dry Cow Pasture Map - Plan Item 10



AEM Tier 3 Plan

Management Practice Implementation Schedule: Springfield Acres (Farmstead and Field B)

Note: The "Item #" is a unique identifier for each area of concern and associated practice or system through

Tract / Field ID	Practice/System Description	NRCS Practice Name	Plan Section	Units Planned	Implementation Goal
111	Livestock Heavy Use Area Runoff Mgt. System				
	Tiestall Barnyard Roof and Curbs	Heavy Use Protection Area / Roofs and Covers	Farmstead	0.03 ac.	9/2008
111	Drip Tile by Calf Greenhouse	Roof Runoff Structure and Subsurface Drain	Farmstead	200 ft.	9/2007
111	Grading and Shaping Barnyard Area	Heavy Use Protection Area	Farmstead	0.1 acres	9/2007
111	Calf Greenhouse	Heavy Use Protection Area	Farmstead	0.02 ac.	9/2007
111	Process Wash Water Mgt. System (Milking Center Wastewater Transfer)	Waste Transfer	Farmstead	1	Completed
111	Silage leachate Control & Treatment System				
111	Bunker Silo Apron	Heavy Use Protection Area	Farmstead	0.2 ac.	Completed
111	High/Low Flow Collection and Transfer	Waste Transfer	Farmstead		Completed
111	High Flow Treatment Area	Vegetated Treatment Area	Farmstead	0.6 acres	8/2006
111	Waste Storage and Transfer System				
	Evaluate Existing Reception Pit	Waste Storage Facility	Farmstead	1	8/2007
All Crop Fields	Soil Conservation System	Cover Crop / Conservation Crop	Cropland Conservation	590.9 ac.	Completed

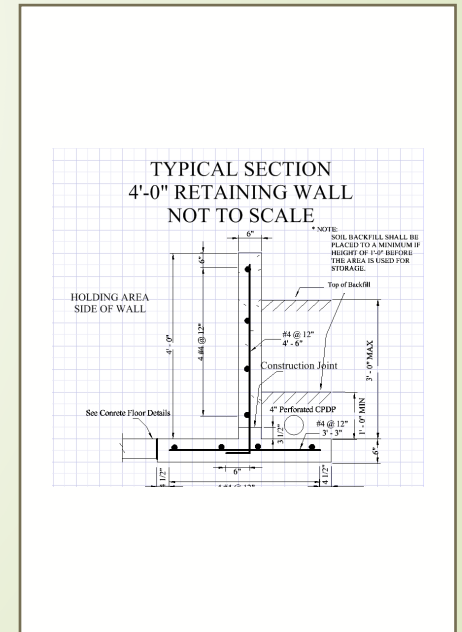
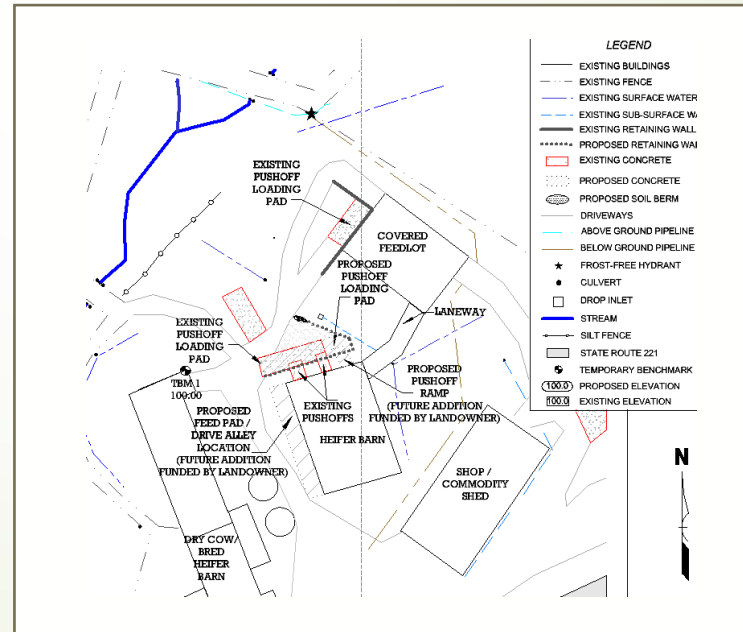
AEM Tier 4 Design

Agricultural Best Management Practice Systems Catalogue

NYS Soil and Water Conservation Committee
Approved June 2023

Materials List

Type	Amount	Unit
Silt Fence	180	FT
Concrete – Pushoff Loading Pad	22	CY
Concrete – Retaining Wall	49	CY
Geotextile	3,450	SF
#2 Stone sub-base	68	CY
Fill (Bank Run)	92	CY
ENKA Drain	910	SF
4" CPDT	100	FT
Item #4 Gravel	28	CY



Funding Programs

Climate Resilient Farming Program

Agricultural Non-Point Source Pollution
Abatement Program

AEM Tier 4 - Implementation

FLOWPA

USC



Climate Resilient Farming Program

- ▶ \$28,750,000 available in Round 8 of the program. Applications due – June 24, 2024. Awards announced – September 2024
- ▶ Four tracks
 - 1A: Livestock Management: Alternative Waste Management and Precision Feed Management (NYS funds)
 - ***New***1B: Manure Storage Cover and Methane Capture Projects (federal funds)
 - 2: Adaptation and Resiliency (NYS funds)
 - 3A: Healthy Soils NY (systems and BMPs that support soil health and agroforestry)
 - ***New***3B: Soil Health Systems (federal funds)
 - ***New***4: Agricultural Forestry Management (for carbon sequestration) (NYS funds)
- ▶ Round 7 Implementation
 - 1 Cover and Flare Project
 - 4 Irrigation Water Management Systems
 - 3000 Acres of Cover Crop
 - 300 Acres of reduced tillage: Zone Tillage



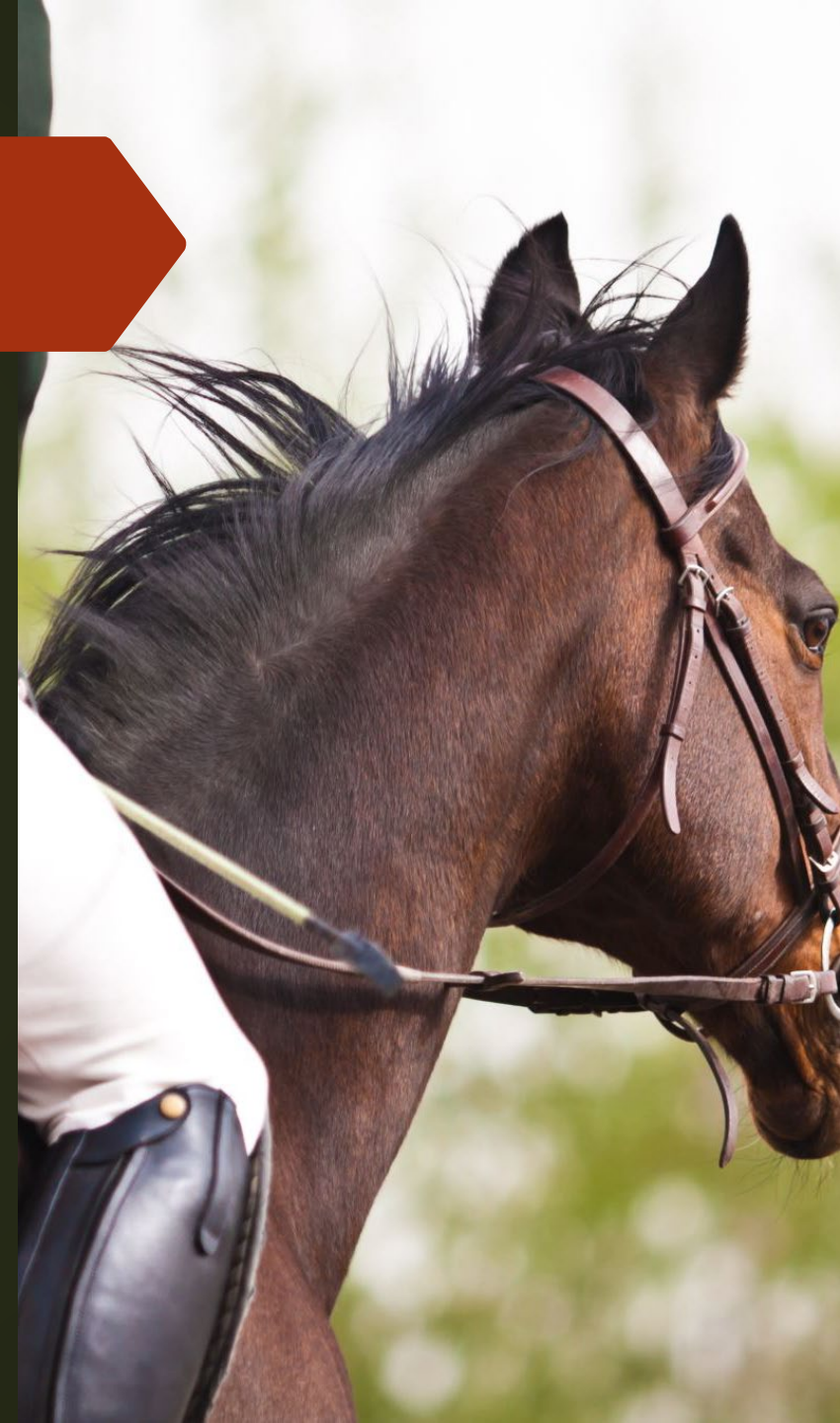
Agricultural Non-Point Source Pollution Abatement and Control Program

- \$13.5 million available in Round 29. 96 applications were received by the State in 2023 requesting \$39 million. Only 33 projects were able to be awarded. Tompkins County SWCD submitted 2 projects and were not awarded.
- Current Contracts include:
 - Cover Crop implementation with Cayuga County SWCD
 - Medium Size Dairy farm crop erosion control system in Groton.



Agricultural Environmental Management *Tier 4 Funding*

- ▶ \$200,000 available to each County in NYS over a 2 year period (2024 & 2025)
- ▶ Funds are cost shareable up to 87.5% based on project scope
- ▶ Projects ranked by local Districts
- ▶ Less competitive than statewide funding sources
- ▶ 2024 Projects to include:
 - ▶ 1 Beef Livestock Heavy Use Area Protection
 - ▶ 2 Dairy Prescribed Rotational Grazing Systems
 - ▶ 1 Goat Farm Clean Water Exclusion System
 - ▶ 1 Horse Manure Storage System





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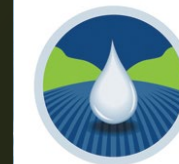
Outreach

Education

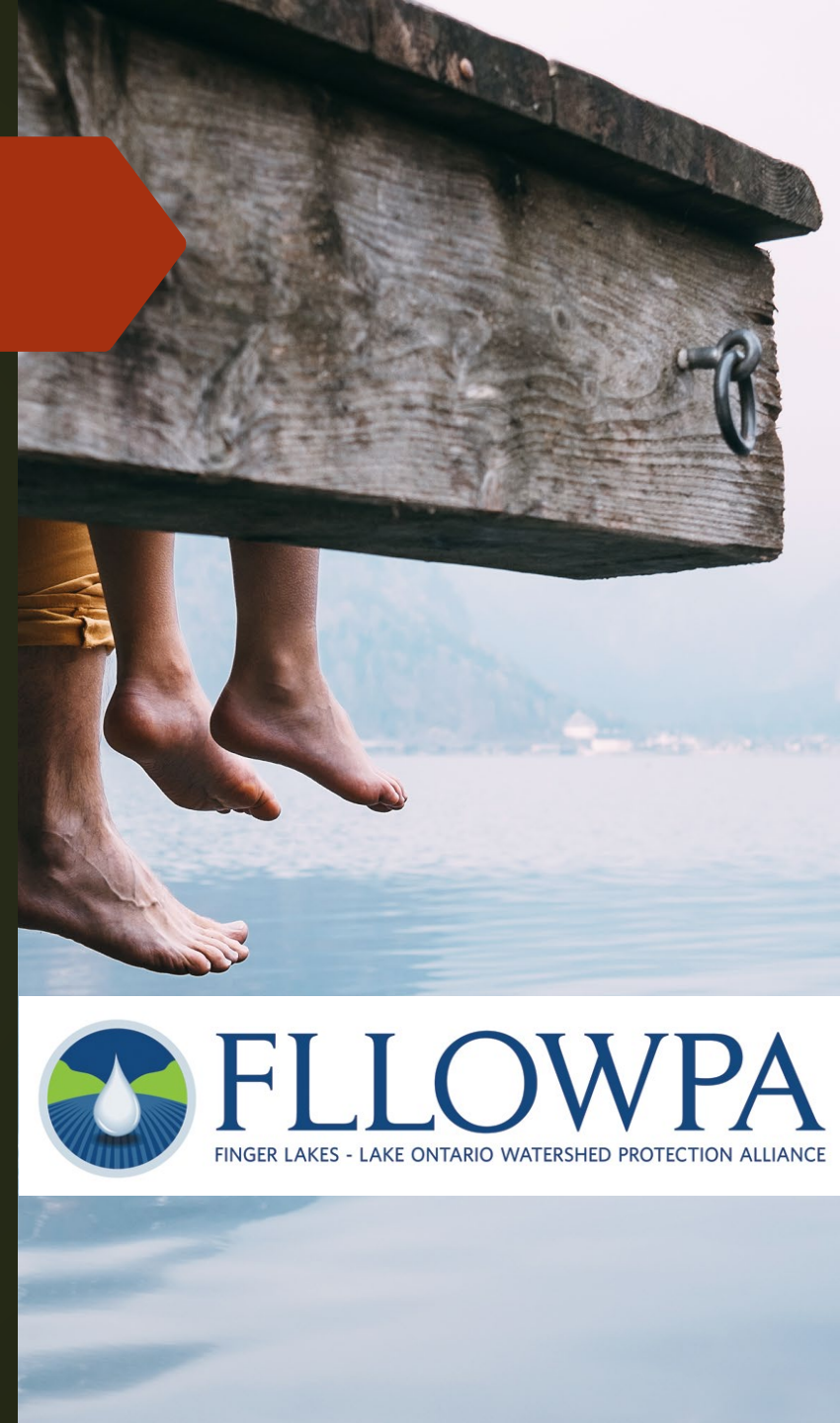
Coordination with other agencies and organizations

Fingerlakes- Lake Ontario Watershed Protection Alliance

- ▶ Group of 25 counties that share funding from the Environmental Protection Fund of NYS. (\$3,500,000 in this year's State budget...an increase from \$2,700,00)
- ▶ Approximately \$37,500 is allocated in yearly contract for an agricultural project in the county.
- ▶ \$37,500 is allocated for non-ag water quality improvement project.



FOLLOWPA
FINGER LAKES - LAKE ONTARIO WATERSHED PROTECTION ALLIANCE



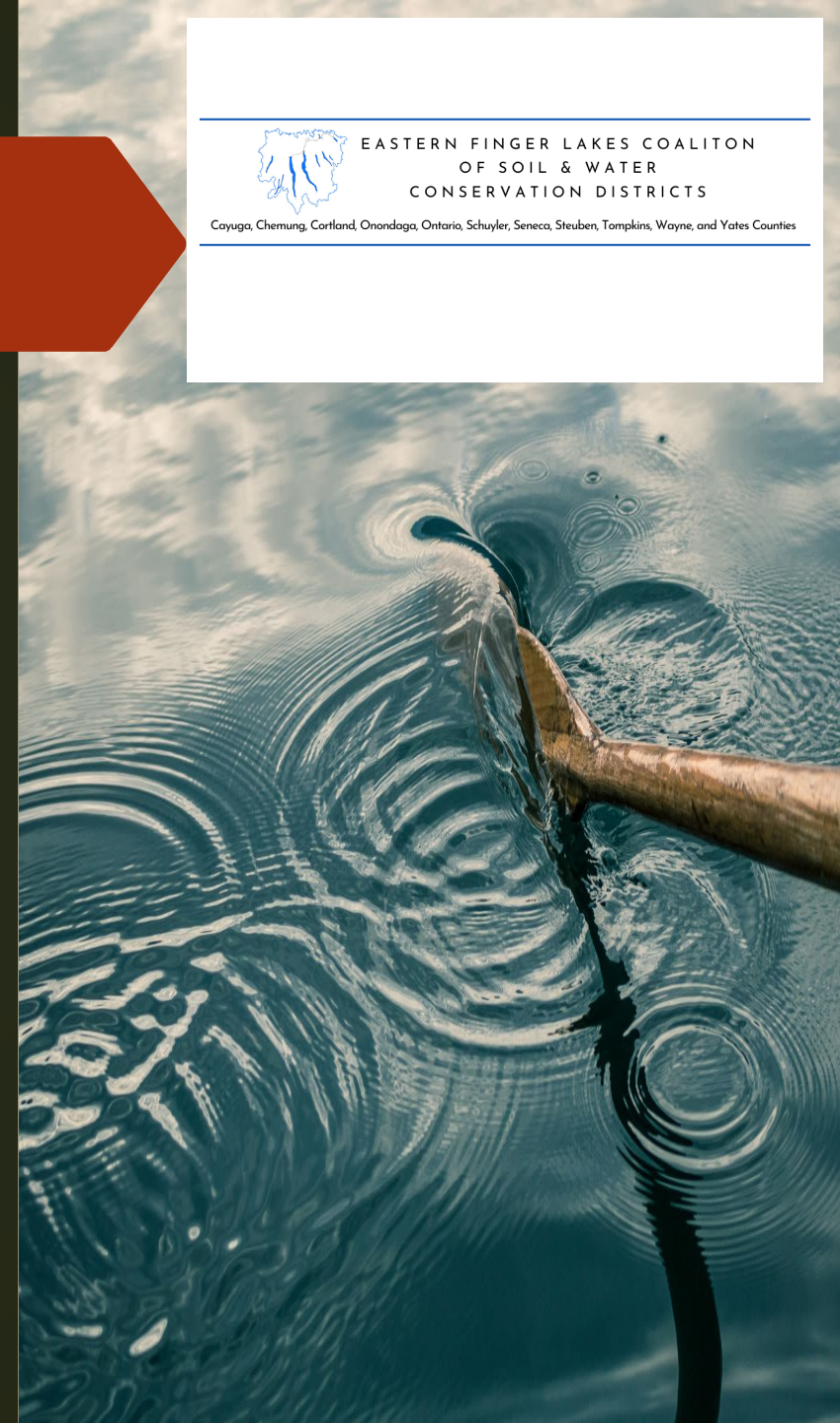
Eastern Fingerlakes Coalition

- Group of 11 SWCDs that share funding from the Environmental Protection Fund of NYS. (\$1,200,000 in this year's State budget)
- Details of funding allocations are still being worked out with DEC in Albany.
- Increased capacity for SWCD's with a watershed coordinator and increased staff is expected.
- Seeking dedicated funding for implementation of BMPs



EASTERN FINGER LAKES COALITION
OF SOIL & WATER
CONSERVATION DISTRICTS

Cayuga, Chemung, Cortland, Onondaga, Ontario, Schuyler, Seneca, Steuben, Tompkins, Wayne, and Yates Counties



Upper Susquehanna Coalition

- Group of 11 Soil and Water Conservation Districts that work to address issues identified in the Chesapeake Bay TMDL
- Funding is usually from Federal Grant sources
- Working Group Teams address wetland, stream and agricultural resource concerns.



GET OUT IN THE FIELD WITH US!

The Upper Susquehanna Coalition invites you to join us for riparian buffer stewardship workdays across the Upper Susquehanna watershed!

★ What are steward workdays?

The USC riparian forest buffer stewardship program hosts group workdays at select buffer sites over the course of the summer. Buffer stewards from participating counties, as well as USC partners, get together to learn, address concerns, and perform establishment activities in the field.

★ What can I expect to do at workdays?

Workday activities can include survival assessment of planted forest buffers, invasive control, tree shelter maintenance, replanting, weeding & trimming, as well as training exercises such as practicing tree ID and learning about conservation projects.

★ How can I find out more?

Contact Ava Glasser, USC Buffer Stewardship Coordinator, to find out more about our workdays:
Email: glassera@tioga-county-ny.gov
or call (607)-972-2359.

★ Register for workdays here:
<https://www.u-s-c.org/StewardWorkday>



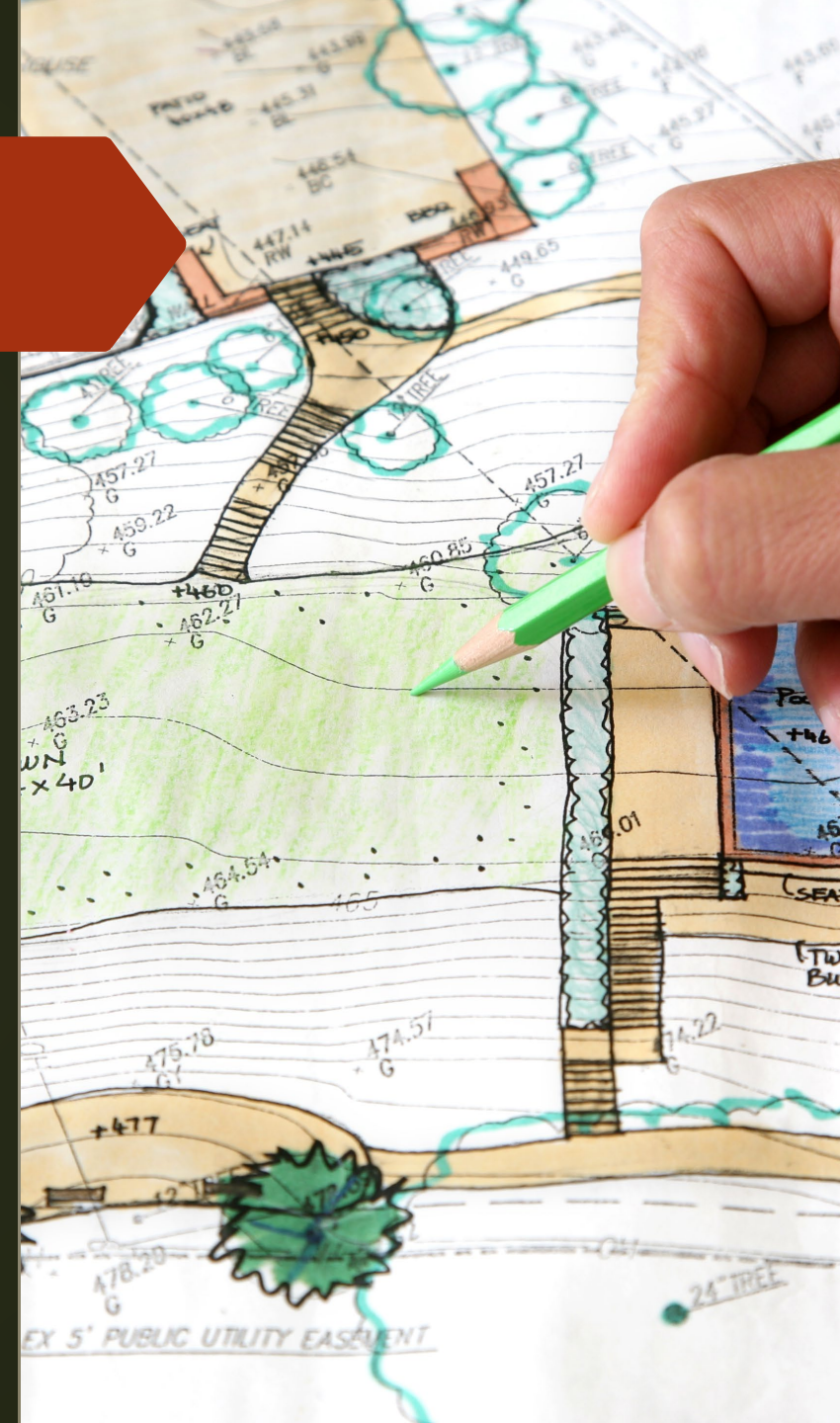
NYSDEC's Water Quality Improvement Program

- ▶ Funding made available by the NYSDEC (at least \$75 Million in Round 20). Applications are due by July 31, 2024.
- ▶ Round 19 of the Program saw \$110 million awarded to 51 projects across the State.
 - ▶ Tompkins county received the following:
 - ▶ \$693,866 for the Town of Enfield to replace Bostwick Road culvert.
 - ▶ \$190,000 for Tompkins SWCD to continue our Hydroseeding program
 - ▶ \$359,148 for Town of Caroline to replace culverts on South Road and Braley Hill.
- ▶ Existing Contracts include work on Shelter Valley Streambank Stabilization and MS4 Stormwater Mapping.



NYSDEC's Non-Agricultural Nonpoint Source Planning and MS4 Mapping Grant (NPG)

- ▶ Funding made available by the NYSDEC to aid in preparing nonpoint source projects for construction and application of implementation funding. Also to encourage and support cooperation among regulated MS4s to complete mapping of their stormwater system.
- ▶ Up to \$3 Million in Round 5. Applications are due by July 31, 2024.
- ▶ Round 4 of the Program saw \$3 million awarded to 35 projects across the State.
 - ▶ Tompkins county received the following:
 - ▶ \$75,000 to Tompkins County for Sixmile Creek Stream Corridor Assessment
 - ▶ \$50,000 to Tompkins County SWCD for Buttermilk Creek Stream Stabilization Assessment.





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Tompkins County Stormwater Coalition

- ▶ The SWCD actively maintains support to the Stormwater Coalition through administration
 - ▶ Meeting Coordination
 - ▶ Annual Reporting
 - ▶ Workshop/Outreach Coordination
 - ▶ Grant Administration
- ▶ The District supports a majority of municipalities in the County through annual agreements to assist with stormwater permit reviews.



Stormwater Coalition of Tompkins County



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Cayuga Lake Hydrilla Eradication Program

- The SWCD has mostly given control of the eradication program to NYSDEC and the Fingerlakes PRISM.
- The SWCD applied for funds under Round 3 of the NYSDEC's Invasive Species Grant Program. We were awarded \$51,718 to help the project management Team (Fingerlakes PRISM, CLWN, Town of Lansing) install a Boat Decontamination station at Myers Park.





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Operations, Community Services, Outreach/Education

- ▶ Tompkins County is in the process of construction on a 50x100 cold storage facility to be shared with the SWCD. This will help our equipment storage needs and allow a space to bring back our Tree Sale!!
- ▶ We have added one more staff member to our crew. Possibly adding another 1-2 FTE's with increased State capacity funding.
- ▶ Great Success was had with our Tire Recycling and Septic System Workshops in coordination with partners. Opportunities to continue programs in 2024 exist.
- ▶ The National Envirothon Competition will be held this year in NYS at Hobart & William Smith College, July 28th – August 3. Volunteers needed!!!





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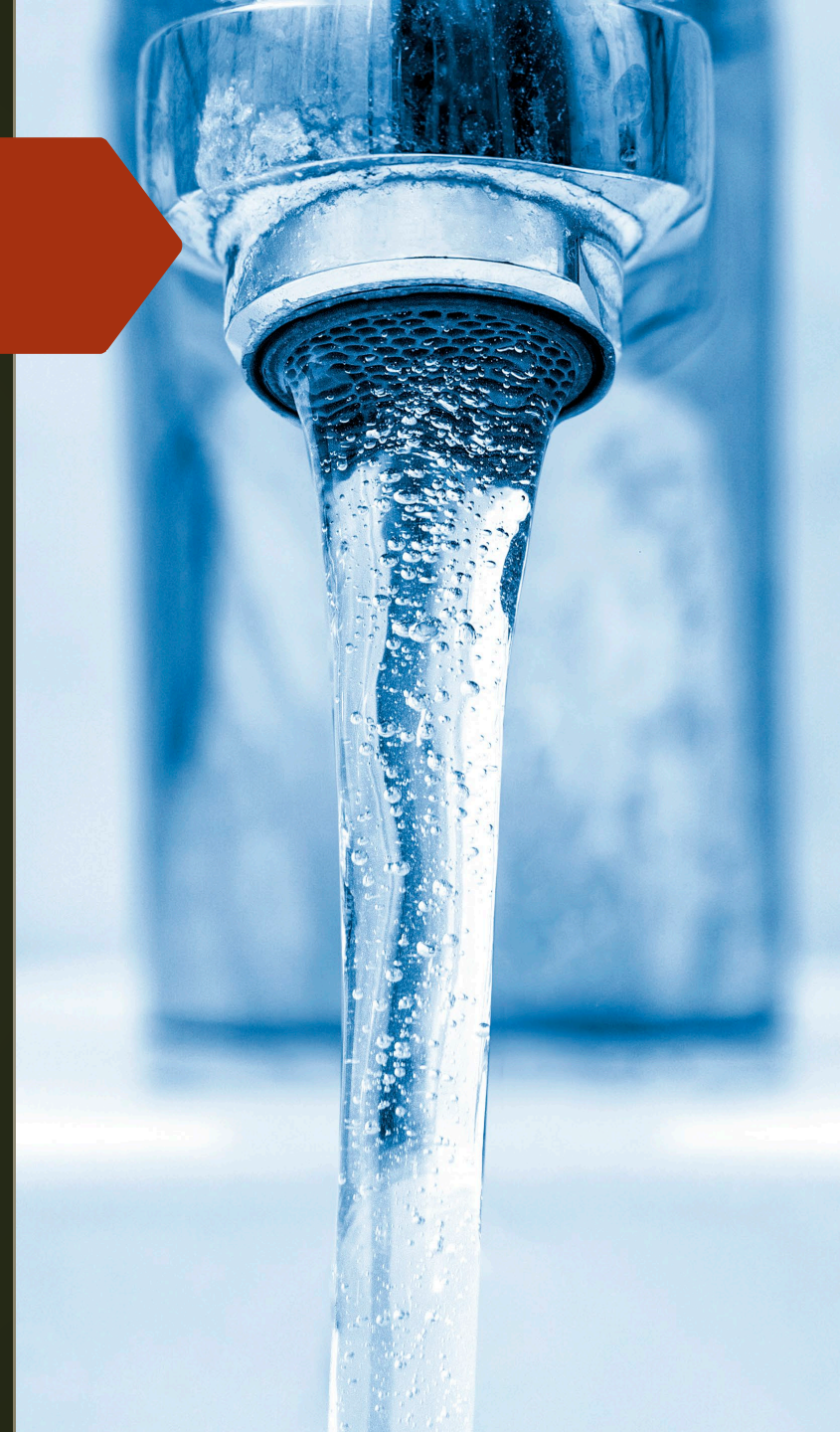
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City of Ithaca DWSP2 Funds

- ▶ The City of Ithaca has been a great partner in conservation for 2024 by providing \$12,500 in match support to 2 projects in the Sixmile Creek watershed that will target high impact projects identified in their DWSP2 plan.
- ▶ Other Water Purveyors are encouraged to adopt these DWSP2 plans and consider this funding model.



What else can we do?

- We are here to help you all make wise decisions regarding the conservation of our natural resources. How can we help you?





QUESTIONS?

Tompkins SWCD
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Ithaca, NY 14850
JNegley@tompkins-co.org