

**Ontario County Soil & Water Conservation
District Agricultural Environmental
Management 5 Year Strategic Plan
2021-2025**



ONTARIO COUNTY
SOIL & WATER CONSERVATION DISTRICT
www.ontswcd.com

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Ontario County Soil & Water Conservation District
Agricultural Environmental Management 5 Year Strategic Plan
2021-2025



Background Information

Mission Statement:

To promote the sustainable economic viability of agriculture in Ontario County through informed environmental stewardship and the implementation of conservation practices.

Vision Statement:

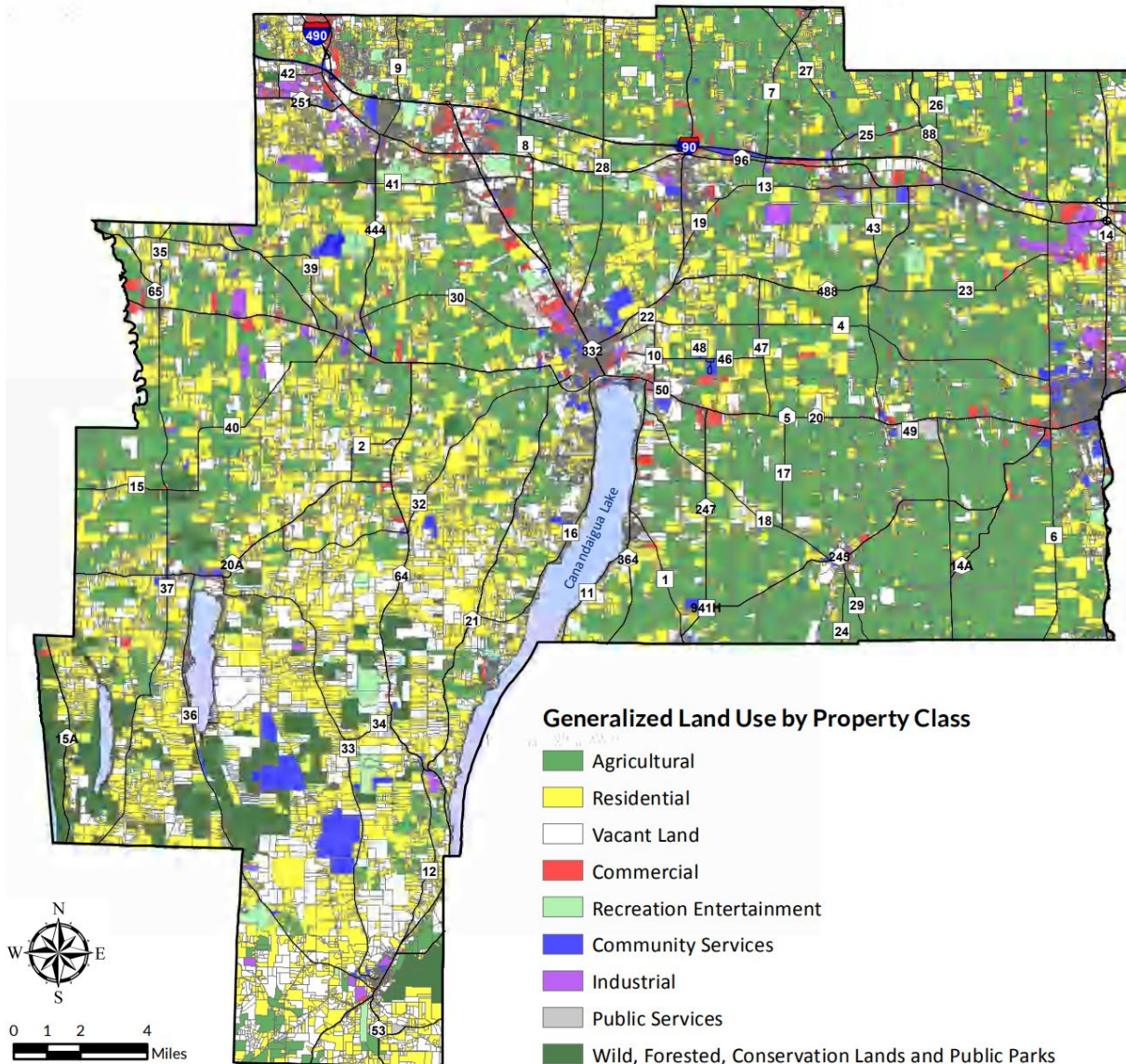
AEM is a voluntary, farmer-led, farmer driven process, which utilizes coordination and teamwork to efficiently and cost effectively address natural resource concerns on the farm as prioritized through a watershed approach.

Groups Involved:

Ontario County Soil & Water Conservation District
Ontario County Agricultural Enhancement Board
Ontario County Water Resources Council
Members of the Agricultural Advisory Committees of Canandaigua Lake, Central Lowlands and the Northern Watersheds
Cornell Cooperative Extension
USDA Natural Resource Conservation Service and Farm Service Agency
Canandaigua Lake Watershed Association
Canandaigua Lake Watershed Council
Honeoye Lake Watershed Task Force
Seneca Watershed Intermunicipal Organization
Municipal Highway Departments
Yates, Seneca, Wayne, Monroe & Livingston Soil & Water Conservation Districts
Northwest New York Dairy, Livestock, and Field Crops Team of CCE
Cornell PRO-Dairy/Cornell CALS

Historical Perspective

The local AEM program is based on cooperation and interaction with stakeholders that include the general public, farm owners and working groups, lake associations, businesses and agencies. Bringing these stakeholders together has complemented efforts dealing with a variety of natural resource issues that include protection of water supplies, on-site wastewater management, stormwater management, forestry and agriculture. As the local AEM process progressed, it has expanded to include multi-county watershed organizations, cooperation with the regional NRCS, FSA, and lake associations on a broader scale to address watershed management objectives.



- Notes:**
1. Ontario County Parcel data from August 2015.
 2. Projection: North American Datum 1983 State Plane New York Central FIPS 3102
 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

Figure 1: Land use patterns throughout Ontario County from “Agricultural Enhancement Plan for Ontario County” Adopted March 29, 2018

http://www.co.ontario.ny.us/DocumentCenter/View/14091/2018-05-11_Ontario-Co-Ag-Plan_FINAL_All_reduced-file-size

Status of Agriculture in Ontario County

Ontario County is located in the Finger Lakes Region of west central New York. In 2017 there were 200,089 Acres of operated farmland, 47 percent of the county's total 424,000 acres. There were 833 farms in the county averaging 240 acres per farm. Ontario County ranks 11th in the state for number of farms and 7th for land in farms.

In 2017, according to the Census of Agriculture, the market value of all agricultural products sold from county farms was \$205,160,000. Total sales averaged \$246,291 per farm. The total farmland acreage for Ontario County has increased by 7,473 acres since 2012. Ontario County has lost 57 farms since 2012 but the value and profit per farm has increased 16.5%, indicating higher productivity. The leading products sold were: dairy products (58%), grains and dry beans (17%), cattle and calves (9%), vegetables (7%), other crops including hay (4%), fruits and berries (2%), all other livestock and their products (2%), and nursery/greenhouse/floriculture (1%).

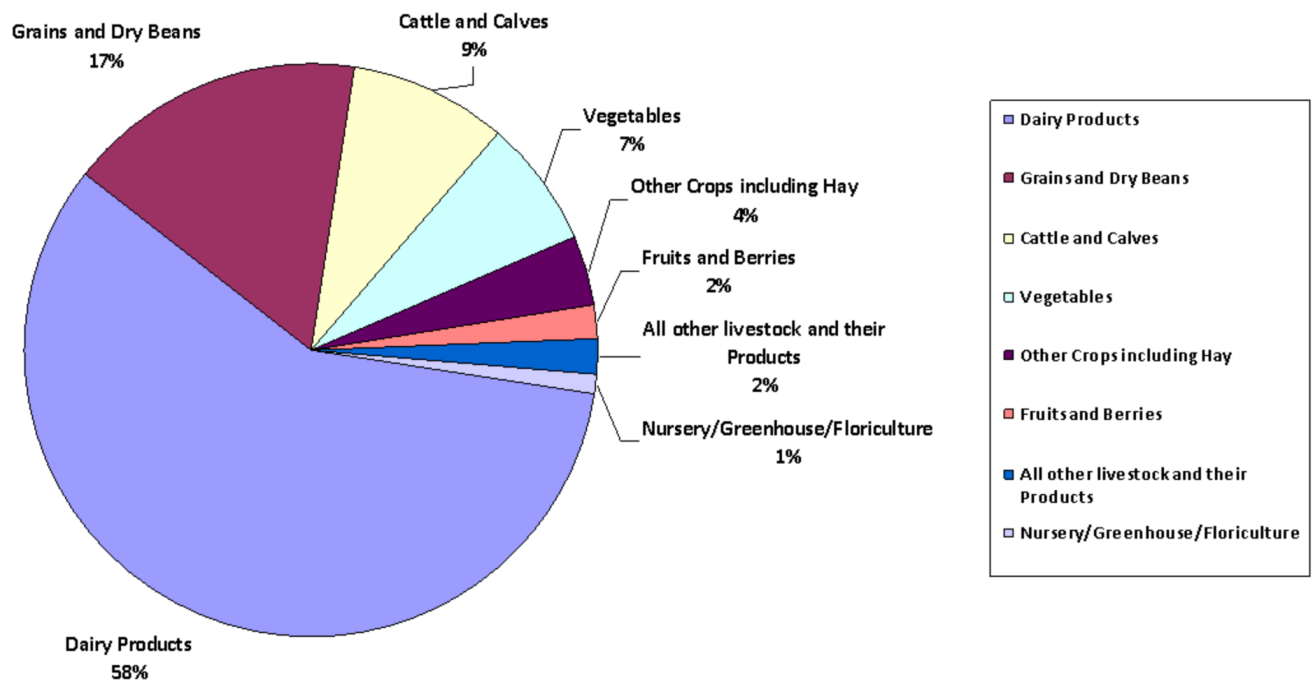


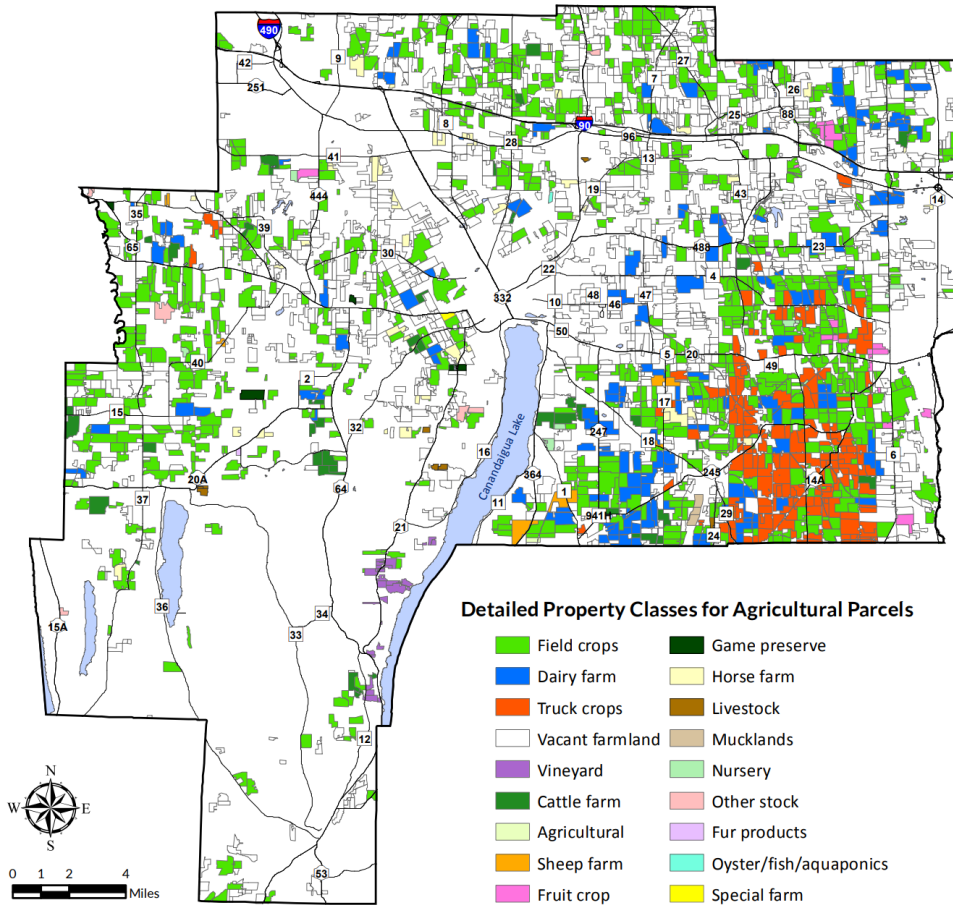
Figure 2: Market value of agricultural products sold from Ontario County farms based on the 2017 Census of Agriculture

Acres of Farmland

200,089 acres of farmland (land in farms); 136,315 acres of harvested cropland (68%), 7,892 acres in all types of pasture (4%), 17,755 woodland acres (9%), 12,794 acres in farmstead (6%; including land in homes, buildings, livestock facilities, ponds, roads, wasteland, etc.), and 25,333 of other cropland (13%). Farmland totals 47% of Ontario County’s 424,000 acres. Average size of a farm is 240 acres.

Number of Farms / Type

833 Farms Total: 104 Dairy Farms, 100 Beef Farms, 33 Sheep Farms, 29 Hog Farms, 207 Corn for Grain & 123 Corn for Silage Farms, 109 Vegetable Farms, 53 Orchards, 42 Vineyards, etc.
 CAFOs: 23 (10 large, 13 medium)



Notes: 1. Ontario County Parcel data from August 2015.
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Figure 3: Agricultural land uses throughout Ontario County from “Agricultural Enhancement Plan for Ontario County” Adopted March 29, 2018
http://www.co.ontario.ny.us/DocumentCenter/View/14091/2018-05-11_Ontario-Co-Ag-Plan_FINAL_All_reduced-file-size

General Resource Information

- ✓ 42,609 Acres of Highly Erodible Cropland
- ✓ Continual development pressures, especially in the towns of Victor, Farmington, Canandaigua and Gorham
- ✓ Town of Gorham has a local law that requires that all agricultural waste storage facilities be designed to USDA NRCS standards
- ✓ 88% of agricultural lands fall under the umbrella of some type of government program
- ✓ Participation/ Recognition: Lake Friendly Farmer signs, NYS AEM and cover crop signage available to all farm operations meeting requirements
- ✓ Ontario has a growing Plain Sect farm population, including an estimated 50 Mennonite owned dairy farms
- ✓ The Ontario County Agricultural Enhancement Board has been active in promoting agriculture and agri-businesses, and preserve and protect farmland

Natural Resource Concerns

- ✓ Water Quality Contamination: Surface and Groundwater
- ✓ Erosion/Runoff from Cropland
- ✓ High nutrient loads from ag runoff and legacy sediment
- ✓ Loss of farmland to less preferred land uses such as development
- ✓ Continual loss of natural buffers, wildlife corridors and wetland areas



Figure 4: Cover crops interseeded to protect our natural resources by reducing erosion and nutrient loss.

Outreach

AEM outreach is constant and is achieved through all involved parties and on a variety of occasions. There are fact sheets, brochures, and Tier 1 applications distributed at presentations, fairs, and booths at events. There are quarterly office newsletters sent out through email that include at least 1 article on AEM projects in the county. The website (www.ontswcd.com) includes information on AEM and how to get started. The Ontario County SWCD holds an annual Soil Health Workshop with approximately 150 attendees on average each year. The workshop includes presentations from soil health experts, agricultural professionals, nutrient management experts, and much more. The workshop promotes the AEM program and supports the local ag community. Many of the Ontario County SWCD employees conduct presentations all over the county about SWCD programs, always including the AEM program and how to get started. Occasionally, there are newspaper articles giving updates on agricultural related projects/events. AEM outreach also informs the community through word of mouth by all SWCD staff as well as farmers who have participated in the program. Furthermore, prospective participants are contacted through various outreach avenues.

As the Plain Sect community, predominately Mennonites, continues to grow in Ontario County, it is important to offer outreach that meets the needs of this farming community. While participation in grant funded programs is limited, outreach is concentrated on technical support and resources dedicated to education. Topics such as soil health and organic dairy and grazing operation are well received. Our traditional AEM framework requires flexibility when working with the Plain Sect community. The District will continue to improve and grow our communication network and enhance our ties within the community.



Figure 5: Ontario SWCD holds several large AEM education events each year. This includes soil health workshops, pasture walks, and CAFO farm tours.

Areas of Concern – In Priority Order

1. Northern Watersheds: (Canandaigua Outlet 041402010/401/403/404, Mud Creek 041402010/101/102/103, Black Brook 041402010402, Irondequoit Creek 041401010/701/704, Honeoye Inlet 041402010201, Honeoye Creek 041300030/205,206,301 Hemlock Lake 041300030203 and Canadice Lake 041300030202). Agriculture and storm water runoff are known sources of pollution as with on-site septic systems suspected and municipal sources possible. Known types of pollution include nutrients, specifically phosphorus with silt and sediment being suspected. This watershed area also incorporates part of the Genesee River Watershed.
2. Finger Lakes Central Lowlands Watersheds (Seneca Lake 041402010/901/903/904 including Kashong Creek, Wilson Creek and Castle Creek, Flint Creek 041402010/302/303). Seneca Lake is a drinking water supply for over 80,000 residents across multiple counties. Known sources of contamination in this watershed planning unit include agriculture and habitat modification. Known pollutants include nutrients and silt/sediment. Pesticides are a suspected type of pollution and roadbank and streambank erosion are possible sources.
3. Canandaigua Lake Watershed (Canandaigua Lake 041402010/201/202/203/204/205 including West River, Naples Creek, Bristol Springs, Deep Run and Sucker Brook). Canandaigua Lake serves as a drinking water source for 60,000 residents located in Ontario, Wayne & Yates Counties. Agriculture is a suspected source of nutrients along with silt/sediment as identified in the PWL. On-site septic systems and storm water runoff are also suspected sources of pathogens and nutrients.
4. Groundwater Resources: Ontario County contains many rural communities with residents relying on wells as their sole source of freshwater. Protection of these groundwater resources from contamination is important.

Evaluation

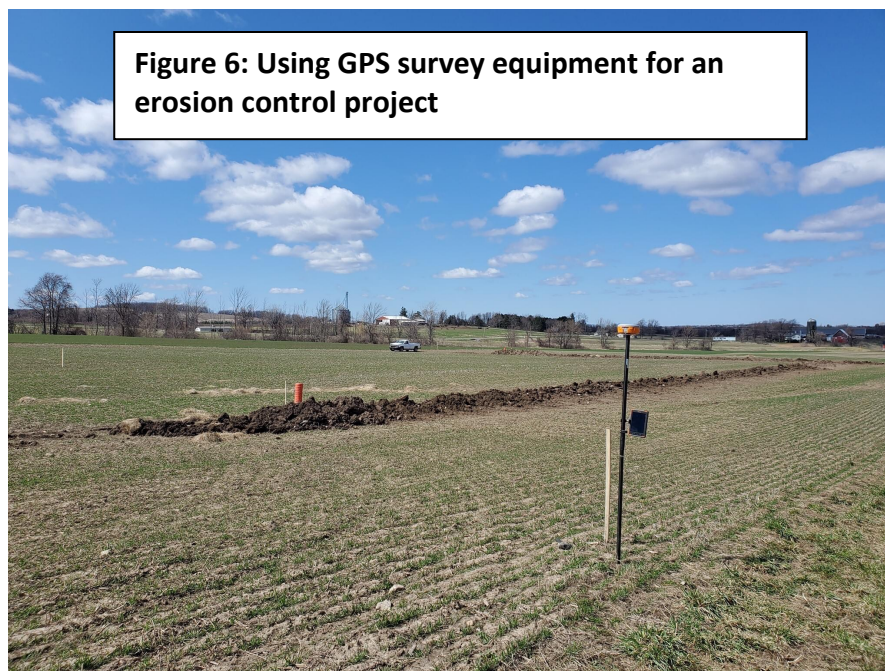
Evaluation of the AEM process will be both constant among staff members and annually with the completion of the AEM Report Card and oversight by the state committee. Each year will be compared against past years and future goals to aid in focusing the process within the county. Annual Action Plans will reflect the evolution of the process as it transitions from inventory to planning and implementation. Results of the AEM report card will be shared and explained to the SWCD board. Appendix 1 highlights past and present AEM projects.



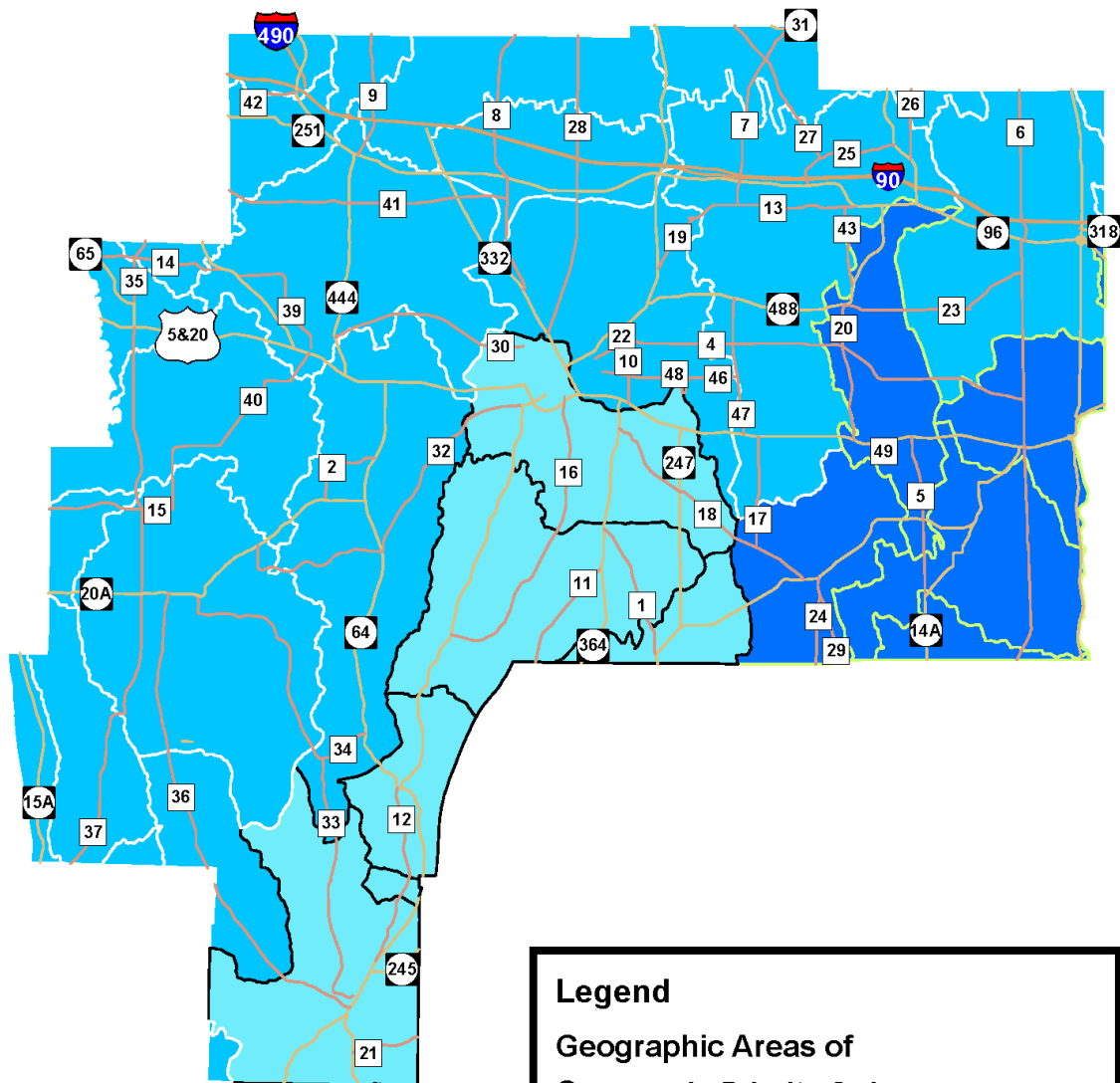
AEM Team Capacity Assessment

Expertise	SWCD	NRCS	CCE	FSA	AAC	Private Sector	Lake Associations	County Planning	Land Owner	NYSDEC	Water Resource Council
CCA	✓	✓				✓					
Certified Planner	✓					✓					
Engineering Job Approval		✓				✓					
Water Monitoring	✓		✓			✓	✓			✓	
Education	✓		✓				✓				
Program Evaluation	✓	✓	✓		✓		✓		✓	✓	
Program Administration	✓			✓							
Grant Writing	✓		✓				✓				
Local Funding								✓	✓		✓
Agricultural Enhancement Board	✓		✓					✓			

Training Needs: The District currently has two Certified Crops Advisors (CCA) and one Comprehensive Nutrient Management (CNMP) Planner on staff. Staff continues to pursue training and recertification courses in agricultural practices, design engineering for best management practices, GIS and surveying.



Ontario County Soil and Water Conservation District Agricultural Environmental Management 5 Year Strategic Plan Priority Watershed Listing



Legend

Geographic Areas of Concern In Priority Order

- Northern Watersheds
- Finger Lakes Central Lowlands Watersheds
- Canandaigua Lake Watershed

Figure 7: Map of Priority AEM Planning Units in Ontario County



Northern Watersheds

Water Quality Problem Statement:

The Northern Watersheds covers 42% of the county. The Northern Watersheds have the largest number of CAFO farms in Ontario County. While Honeoye Lake is not listed as a drinking water supply, there are residents who pull water from the lake for residential use. Many residents in this area rely on groundwater for their drinking water supply making the protection of this resource important. The Northern Watersheds have largely karst bedrock topography which may increase the potential for groundwater contamination. Water supply, public bathing and recreation have been identified as impaired as part of the NYS DEC Priority Waterbodies List (PWL). Known pollutants have been found to be nutrients.

Known Sources of Pollutants:

Agriculture has been found to be a source of pollution in the watershed

Desired Future Condition:

- ✓ To promote agriculture as a preferred use of land
- ✓ To incorporate agricultural uses of the land while at the same time meeting the developmental needs of the community

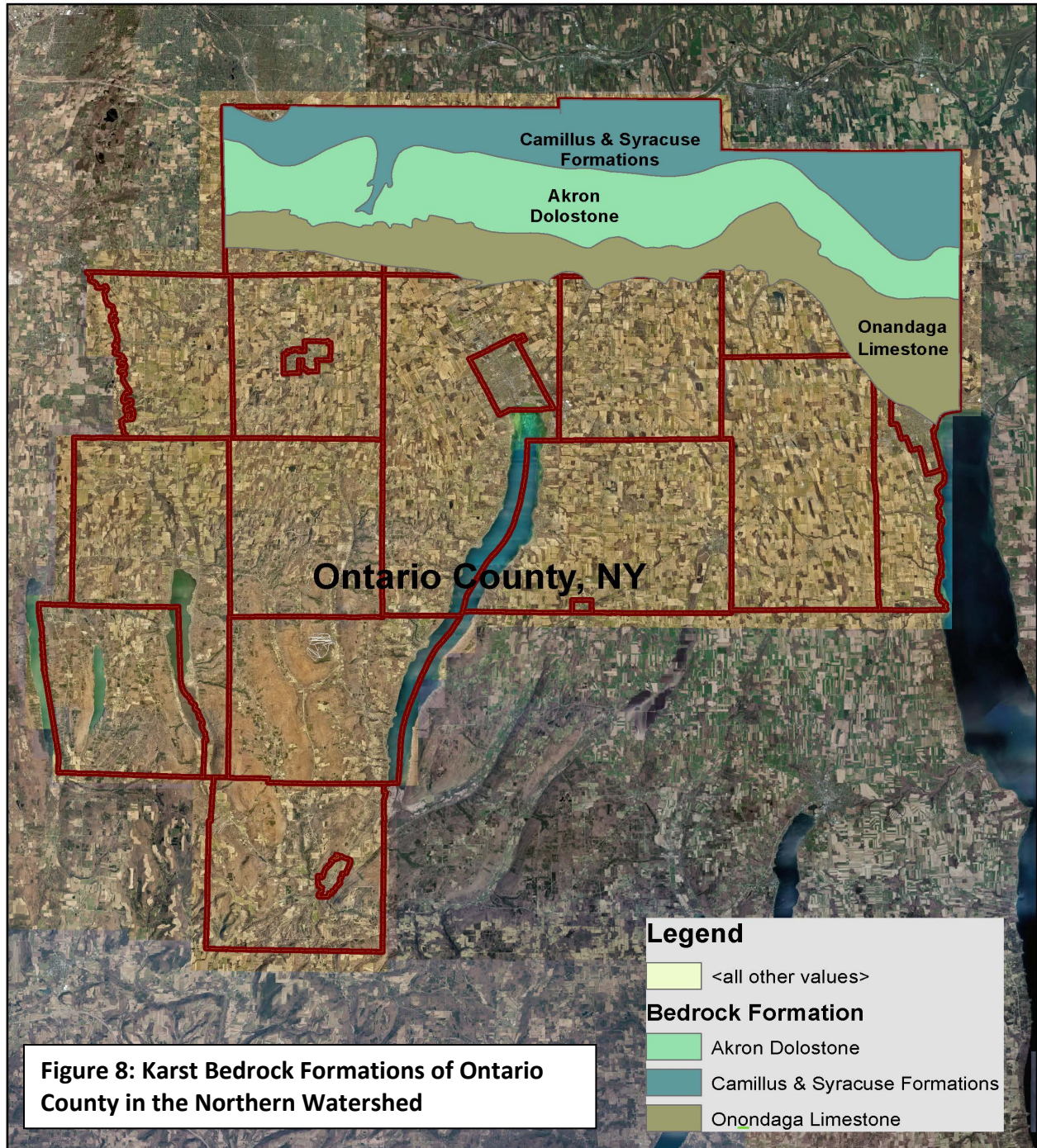
Objective 1: Promote the AEM process in the watershed.

Task- Prioritize farms and projects	Continual
Conduct Tier I Surveys and Tier II assessments on new volunteer farms in the watershed	Continual
Maintain database and GIS of participants	Continual
Continue Education and Outreach	Continual

Objective 2: Continued contact and progress with current participants in the watershed.

Task- Conduct Tier 5As to update database	As Necessary
Conduct Tier 5Bs to ensure practices are maintained and working and promote successes	As Eligible
Continue contact with participants to promote stewardship	Continual
Address resource concerns through Ag Non-point Source Grant program where appropriate	As Eligible
Identify and design best management practices for priority farms.	Continual





0 1.75 3.5 7 Miles



Karst Bedrock Formations of Ontario County



Seneca Lake/Flint Creek Watersheds

Water Quality Problem Statement:

The Finger Lakes Central Lowlands watersheds include Flint Creek and Seneca Lake. Known sources of pollutants include agriculture with nutrients and silt/sediment being known types of pollution. Seneca Lake also experiences Harmful Algal Blooms which are known to be triggered by excess nutrients.

Known Sources of Pollutants:

Agriculture has been found to be a source of pollution in the watershed

Suspected Sources of Pollutants:

Sources include urban runoff, onsite wastewater treatment systems, boating, agriculture, construction and road bank erosion

Desired Future Condition:

- ✓ To promote agriculture as the preferred use for the vast amounts of agricultural land in the watershed utilizing the AEM process to include ongoing educational awareness

Objective 1: Promote the AEM process in the watershed.

Task- Prioritize farms and projects	Continual
Conduct Tier I Surveys and Tier II assessments on new volunteer farms in the watershed	Continual
Maintain database and GIS of participants	Continual
Continue Education and Outreach	Continual

Objective 2: Continued contact and progress with current participants in the watershed.

Task- Conduct Tier 5As to update database	As Necessary
Conduct Tier 5Bs to ensure practices are maintained and working and promote successes	As Eligible
Continue contact with participants to promote stewardship	Continual
Address resource concerns through Ag non-point source Grant program where appropriate	As Eligible
Identify and design best management practices for priority farms	Continual



Canandaigua Lake Watershed

Water Quality Problem Statement:

Canandaigua Lake is designated a public drinking water body which supplies potable water to over 60,000 people located in Ontario, Yates and Wayne counties. It has a drinking water supply classification of AA(TS) indicating that the lake is to be maintained so as to require little treatment. Canandaigua Lake is listed as threatened to reflect the value of the resource. As with all Finger Lakes, Canandaigua Lake has experienced Harmful Algal Blooms (HABs) which have threatened the water supply.

Suspected Sources of Pollutants:

Sources include agriculture, urban runoff, onsite wastewater treatment systems, boating, construction and road bank erosion, as well as natural erosion in legacy sediments.

Desired Future Condition:

- ✓ To promote agriculture as the preferred use for the 30,209 acres of agricultural land remaining in the watershed utilizing the AEM process and to include ongoing educational awareness. The Finger Lakes Land Trust has also focused conservation easement efforts in the watershed and ONTSWCD has aided with these programs focused on maintaining agricultural lands and scenic viewpoints.

Objective 1: Promote the AEM process in the watershed.

Task- Prioritize farms and projects	Continual
Conduct Tier I Surveys and Tier II assessments on new volunteer farms in the watershed	Continual
Maintain database and GIS of participants	Continual
Continue Education and Outreach	Continual

Objective 2: Continued contact and progress with current participants in the watershed.

Task- Conduct Tier 5As to update database	As Necessary
Conduct Tier 5Bs to ensure practices are maintained and working and promote successes	As Eligible
Continue contact with participants to promote stewardship	Continual
Address resource concerns through Ag Non-point Source Grant program where appropriate	As Eligible
Identify and design best management practices for priority farms.	Continual



Appendix 1: AEM Project List

AEM Project List 2016-2020

Grant	Title	Priority Area	Farms Involved
Ontario County	CAFO Tire Recycling	All	All
Ontario County AEB	CAFO Tire Recycling/Soil Health Workshop 2020	All	All
Ag Plastics Program	Coordination	All	All
Base AEM	Funding Year 16	All	4
	Grazing Workshop 2019		
Ontario County AEB (Pending)	Grazing Workshop 2020	All	All
Water Resource Council/ CLWA	Soil Health Workshop 2017	All	All
Water Resource Council/ SWIO	Soil Health Workshop 2018	All	All
FLOWPA	Soil Health Workshop 2019	All	All
FLOWP/ CLWA	Soil Health Workshop 2020	All	All
AgNPS Round 24	Mud Creek Erosion Control Project	Northern	5
AgNPS Round 25	Northern Watersheds Waste Management Project	Northern	3
GLRI	Genesee River Watershed GLRI	Northern	All
Genesee River EBM		Northern	4
AgNPS Round 25	Heifer Haven Waste Storage Project	Finger Lakes Central Lowlands	1
AgNPS Round 26 (Pending)	Finger Lakes Central Lowlands Ag Waste Management	Finger Lakes Central Lowlands	3
CRF Rd 2	Finger Lakes Cover Crop Implementation Project	Finger Lakes Central Lowlands	3
CRF Rd 3	Finger Lakes Cover Crop Implementation Project Phase II	Finger Lakes Central Lowlands	4
CAFO Waste Storage & Transfer System	V. DeBoover Farm	Finger Lakes Central Lowlands	1
CAFO Waste Storage & Transfer System	Landmark Farms	Finger Lakes Central Lowlands	1
CAFO Waste Storage & Transfer System	Reedland Farm	Finger Lakes Central Lowlands	1
FLOWPA	Davie Farm Water Retention Basin Project 2019	Finger Lakes Central Lowlands	1
FLOWPA	Reed Farm Water Retention Project	Finger Lakes Central Lowlands	1
FLOWPA	DeFelice (Pedersons) Water Retention Project	Finger Lakes Central Lowlands	1
FLOWPA	Davie Farm Water Retention Basin Project 2020	Finger Lakes Central Lowlands	
AgNPS Round 23	Canandaigua Outlet Waste Storage Project	Canandaigua	2
CRF Rd 5 (Pending)	Fruition Seeds	Canandaigua	1
FLX EBM	Green View Farm	Canandaigua	1
FLX EBM	Rockefeller Farm	Canandaigua	1
FLX EBM	Bay Farm	Canandaigua	1
FLOWPA	Rockefeller Farm Water Retention Project	Canandaigua	1

AEM Historical Projects

Grant	Title	Priority Area	Farms Involved
Finger Lakes AEM Round 9	Phase II	All	100
Finger Lakes AEM Round 12	Phase III: Planning	All	All
AgNPS Round 2	Pilot Project, Deep Run Project/Tamberlane Farm planning and implementation	Canandaigua Lake	1
AgNPS Round 4	Phase I:1998-99.	Canandaigua Lake	100
AgNPS Round 5	Phase II: 1999-2000.	Canandaigua Lake	12
AgNPS Round 7	Phase III:	Canandaigua Lake	8
AgNPS Round 8	Phase IV:	Canandaigua Lake	6
AgNPS Round 8	Hickory Bottom Composting Project	Canandaigua Lake	1
AgNPS Round 9	Phase V:	Canandaigua Lake	4
AgNPS Round 13	Phase VI:	Canandaigua Lake	3
AgNPS Round 15	Phase VII:	Canandaigua Lake	8
AgNPS Round 18	Phase VIII:	Canandaigua Lake	5
AgNPS Round 20	Phase IX:	Canandaigua Lake	3
CREP	2004 Implementation	Canandaigua Lake	2
CREP	2004 Implementation	Canandaigua Lake	14
CREP	2004 Implementation	Northern Watersheds	13
CREP	2004 Implementation	Northern Watersheds	40
CREP	2004 Implementation	Seneca Lake/Flint Creek	12
CREP	2004 Implementation	Seneca Lake/Flint Creek	8