



AGRICULTURAL  
ENVIRONMENTAL  
MANAGEMENT



# Monroe County, New York

## Agricultural Environmental Management

### (AEM)

### Strategic Plan 2026-2030



Prepared by: Monroe County Soil & Water Conservation District

Rochester NY

*Developed November, 2008; Revised April 2011; Updated March 2015; Updated January 2021; Updated December 2025*

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Monroe County Soil & Water Conservation District

145 Paul Rd Bldg 5  
Rochester NY 14580

585-753-7680

## Table of Contents

SECTION 1: INTRODUCTION.....	2
A. BACKGROUND INFORMATION.....	2
B. MISSION STATEMENT.....	2
C. VISION STATEMENT.....	3
D. STATUS OF AGRICULTURE IN MONROE COUNTY.....	3
<i>Figure 1. Percent of each farm type that exists in Monroe County (2022).....</i>	3
E. HISTORY AND CURRENT STATUS OF PROJECTS FUNDED TO SUPPORT MONROE COUNTY AGRICULTURE.....	3
SECTION II: EVALUATION AND PRIORITIZATION PLANNING.....	6
A. AGRICULTURAL LAND & WATERSHEDS WITHIN MONROE COUNTY.....	7
<i>Figure 2. Agricultural Land &amp; Watersheds within Monroe County.....</i>	7
B. PRIORITY WATERBODIES LISTS, NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC).....	7
<i>Figure 3. Waterbodies listed on the WI/PWL and the location of active agricultural land in Monroe County.....</i>	8
<i>Figure 4. Watersheds with “Known” or “Suspected” agricultural impacts to water quality.....</i>	9
C. OTHER WATERSHED PLANS AND PROGRAMS.....	9
D. FARMER PARTICIPATION IN AEM BY WATERSHED IN MONROE COUNTY.....	12
<i>Table 1. AEM data collected by watershed.....</i>	13
E. PRIORITY WATERSHED REGION RANKING.....	14
<i>Figure 5. AEM Priority Watershed Regions.....</i>	15
SECTION III: AEM ROUND 19 .....	16
A. ROUND 19: YEAR 1 - 2026.....	16
B. ROUND 19: YEAR 2 - 2027.....	16
C. ROUND 19: YEAR 3 - 2028.....	17
SECTION IV: AEM ROUND 20.....	19
A. ROUND 20: YEAR 1 - 2029.....	19
B. ROUND 20: YEAR 2 - 2030.....	20
SECTION V: AEM OUTREACH.....	21
SECTION VI: PARTNERSHIPS.....	22
<i>Table 2. Partnership, Roles and Impacts.....</i>	22
SECTION VII: OVERVIEW OF MONROE COUNTY AEM STRATEGIC PLAN OBJECTIVES.....	23

## Section 1: Introduction

### Background Information

The Monroe County Soil & Water Conservation District (MCSWCD) has been actively involved in assisting farmers evaluate, install and improve conservation management practices since the District formed in 1954. In conjunction with evolving state and federal funding opportunities, District technical staff has assisted many farmers with planning and implementation of conservation practices to protect and conserve Monroe County's natural resources.

The primary tool used to help farmers implement conservation projects on the ground is the Agricultural Environmental Management (AEM)<sup>1</sup> program. AEM is a state-wide program where policy is developed under NYS Department of Agriculture & Markets, NYS Soil & Water Conservation Committee (SWCC). The AEM program in Monroe County was established in 1998 in Northrup Creek watershed, a priority watershed of local importance, and continues to expand based on determinations of watershed priorities today. The program now covers all Monroe County watersheds with agricultural impacts, and has expanded to include over 600 participants throughout Monroe County.

Farms in the AEM Program progress through a series of Tiers as follows:

<b>Tier 1 - Inventory current activities, future plans, and potential environmental concerns</b>
<b>Tier 2- Document current land stewardship; assess and prioritize areas of concern</b>
<b>Tier 3A - Develop conservation plans addressing environmental resource concerns while helping to reach farm goals</b>
<b>Tier 4 - Implement plans utilizing available financial, educational, and technical assistance</b>
<b>Tier 5A, 5B - Evaluate to ensure the protection of the environment and farm viability</b>

### Mission Statement

The mission of the Monroe County AEM program is to promote the awareness and adoption of agricultural conservation practices on local farms, increase environmental stewardship and climate resiliency among agricultural producers while enhancing the economic viability of agriculture in Monroe County. The AEM program also seeks to improve awareness of the benefits of agriculture throughout the County, assist agricultural producers with achieving their farm's objectives, and protect and improve local water quality and natural resources.

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<sup>1</sup> More detail regarding the AEM Program can be found on the NYS SWCC website at:  
<https://agriculture.ny.gov/soil-and-water/agricultural-environmental-management>

## Vision Statement

Ensuring agriculture's role in land and water stewardship.

## Status of Agriculture in Monroe County

According to the United States Department of Agriculture (USDA) 2022 Census of Agriculture, Monroe County holds the following statistics:

### Acres of Farmland in Monroe County

- **93,901 Acres of land in farms**
- **63,733 Acres of active cropland**

### Percent Farm Type

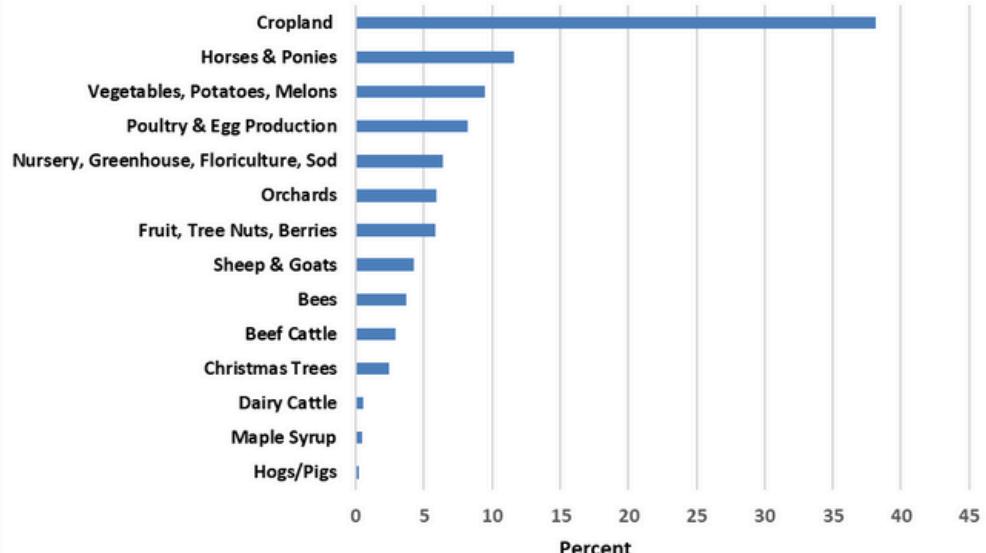


Figure 1. Percent of each farm type that exists in Monroe County (2022)

## History and Current Status of Projects Funded to Support Monroe County Agriculture

Monroe County SWCD has been successful since 1998 in securing funds to either collect data, plan farms best management practices (BMPs), and implement BMPs under the AEM program. The funding program, year, support provided by watershed and whether the project/program is complete has been summarized below.

Name of Program	Year	AEM Tier	Support Provided	Watershed (s)	Notes	Status
Monroe County Water Quality Coordinating Committee Mini-Grant	1998	1 & 2	9 Tier 1 and Tier 2 assessments were completed	Northrup Creek		Complete
Agricultural Non-point Source (AgNPS) Pollution Abatement & Control	Round VI 1998 - 2002	1 & 2	21 Tier 1 and 13 Tier 2 assessments were completed	Oatka Creek		Complete
	Round VII 2000 - 2003	1, 2 & 3A	97 Tier 1, 13 Tier 2 assessments completed; and 4 Tier 3A plans completed	Braddock Bay	Watershed includes Salmon Creek and Buttonwood Creek	Complete
	Round VIII 2001 - 2005	3B	1 Tier 3B Certified Nutrient Management Plan was completed for a Concentrated Animal Feeding Operation (CAFO)	Oatka Creek	Watershed encompassed Monroe, Genesee and Wyoming counties	Complete
	Round IX 2003 – 2006	1 & 2	11 Tier 1 and 9 Tier 2 assessments completed	Sandy Creek (including Monroe & Orleans Counties)	8 of the farms included have operations in both Braddock Bay watershed & Sandy Creek watershed	Complete
	Round XI 2005 - 2009	4	Tier 4 Implementation: 17 best management practices (BMPs) implemented on 13 farms	Genesee River (including Monroe, Genesee and Wyoming counties)	Monroe County included 2 dairy farms and 1 dairy replacement (heifer) operation representing 1 Concentrated Animal Feeding Operation (CAFO) dairy in Oatka Creek watershed, 1 CAFO dairy in Salmon Creek watershed, & 1 CAFO dairy in Little Black Creek watershed	Complete
	Round XIII 2007 - 2010	4	Tier 4 Implementation: 6 best management practices implemented on 3 CAFO farms	Lake Ontario	Includes 3 BMPs in Salmon Creek watershed, 1 BMP in Black Creek watershed, & 1 BMP in Oatka Creek watershed	Complete
	Round XIV 2007 - 2010	4	Tier 4 Implementation: 2 agrichemical mixing facilities were implemented on 2 farms	Sandy Creek		Complete

Name of Program	Year	AEM Tier	Support Provided	Watershed (s)	Notes	Status
Agricultural Non-point Source (AgNPS) Pollution Abatement & Control	Round XV 2008	4	Three applications were submitted for three watersheds to support 10 farms and 17 BMPs	Honeoye Creek, Irondequoit Creek, and Hamlin-Parma Beach	Not Funded	N/A
	Round XVII 2010 - 2011	4	Tier 4 Implementation: 36 BMPs on 10 farms	Black Creek watershed and Oatka Creek watershed	Watershed encompassed Monroe, Genesee and Wyoming counties	Complete
	Round XVIII 2011 - 2012	4	Tier 4 Implementation: 36 BMPs on 5 farms	Oatka Creek	Watershed encompassed Monroe and Genesee counties	Complete
	Round XX 2014	4	Tier 4 Implementation: 1,370 acres of cover cropping on 9 farms	Salmon Creek		Complete
	Round XXI 2015	4	Tier 4 Implementation: 12 BMPs on 4 farms	Irondequoit Creek		Complete
Great Lakes Restoration Initiative (GLRI)	2010 - 2014	4	Tier 4 Implementation: 8 BMPs on 4 farms	Lake Ontario	7 counties participated to implement 50 BMPs on 25 farms in the Lake Ontario Basin	Complete
	2018 - 2022	4	Tier 4 Implementation: 4 BMPs on 4 farms	Genesee River	5 counties participating to implement erosion & sediment control BMPs on farms in the Genesee River Basin	Complete
Great Lakes Commission (GLC)	2010 - 2015	4	Tier 4 Implementation: 25 BMPs on 10 farms	Black Creek watershed and Oatka Creek watershed	Watershed encompassed Monroe, Genesee, and Wyoming counties participating to implement over 95 BMPs on 23 farms	Complete
Climate Resilient Farming (CRF)	Round 3 2018 - 2021	4	Tier 4 Implementation: 2 BMPs on 1 farm	Black Creek watershed		Complete
AEM Cost-Share	Round 16 2020 - 2021	4	Tier 4 Implementation: 9 BMPs on 3 farms	Black Creek watershed, Buttonwood Creek watershed, and Genesee River Direct Drainage		Complete
	Round 17 2022 - 2023	4	Tier 4 Implementation: 4 BMPs on 2 farms	Black Creek and Buttonwood Creek		Complete
	Round 18 2024 - 2025	4	Tier 4 Implementation: 6 BMPs on 1 farm	Black Creek and Salmon Creek		On-going

## **Section II: Evaluation and Prioritization Planning**

Priorities have been developed for the AEM program planning effort by reviewing the estimated number of acres of agricultural land in each watershed within Monroe County, the NYS Department of Environmental Conservation's Priority Waterbodies List and known or suspected impacts to water quality from agriculture, and the level of current and past participation/interest of farmers in the AEM program. These priorities from 2009, 2015, and 2021 were set and reviewed with the AEM Advisory committee. The committee would meet prior to each strategic plan update and evaluate this information to determine the priorities for the County. AEM Advisory Committee Members for these past years can be found on previous strategic plans. For 2025 updates to this strategic plan through 2030, the MCSWCD is following priorities in current plans and programs that have been determined by Monroe County Department of Environmental Services (MCDES), Monroe County Planning & Development, Monroe County Farmland Protection Plan Steering Committee, NYS DEC, the Genesee River Watershed Coalition, and Genesee Finger Lakes Regional Planning Council.

## A. Agricultural Land & Watersheds within Monroe County

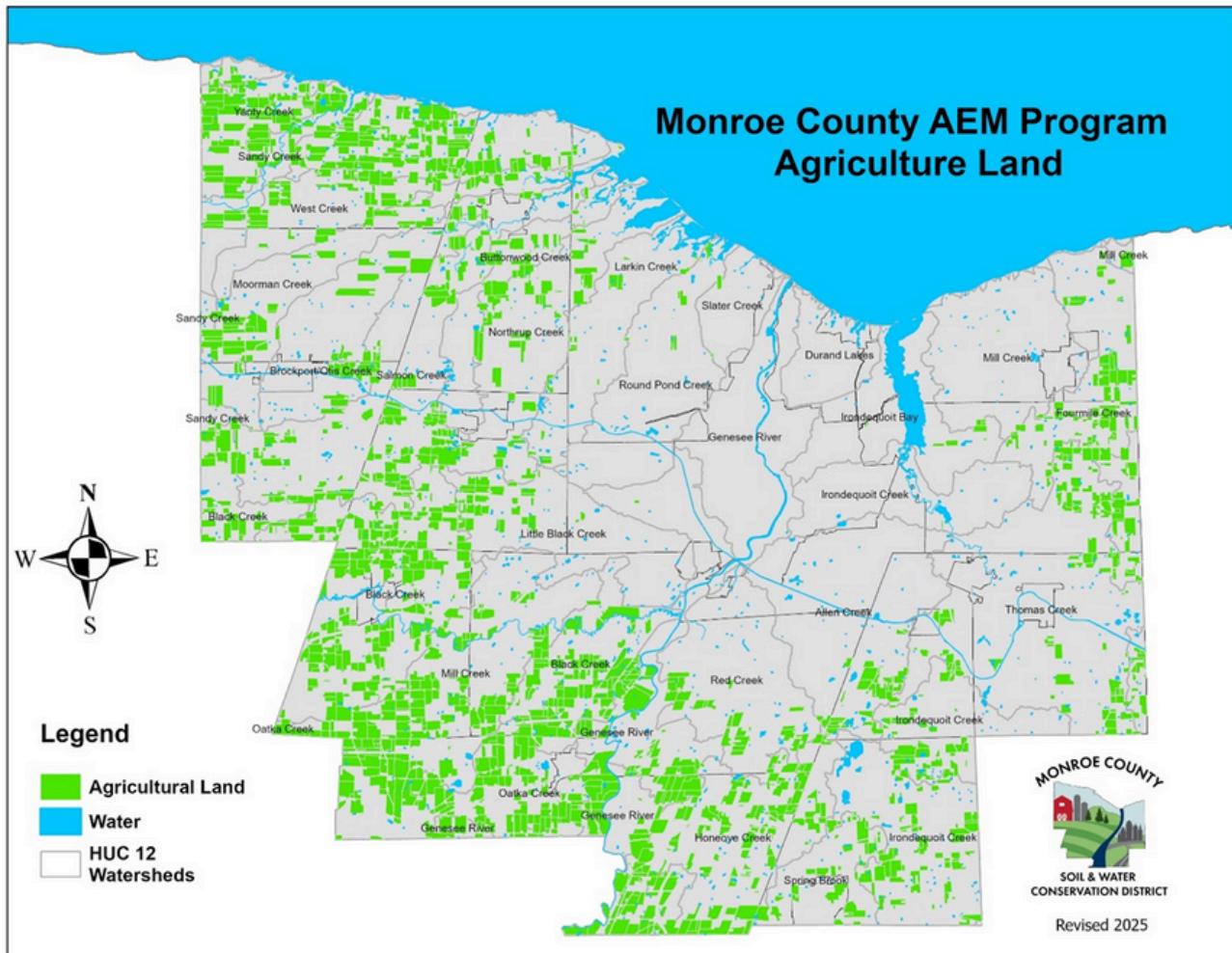


Figure 2. Agricultural Land & Watersheds within Monroe County

## B. Priority Waterbodies Lists, NYS Department of Environmental Conservation (DEC)

The Waterbody Inventory/Priority Waterbodies List (WI/PWL)<sup>2</sup> provides narrative assessments of New York State's waterbodies. The (WI/PWL) dataset is an inventory of the state's surface water quality. The WI/PWL reports are produced for each of the 17 major drainage basins in the state on a schedule that allows each to be updated every 5 years. The review and updating of these reports include a public participation component. The data are displayed in four themes, representing the types of waterbodies included on the WI/PWL. They include Shoreline, Rivers/Streams, Lakes/Reservoirs, and Estuary. This dataset provides a summary of general water quality conditions, tracks the degree to which a waterbody supports its designated uses, and monitors progress toward the identification and resolution of water quality problems, pollutants, and sources. Figures 3 and 4 show waters in Monroe County with designated impairments due to agriculture.

<sup>2</sup> More detail regarding the WI/PWL assessment effort can be found on the NYS DEC website at: <https://www.dec.ny.gov/chemical/8459.html>

## Monroe County AEM Program Impaired Waters and Agricultural Land

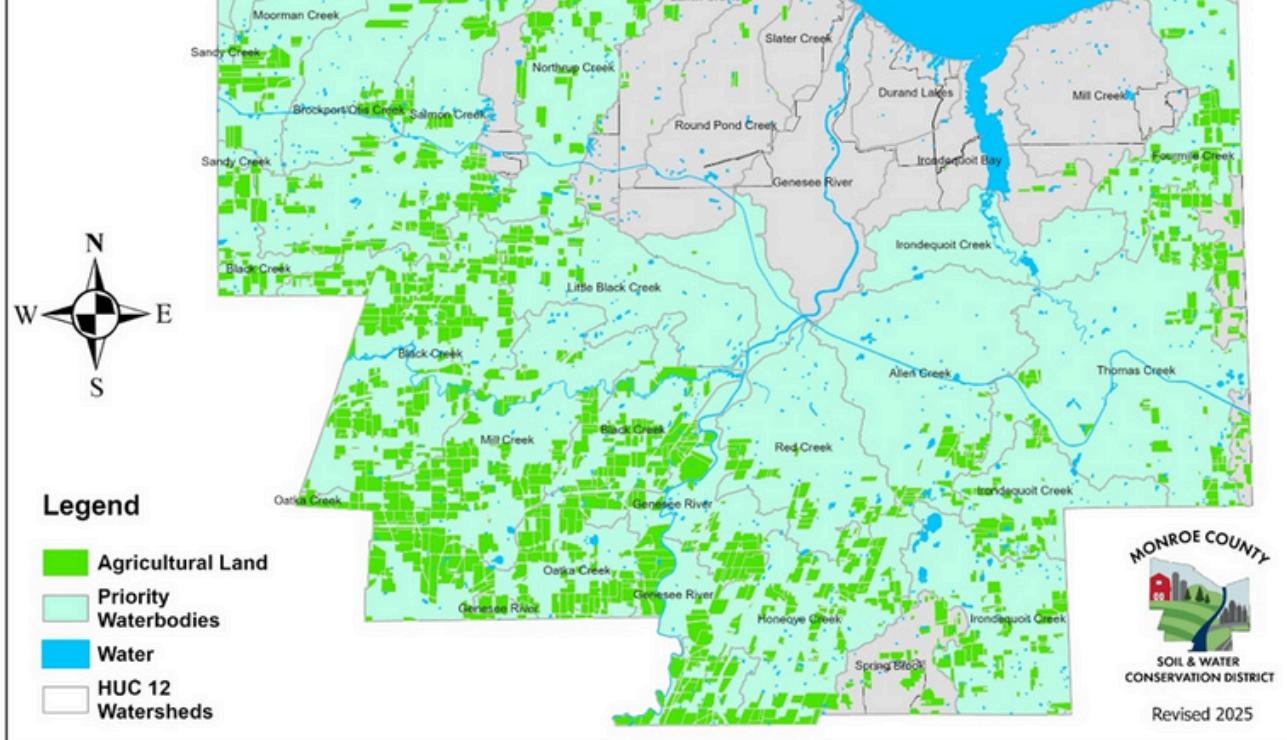


Figure 3. Waterbodies listed on the WI/PWL and the location of active agricultural land in Monroe County

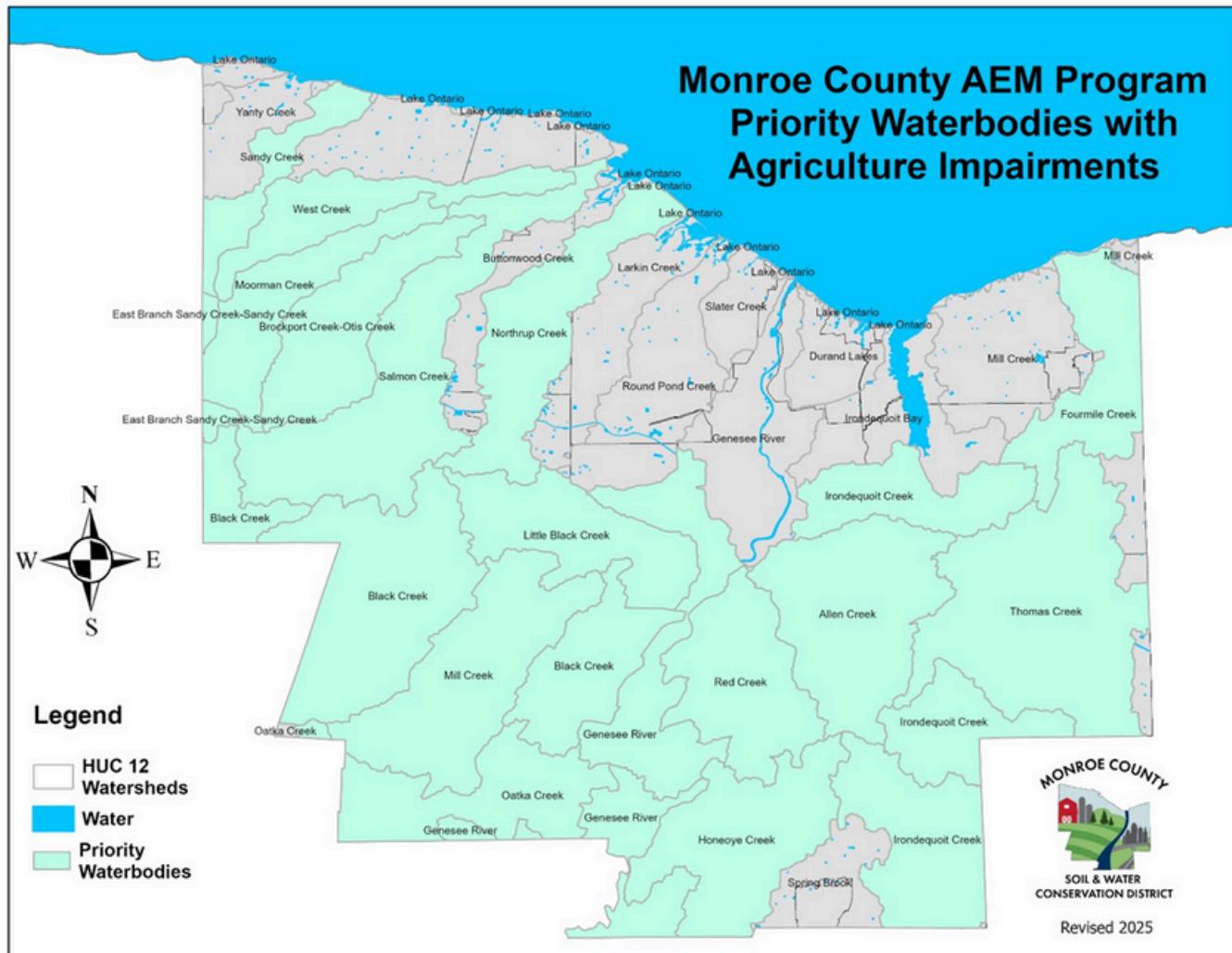


Figure 4. Watersheds with “Known” or “Suspected” agricultural impacts to water quality

## C. Other Watershed Plans and Programs

The following watershed plans and programs were used to further the AEM strategy goals & objectives:

- Genesee River Basin Nine Key Element Watershed Plan for Phosphorous and Sediment
- Genesee River Basin Watershed Implementation Plan
- Irondequoit Bay Harbor Management Plan
- Monroe County Farmland Protection Plan
- Braddock Bay Sampling Program

### ***Genesee River Basin Nine Key Element Watershed Plan for Phosphorus and Sediment***

With the Genesee River the second largest tributary responsible for phosphorus loading into Lake Ontario, all the major sub-basin required management plans. The first element is to identify causes of impairments and pollutant sources, many of which are listed in the NYS Section 303 (d) List. The second element is to estimate load reductions based on the management plan(s). The third element is to identify your specific nonpoint source management measures, which also help with preventing the creation of new sources. The fourth element is to determine, and obtain if necessary, your technical and financial assistance. Agricultural land BMP's are almost entirely voluntary.

The fifth element is information and education, with several stakeholder groups engaging and planning as part of the management plan. The sixth element is determining the implementation schedule. Initial focus of management falls to the highest priority sub-basins. The recommended timeframe for implementation is 10 years for high priority, 15 years for medium priority, and 25 years for low priority watersheds. The seventh element is the “milestones” of assessing your watershed plan at the HUC12 level. It is recommended that high priority watersheds are assessed five years from the plant date, medium priority watersheds assessed 13 years after plan date, and low priority watersheds assessed 20 years after plan date. The goal would be to have at least 60% of practices on the ground at that point in time. These assessments are based off miles or acres of management measures installed. The eighth element is knowing your assessment criteria. In the case of this plan, it was the soluble reactive phosphorus loaded into Lake Ontario. The ninth and final element is regular monitoring of the major basin of the watershed, in this case the Genesee River<sup>3</sup>.

### ***Genesee River Basin Watershed Implementation Plan***

In 2023, the Genesee River Watershed Coalition (GRWCCD), with Monroe SWCD acting as coordinator, began working as a critical partner on developing a Watershed Implementation Plan for the river basin to provide:

1. An updated framework to implement the Genesee River Basin Nine Key Element Plan for Phosphorous and Sediment (9EP) in the Genesee River watershed (GRW) in alignment with New York’s Great Lakes Action Agenda<sup>4</sup> and the Lake Ontario Lakewide Action and Management Plan<sup>5</sup>.
2. A framework of goals and actions that focus and guide coordinated efforts among the GRWCCD and its partners to effectively manage the water resources of the GRW.
3. A mechanism to ensure projects that manage and use the GRW’s water resources receive stakeholder support, are current, and reasonably assured to be successful.

Genesee River watershed has been prioritized in Year 2 of Round 19.

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<sup>3</sup> Genesee River Nine Element Watershed Management Plan can be viewed and downloaded at:  
[https://extapps.dec.ny.gov/docs/water\\_pdf/geneseeninelement.pdf](https://extapps.dec.ny.gov/docs/water_pdf/geneseeninelement.pdf)

<sup>4</sup> New York’s Great Lakes Action Agenda can be viewed and downloaded at:  
<https://dec.ny.gov/nature/waterbodies/watersheds/management/great-lakes/action-agenda>

<sup>5</sup> Lake Ontario Lakewide Action and Management Plan can be viewed and downloaded at:  
<https://www.epa.gov/greatlakes/lake-ontario-lamps-and-associated-reports>

### ***Irondequoit Bay Harbor Management Plan***

As one of the largest coastal bays of Lake Ontario, Irondequoit Bay has 1,680 acres available for public use. The plan was prepared as part of New York State's Coastal Resources and Local Waterfront Revitalization Program, and authorized by the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. With the approval of this plan, local and federal agencies would follow the guidelines set forth.

The plan outlines many goals dealing with resource protection, water surface use conflicts, public access, and economic development. For resource protection, the plan states the following goals: better protect and enhance sensitive natural areas and resources of Irondequoit Bay, improve and protect water quality for desired uses emphasizing a healthy aquatic system, and ensure that any development around Irondequoit Bay occurs without impacting significant environmental, historical, and aesthetic resources. To minimize water use conflicts while still preserving the natural environment of Irondequoit Bay, the plan states to work in conjunction with all stakeholders to provide an adequate mix of recreation and natural uses. Additional goals of the plan are to increase public access to recreation at the Bay and make the Bay integral to regional and local economic development. This plan is currently being updated<sup>6</sup>.

### ***Monroe County Farmland Protection Plan***

Monroe County is preparing an updated Agriculture & Farmland Protection Plan<sup>7</sup> that will help Monroe County, its municipalities, partner agencies, and organizations better support local farms and the agricultural industry. This Plan will identify practical strategies to:

1. Retain productive farmland for continued agricultural use.
2. Support the economic viability of farming and related industries.
3. Encourage best practices for protecting water quality and the environment.

### ***Braddock Bay Sampling Program***

Wetland and barrier beach restoration in Braddock Bay played an important role in improving fish and wildlife habitat in this previously degraded ecosystem, supporting the delisting of the Rochester Embayment Area of Concern (AOC). A threat to the sustainability of these restored habitats is declining water quality associated with increasing nutrient concentrations, elevated algal biomass, dense stands of submerged aquatic vegetation, and frequent surface scums of cyanobacteria ("blue-green algae") associated with harmful algal blooms (HABs). The goal of this project is to create a targeted strategy for water quality improvement and continued monitoring, with an emphasis on nutrient levels and HABs. Water quality and submerged aquatic vegetation will be monitored in Braddock Bay to assess seasonal trends in nutrient, plant, and algal dynamics as well as to evaluate the potential threat posed by cyanobacterial toxins. Project partners, including the MCSWCD and the Monroe County Department of Environmental Services, that will also collect data to assess seasonal inputs of nutrients from tributaries Buttonwood Creek, Salmon Creek, and West Creek in the watershed as a priority over the next two years. Therefore, those watersheds have also been prioritized the first two years in the MCSWCD AEM Strategic Plan.

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<sup>6</sup> Irondequoit Bay Harbor Management Plan can be viewed and downloaded at:  
<https://www.monroecounty.gov/irobay>

<sup>7</sup> Monroe County Farmland Protection Plan can be viewed and downloaded at:  
<https://www.monroecounty.gov/planning-farmland>

#### **D. Farmer Participation in AEM by Watershed in Monroe County**

Table 1 incorporates all AEM data that has been collected by each watershed through December 2025 and identifies any waterbodies in a watershed that is “Stressed”, “Impaired” or “Threatened” with agriculture listed as a “Suspected” or “Known” source. Table 1 also serves as an indicator of AEM participation in each watershed since the program’s inception in 1998.

Table 1 - Summary of Monroe County Agricultural WI/PWL and AEM Data collected through December 2025

Monroe County Watersheds Including Huc-12 watersheds	WI/PWL Water Quality Impacts	WI/PWL Agricultural Source	AEM Priority Waterbody Region	Agricultural Land (acres)	AEM Interest*	Tier 1		Tier 2		Tier 3A		Tier 4		Tier 5A		Tier 5B	
						1	2	3	4	5	6	7	8	9	10	11	12
Black Creek	Impaired	Known	1	20,773	High	82	22	9	16	20	12	7	1	0	0	1	0
Robins Brook																	
Hotel Creek																	
Mill Creek																	
Black Creek																	
Buck Pond	Impaired	Suspected	2	440	Low	7	1	0	0	1	0	0	0	0	0	0	0
Larkin Creek																	
Buttonwood Creek	Stressed	Suspected	2	916	Medium	15	1	0	1	0	0	0	0	0	0	0	0
Durand	Non-Ag	Non-Ag	3	5	N/A	0	0	0	0	0	0	0	0	0	0	0	0
Finger Lakes	Unassessed	UnKnown	3	1,286	Low	11	3	2	0	0	0	0	0	0	0	0	0
Red Creek																	
Lower Mud Creek																	
Four Mile Creek	Impaired	Unconfirmed	3	2,502	Medium	19	4	4	0	0	0	0	0	0	0	0	0
Genesee River	Stressed	Known	1	6,719	Medium	19	6	4	3	6	2	0	0	0	0	0	0
Dugan Creek																	
Genesee River																	
Hamlin-Parma Beach(Lake Ont West)	Unassessed	Unknown	2	6,539	High	31	13	9	2	9	4	0	0	0	0	0	0
Cowsucker Creek																	
Honeoye Creek	Stressed	Suspected	1	6,656	High	30	9	5	5	1	0	0	0	0	0	0	0
Spring Brook																	
Honeoye Creek																	
Irondequoit Creek	Stressed	Suspected	3	8,371	High	29	13	7	2	4	0	0	0	0	0	0	
Allen Creek																	
Thomas Creek																	
Irondequoit Creek																	
Irondequoit Bay																	
Little Black Creek	Impaired	Suspected	1	1,364	Medium	14	4	3	2	5	3						
Little Pond	Non-Ag	Non-Ag	2	36	N/A	0	0	0	0	0	0	0	0	0	0	0	0
Slater Creek																	
Long Pond	Threatened	Known	2	2,595	Medium	19	3	3	7	1	0	0	0	0	0	0	0
Northrup Creek																	
Mill Creek	Impaired	Suspected	1	238	Low	1	1	0	0	0	0	0	0	0	0	0	0
Shipbuilders Creek																	
Oatka Creek	Stressed	Known	1	6,403	High	30	15	3	9	8	10						
Red Creek	Stressed	Unconfirmed	1	1,206	Low	10	2	2	0	0	0	0	0	0	0	0	0
Round Pond	Stressed	Non-Ag	2	249	Low	7	2	0	0	0	0	0	0	0	0	0	0
Round Pond Creek																	
Salmon Creek	Stressed	Known	2	11,463	High	101	20	10	8	22	17	0	0	0	0	0	0
West Creek																	
Moorman Creek																	
Brockport Creek																	
Salmon Creek																	
Sandy Creek	Stressed	Suspected	2	2,656	Medium	10	4	0	0	3	0	0	0	0	0	0	0
East Branch Sandy Creek																	
Sandy Creek																	
Yanty Creek	Unassessed	Unknown	2	2,679	Low	14	4	4	1	2	5	0	0	0	0	0	0
Yanty Creek																	
Bald Eagle Creek																	

\*As perceived through MCSWCD AEM farmer participation/interest, outreach and planning efforts

Table 1. AEM data collected by watershed

## **E. Priority Watershed Region Ranking**

Watershed regions were selected based on the position of the watersheds around the county. Each region was then ranked according to total agricultural land, known water quality impacts from agriculture, and current farmer participation in AEM. *Figure 5* indicates priority watershed regions and 12 digit HUC codes.

### PWR 1. Lower Genesee River

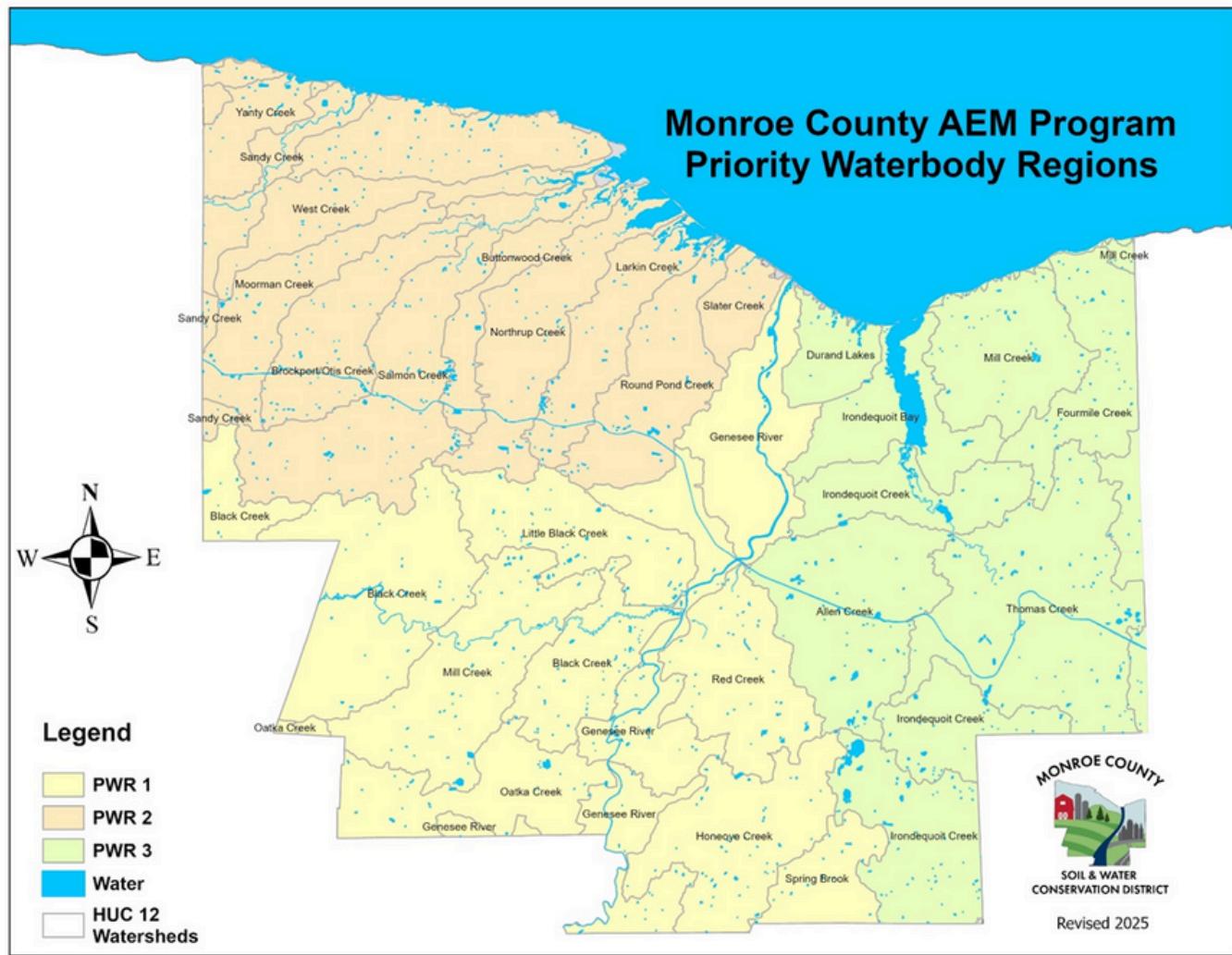
- a. Genesee River- Direct Drainage
- b. Black Creek
- c. Little Black Creek
- d. Oatka Creek
- e. Honeoye Creek

### PWR 2. Lake Ontario Shoreline - Rochester West (West of Genesee River Outlet)

- a. Salmon Creek
- b. Yanty Creek
- c. Sandy Creek
- d. Buttonwood Creek
- e. Long Pond
- f. Hamlin-Parma Beach
- g. Little Pond
- h. Round Pond

### PWR 3. Lake Ontario Shoreline Area- Rochester East (East of Genesee River Outlet)

- a. Irondequoit Creek
- b. Four mile Creek
- c. Thomas Creek



*Figure 5. AEM Priority Watershed Regions*

## Section III: AEM Round 19

### A. Round 19: Year 1 - 2026

#### Priority Watershed Region – 2

**1. Salmon Creek Watershed** - Approximately 11,681 acres drains through the Towns of Greece and Parma to Braddock Bay on Lake Ontario. Land use in the watershed is estimated to be 80% agricultural. According to the Waterbody Inventory for Western Ontario (Oak Orchard-Twelvemile) Watershed, aquatic life support is stressed by silt and sediment as well as priority organics and possibly by nutrients with agriculture as a known source.

**2. Northrup Creek Watershed** - The Northrup Creek watershed is approximately 15,500-acres and is located in the Town of Greece along the Lake Ontario shoreline, northwest of the City of Rochester and drains into Long Pond, a shallow embayment located on the shoreline of Lake Ontario. Northrup Creek is the main perennial stream within the watershed and flows from south to north through the Town of Ogden, Village of Spencerport, Town of Parma, and Town of Greece. According to the Waterbody Inventory for Western Ontario (Oak Orchard-Twelvemile) Watershed, Agricultural land use is most prominent in the central portion of the watershed within the Town of Parma, surrounding portions of Northrup Creek. Agricultural production in the watershed includes dairy cattle, beef cattle, nursery stock, vegetable and fruit production, and makes up approximately 17% of the land use in the watershed. The primary water quality issue in the watershed is phosphorous pollution from multiple sources, including agriculture.

**3. Buttonwood Creek Watershed** - The watershed is approximately 6,779 acres and Buttonwood Creek flows through areas including the Towns of Parma and Greece, and empties into Braddock Bay on Lake Ontario. Approximately 14% of the watershed is in agricultural land. Aquatic life support in Buttonwood Creek is thought to experience minor impacts due to nutrient loads from agriculture in the watershed. The creek flows through agricultural lands where concerns have been raised regarding the impact of agricultural runoff and manure on the stream.

**AEM Focus for Round 19: Year 1 for 2026** - There is a large amount of rented land in these watersheds so the attention will be to get some of the landowners that are renting land into AEM Tier 1. There will also be an emphasis to move farms to Tier 2 and update existing Tier 2's (5A), move farms to the 3A, and eventually to implementation under Tier 4.

### B. Round 19: Year 2 - 2027

#### Priority Watershed Region – 2

**1. Brockport-Otis Creek Watershed** - Approximately 12,713 acres of watershed drains north from the Town of Sweden through the Village of Brockport and Town of Clarkson and empties into Salmon Creek in the Town of Parma which drains to Braddock Bay on Lake Ontario. Land use in the watershed is estimated to be 15% agricultural. According to the Waterbody Inventory for Western Ontario (Oak Orchard-Twelvemile) Watershed, aquatic life support in Brockport Creek is known to experience minor impacts due to elevated nutrient loadings likely from nonpoint sources with agriculture being one of those sources.

**2. Sandy Creek Watershed** - Approximately 6,617 acres of watershed drains north through the Town of Hamlin and empties directly into Lake Ontario just west of Sandy Harbour Beach. Land use in the watershed is estimated to be 40% agricultural. According to the Waterbody Inventory for Western Ontario (Oak Orchard-Twelvemile) Watershed, aquatic life support in Sandy Creek is known to experience minor impacts due to nutrient loads from various nonpoint sources in the watershed with agriculture being one of those sources as it is the dominant land use in the watershed.

**3. West Creek Watershed** - Approximately 9,651 acres of watershed drains northeast from the Town of Clarkson through the Town of Hamlin and the north end of the Village of Hilton and empties into Salmon Creek in the Town of Parma which drains to Braddock Bay on Lake Ontario. Land use in the watershed is estimated to be 22% agricultural. This watershed has not been assessed by the New York State Department of Environmental Conservation, and no water quality data are currently available from Monroe County, however; this has been included as a focus watershed due to the current water sampling program initiated in this watershed described above under the Braddock Bay Sampling Program.

**4. Moorman Creek Watershed** - Approximately 11,455 acres of watershed drains north from the Town of Sweden and the west side of the Village of Brockport and then east through the Town of Clarkson and empties into West Creek in the Town of Hamlin which then drains to Salmon Creek and eventually to Braddock Bay on Lake Ontario. Land use in the watershed is estimated to be 19% agricultural. According to the Waterbody Inventory for Western Ontario (Oak Orchard-Twelvemile) Watershed, aquatic life support in Moorman Creek is known to experience minor impacts due to nutrient loads from various nonpoint sources in the watershed with agriculture being one of those suspected sources.

Brockport-Otis Creek, West Creek, and Moorman Creek all eventually drain to Braddock Bay, which is impacted for public bathing and recreational uses by elevated sediment loadings thought to be the result of urban/stormwater runoff, residential development and agricultural activities in the watershed. Loading from agricultural activities and increased development (home construction) is exacerbated by highly erodible soils (Waterbody Inventory for Western Ontario (Oak Orchard-Twelvemile) Watershed).

**AEM Focus for Round 19: Year 2 for 2027** - Move farms that have completed Tier 1's to complete a Tier 2 and then move a Tier 3A conservation plan. From those Tier 3A plans, the focus will be to plan for Tier 4 implementation in the following year. There are a few farms in these focus watersheds that will also need Tier 2 updates (5A).

## C. Round 19: Year 3 - 2028

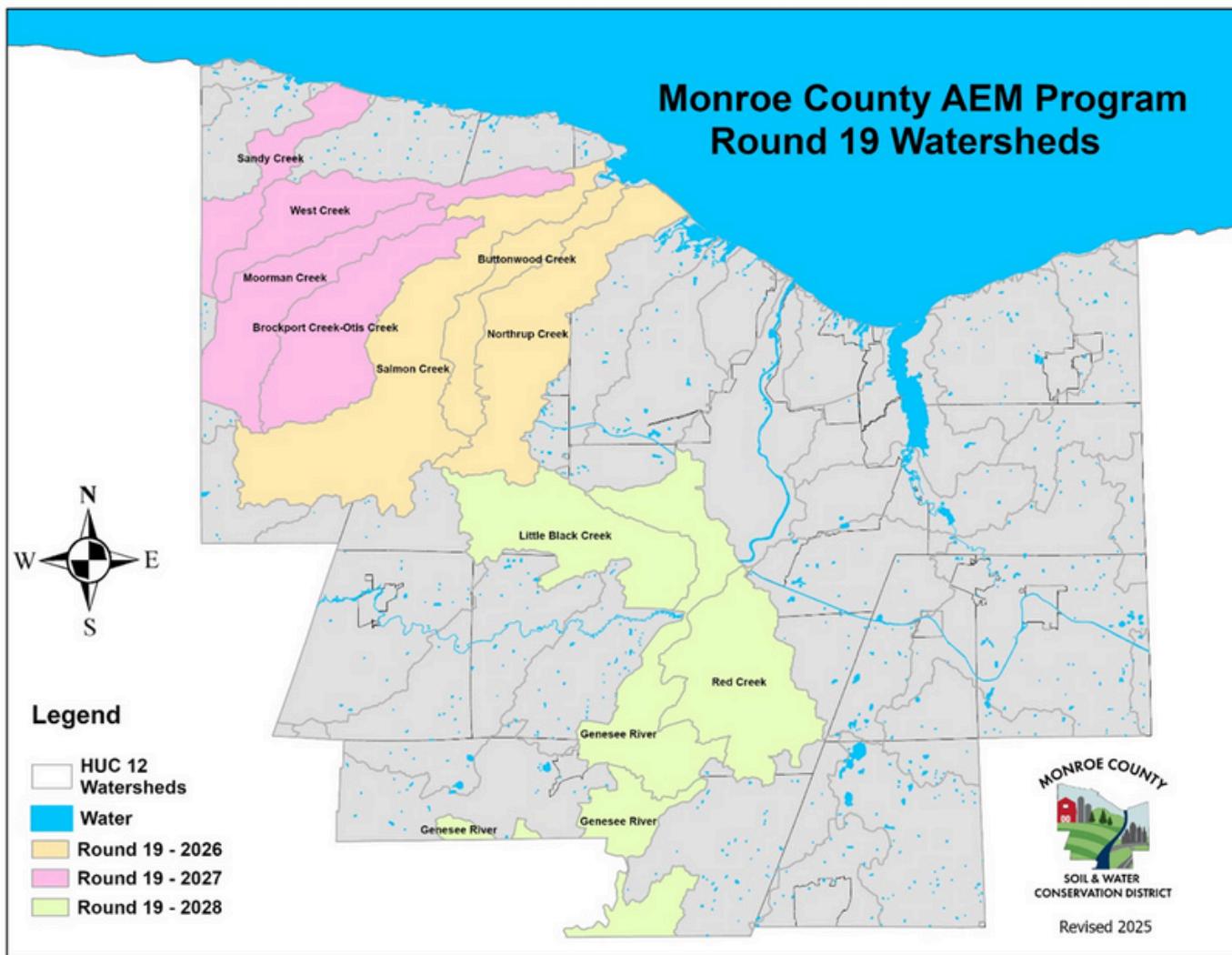
### Priority Watershed Region – 1

**1. Little Black Creek Watershed** - Little Black Creek (LBC) lies southwest of the City of Rochester, NY, originating in the Town of Ogden, flowing east through the Towns of Gates and Chili, under the Rochester International Airport to finally discharge into the Genesee River. The watershed covers approximately 13,148 acres with agricultural land use in the upper reaches (8,669 acres), making up approximately 20% of the land use after residential. According to the 2001 Genesee River Basin NYSDEC PWL, Little Black Creek is impaired for aquatic life and stressed for recreation and habitat/hydrology with possible nutrients being the pollutant and agriculture as a suspected source due to the western half of the watershed manure spreading activities.

**2. Red Creek Watershed** - Approximately 14,302 acres of watershed drains north from the Town of Henrietta through the Town of Brighton and empties into the Erie Canal in the City of Rochester at Monroe County's Genesee Valley Park which then flows nearly 900 feet to the Genesee River. Land use in the watershed is estimated to be 8% agricultural. According to the 2001 Genesee River Basin NYSDEC PWL, aquatic life and recreational uses in Red Creek are impaired by unknown toxicity, perhaps a result of elevated nutrient loadings thought to be the result of urban runoff, possibly sanitary discharges and agricultural activity in the upstream watershed.

**4. Genesee River (Middle) Watershed** - Approximately 28,348 acres of the Genesee River watershed drains north from the Towns of Wheatland and Rush through the Towns of Henrietta, Chili, and Gates and crosses the Erie Canal in the City of Rochester at Monroe County's Genesee Valley Park, ending this portion of the middle section of the watershed. Land use in the watershed is estimated to be 24% agricultural. According to the 2001 Genesee River Basin NYSDEC PWL, aquatic life support is impaired and recreational use and aesthetics impacted by nutrients, silt/sediment, and other pollutants from various nonpoint sources with agricultural activities being one of those suspected sources.

**AEM Focus for Round 19: Year 3 for 2028** - These focus watersheds are more urbanized within Monroe County but still have approximately 52% agricultural land, especially in the Genesee River watershed. The effort will be to move the horse farms in the area into Tier 2, 3A, and eventually a Tier 4 implementation. Additionally, Tier 2 updates (5A) will be completed on the farms that have older Tier 2's, and Tier 3A plan updates (5B) for those fruit and nursery farms in the watersheds. There are a few farms in these watersheds that will also need to have a practice evaluation for 5B during this year.



## Section IV: AEM Round 20

### A. Round 20: Year 1 - 2029

#### Priority Watershed Region – 3

**1. Allen Creek Watershed** - Allen Creek consists of two significant and diverse subwatersheds, Main branch and East branch. After merging with the East branch in Pittsford, the creek flows through Brighton and then discharges into Irondequoit Creek in Panorama Valley in Penfield. The Main branch watershed is 11,583 acres with agricultural land use making up only 2.5% of the Main branch watershed. However, the entire 6,300-acre East Branch watershed lies in the Town of Pittsford with the main land use throughout the upper watershed being agriculture, making up approximately 19% of the East Branch watershed. According to the Waterbody Inventory for Central L. Ontario (Irondequoit-Ninemile) Watershed, the watershed is stressed for public bathing, aquatic life, and recreation from nonpoint sources with agriculture being a suspected source contributing to nutrient and silt/sediment loadings.

**2. Upper Irondequoit Creek Watershed** - Approximately 22,577 acres of this upper watershed of Irondequoit Creek and tributaries drains north from the Town of Mendon, and encompasses drainage from the Towns of Pittsford and Perinton and then joins the lower portion of Irondequoit Creek in the Town of Pittsford before emptying into Irondequoit Bay. Land use in the watershed is estimated to be 17% agricultural. The Waterbody Inventory for Central L. Ontario (Irondequoit-Ninemile) Watershed lists upper Irondequoit Creek and tributaries as having nutrients as “Known” pollutants and agriculture as being a “Suspected” source, especially in the

upper parts of the watershed (2007 Lake Ontario Basin NYSEC PWL). Irondequoit Creek drains to Irondequoit Bay and Irondequoit Bay is listed for having pesticides, PCB's and nutrients as a "Known" pollutant and silt/sediment as being "Suspected" and agriculture as being a "Suspected" source (2007 Lake Ontario Basin NYSDEC PWL).

**AEM Focus for Round 20: Year 1 for 2029** - The effort will be to move the farms into Tier 4 implementation that already have a 3A conservation plan, as well as Tier 2 updates (5A) will be completed on the farms that have older Tier 2's and see if it is necessary to complete a conservation plan or 3A for those farms. There are a few farms in these watersheds that will also need to have a practice evaluation or 5B during this focus year.

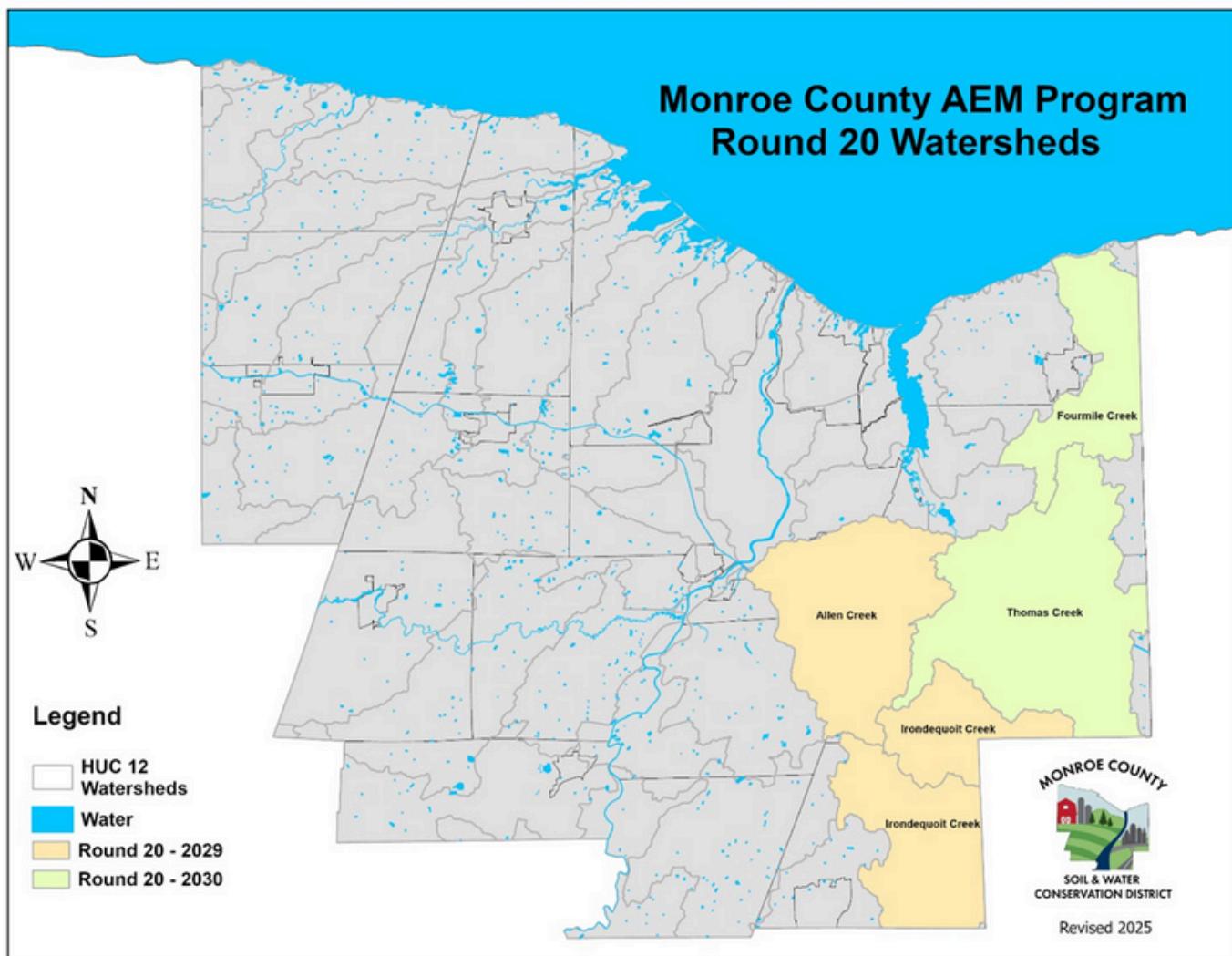
## **B. Round 20: Year 2 - 2030**

### **Priority Watershed Region – 3**

**1. Four Mile Creek Watershed** - Four Mile Creek has a 12,000-acre watershed that lies within Monroe and Wayne counties. The Creek begins in the north central area of the Town of Penfield and flows north, into the Town of Webster. Agricultural land use makes up approximately 23% of the watershed; the second largest land use after residential. Agricultural land use is especially prevalent in the upper and mid-reaches of the watershed. In 2010, Four Mile Creek was added to the NYS Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy. The listing states that Four Mile Creek is impaired for aquatic toxicity and that the source is unknown. Future development of a TMDL is deferred pending verification of the cause of the impairment. There is no known water quality monitoring data at this time.

**2. Thomas Creek Watershed** - The Thomas Creek watershed is located on the eastern side of Monroe County along the border with Wayne County. From its head waters in the Town of Penfield the creek and its tributaries flow south and into the Town of Perinton. Upon reaching the Erie Barge Canal, Thomas Creek turns and flows west and through the Village of Fairport. According to the New York State Department of Environmental Conservation's Lake Ontario Basin Waterbody Inventory and Priority Waterbodies List (NYSDEC 2004), Silt and sediments in the watershed are of known importance with aquatic life being impaired. Agricultural activities in the northern portion of the watershed are suspected to contribute to nutrient and silt/sediment loadings, with agricultural land use making up approximately 18% of the watershed.

**AEM Focus for Round 20: Year 2 for 2030** - These focus watersheds have medium to high interest in AEM despite being in the more urbanized municipalities of Monroe County. This is due to the vast size of these watersheds and that they still have approximately 33% agricultural land use that exists today coalesced with development. The effort will be to move the farms into Tier 4 implementation that have an existing conservation plan or 3A. Additionally, Tier 2 updates (5A) will be completed on the farms that have older Tier 2's, and Tier 3A plan updates (5B) for those farms that have older plans.



## Section V: AEM Outreach

The MCSWCD will work to set up education and outreach presentations in the community as needed and/or requested. A list of some of the groups that the MCSWCD will conduct presentations and educational outreach to include, but are not limited to: the Monroe County Legislature, the Cornell Cooperative Extension (CCE) Agricultural Advisory Committee, the Environmental Management Council, the Oatka Creek Watershed Committee, Irondequoit Bay Technical Steering Committee, Conservation Boards of agricultural communities, the Stormwater Coalition of Monroe County and the Monroe County Farm Bureau. As new groups, agencies or other interested parties are identified, additional presentations will be scheduled. MCSWCD efforts to promote the AEM program and educate farmers and the community on the benefits of farmer participation through multi-media including:

**Agency newsletters:** MCSWCD, CCE, Monroe County Farm Bureau

**Watershed Committee newsletters & meetings:** Oatka Creek Watershed Committee, Stormwater Coalition of Monroe County, Irondequoit Bay Technical Steering Committee

**Local newspapers:** Greece Post, Gates-Chili Post, Henrietta Post, Webster Post, Suburban News

**Websites:** MCSWCD, Stormwater Coalition of Monroe County, Oatka Creek Watershed Committee, and municipal run websites

## Section VI: Partnerships

Partnerships are designed to bring together different strengths, resources, and expertise to address complex issues more effectively. Partnerships are especially beneficial because they:

1. Combine Resources and Skills: Different organizations or groups bring their unique abilities to the table whether it's funding, expertise, manpower, or connections.
2. Enable Joint Problem-solving: By working together, partners can tackle problems that might be too complex or resource-intensive for any single entity to address alone.
3. Encourage Coordination: Effective partnerships promote better coordination across multiple stakeholders, ensuring that efforts aren't duplicated and resources are used efficiently.
4. Build Coalitions: Partnerships often help in forming coalitions, which can amplify the impact of initiatives by gathering support from various sectors or communities.
5. Expand Influence: When organizations come together, they can often gain more attention, influence, and credibility, whether it's with the public, governments, or other partners.

MCSWCD is focused on building strategic partnerships to help implement, support, or advise on the AEM program initiatives. Partnerships like these can be essential for ensuring successful implementation of environmental programs, especially when they combine expertise and resources from various organizations.

Partnerships are listed below that are essential for implementing the AEM program initiatives.

Partner Name	Role/Contribution	Strategic Impact
Monroe County Department of Environmental Services	Environmental planning and agricultural support	Supports farmer input into Monroe County's Climate Action Plan and Organics Management Plan, implementation of AEM program,
Monroe County Department of Planning & Development	Farmland protection	Supports implementation of Monroe County Farmland Protection Plan
Cornell Cooperative Extension (CCE) of Monroe County	Partners with MCSWCD on agricultural education & outreach	Enhances our educational workshops, field days, farm tours, and outreach network
Harvest NY	Partners with MCSWCD on urban agricultural education, outreach, and	Expands our urban ag network, identify trends and focus areas for urban ag, and share resources and tools
Urban Ag Working Group	Advises on urban ag relations	Enhances our urban ag educational tabling events, connection with urban farmers and community gardeners, understanding zoning
Farm Service Agency	Famer Outreach	Expands our outreach network for agricultural related programs and resources
NYS Soil & Water Conservation Committee	Provides funding for MCSWCD	Supports dollars through Climate Resilient Farming Program, Agricultural Non-Point Pollution Abatement & Control Program,
NYS Department of Environmental Conservation	Environmental planning and agricultural support within the	Supports implementation of AEM throughout the Genesee River Basin through the development of the Watershed Implementation
Genesee River Watershed Coalition of Conservation	Provides funding, staff, and education and outreach	Supports implementation of conservation initiatives that protect, promote and enhance the natural resources of the Genesee River
Genesee - Finger Lakes Regional Planning Council	Environmental planning and agricultural support within the	Supports development and implementation of the Watershed Implementation Plan for the Genesee River Basin

Table 2. Partnership, Roles and Impacts

## **Section VII: Overview of Monroe County AEM Strategic Plan Objectives**

The MCSWCD will use the AEM Strategic Plan to identify and address agricultural sources of impacts to water quality concerns in these identified high-priority watersheds. The MCSWCD will continue progressive planning and implementation and will continue to encourage more farms to proceed beyond the Tier 1 and 2 levels and move to the Tier 3 planning phase and Tier 4 implementation phase. Although Urban Agriculture areas were not included in the strategic plan due to there not being an AEM framework at this time, it is still an important part of our partnership and education and outreach efforts as indicated within those areas of the plan.

### **General Tasks associated with each year for focus watersheds:**

1. Notify local stakeholders and municipal officials about AEM program so that the word gets out to farmers about program
2. Update mailing lists and collect all AEM data from previous years for focus watershed year.
3. Contact all landowners/farmers in focus watersheds in Monroe County via letters and emails, and follow-up phone calls to generate interest in participating in the AEM program.
4. Follow-up with past participants of AEM in focus watersheds to update information and encourage farms to move forward in tiered process.
5. Schedule outreach and education presentations and look for new opportunities to collaborate and form new partnerships.
6. Conduct meetings with farmers as requested to completed tiered worksheets, including Tier 3 conservation plans.
7. Prepare Tier 3's for farmers interested in pursuing funding through agricultural related grant funding to implement high priority practices on farms in priority watersheds.
8. MCSWCD staff will attend AEM and any relevant trainings or updates as scheduled.

### **Annual Program Evaluation**

MCSWCD will evaluate effectiveness of program at the end of each year by conducting an assessment of the program through the use of New York State's AEM report card, and incorporating new ideas, programs, outreach and educational efforts that complement the AEM program.