



Department of
Agriculture and Markets



Soil and Water
Conservation
Committee

Agricultural Environmental Management (AEM) and Agroforestry

New York Nut Growers Association 2024
Fall Meeting

agriculture.ny.gov



Kathy Hochul
Governor

Richard A. Ball
Commissioner

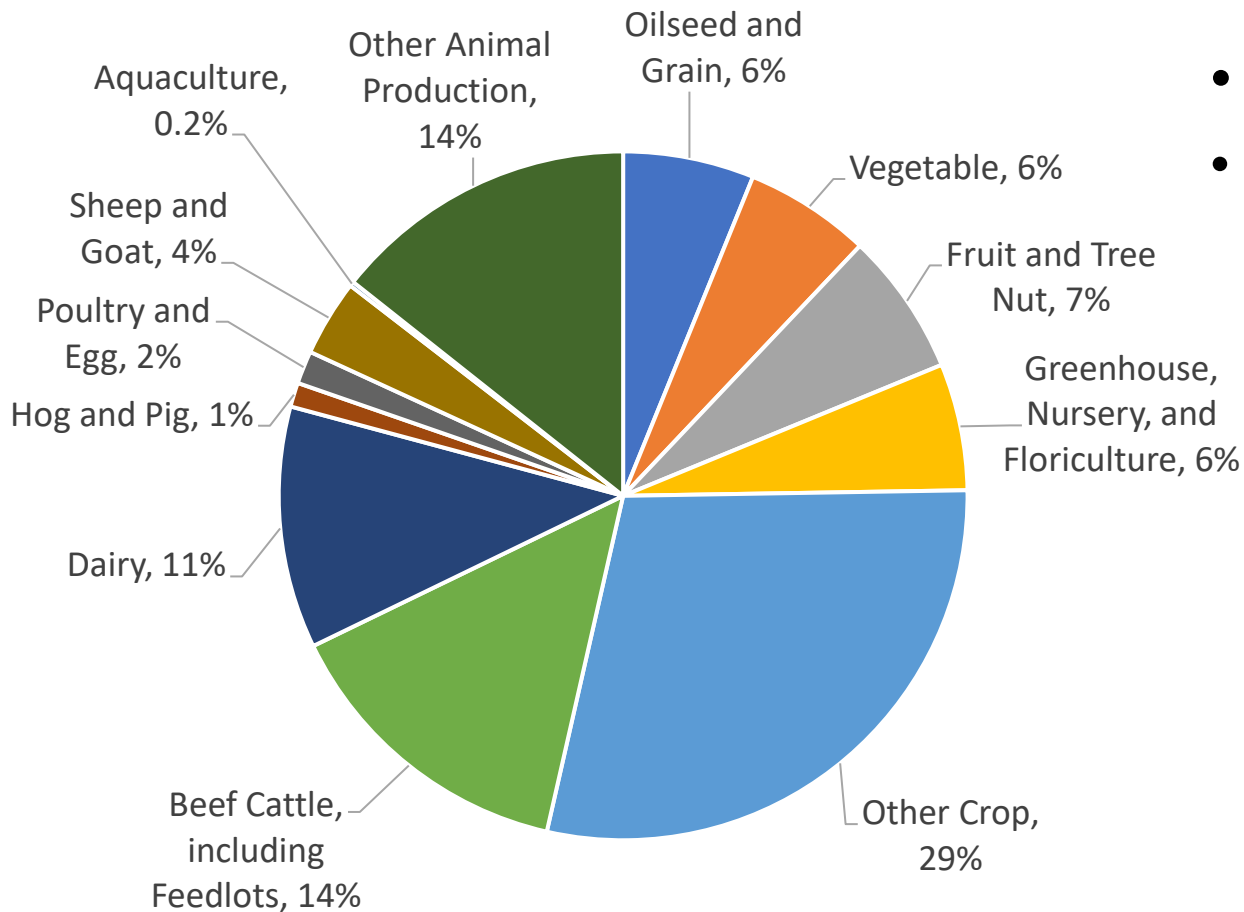
Dale Stein
NYS SWCC Chair

Greg Albrecht
AEM Coordinator
Principal Environmental Analyst

NYS is an Agricultural State

NYS Ag Statistics

Farms by Type (% of Total; 2017 Ag Census)

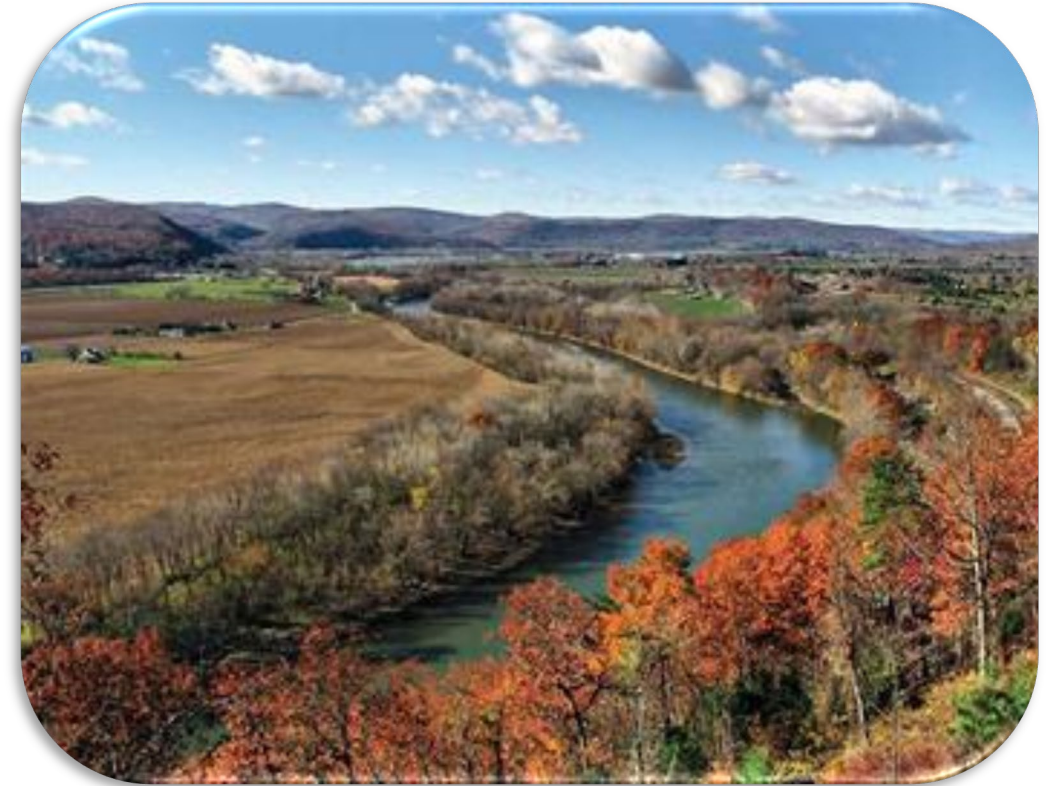


- Annual value of farm products: \$5.7 billion
- 33,400 farms statewide
 - Employing over 55,000 people
- Approx. 7 million acres (~20% of State)
- Nearly 850 farmers' markets in NYS
- NYS Ag ranks top 10 in US for over 30 farm products.....
 - Apples – 2nd
 - Processing Cabbage – 2nd
 - Maple Syrup – 2nd
 - Milk – 3rd
 - Yogurt – 1st
 - Cottage Cheese – 1st
 - Wine/Juice Grapes – 3rd
 - Fresh Mkt Veggies – 5th
 - Floriculture – 9th
 - Among others

Well-Managed Agriculture as Sustainable Development

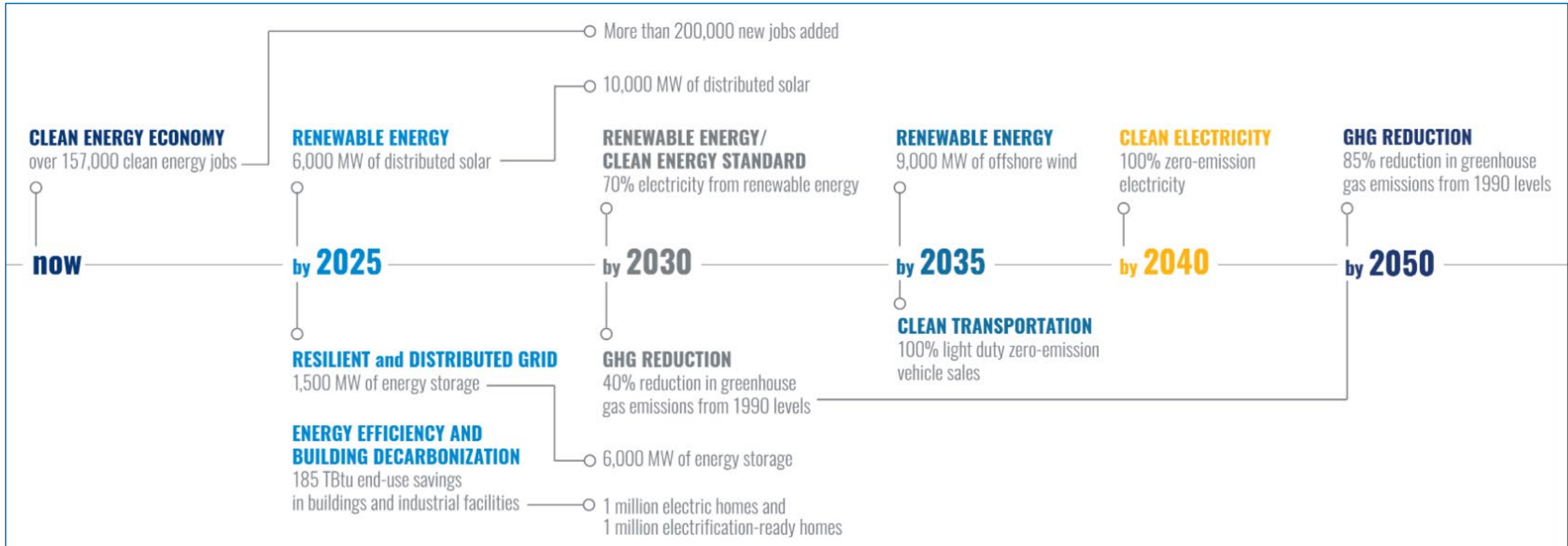
Local food and beverage, horticulture, fiber, forest products, therapeutics, and energy +

- Rural economic growth
 - Locally-based transactions
- Jobs
- Taxes paid by farms >> services used
- Conservation and resiliency:
 - Habitat and wildlife corridors
 - Unpaved open space
 - Resiliency for extreme storms and drought
 - Ag is green infrastructure on a broad scale
 - Water and air quality....for multiple purposes
 - Soil health / function
 - Greenhouse gas mitigation
 - Recycling
- Tourism
 - Scenic vistas / Agricultural vistas
- Quality of life



NYS Climate Leadership and Community Protection Act (CLCPA) – 2019

Reduce NYS economy-wide greenhouse gas emissions 40 percent by 2030 and no less than 85 percent by 2050 from 1990 levels.



Agriculture and Forestry Advisory Panel

of the NYS Climate Action Council

Richard Ball, Chair, Commissioner NYS Department of Agriculture and Markets

Peter Innes, NYS Department of Environmental Conservation

Rafael Aponte, Rocky Acres Community Farm

Amanda Barber, Cortland County Soil and Water Conservation District

John Bartow, Empire State Forest Products Association

Michelle Brown, The Nature Conservancy

Tom Gerow, Wagner Lumber Company

Suzanne Hunt, HuntGreen LLC and Hunt Country Vineyard

Peter Lehner, EarthJustice

Samantha Levy, American Farmland Trust

Robert Malmshemer, SUNY Environmental Science and Forestry

John Noble, Noblehurst Farms

Julie Suarez, Cornell University

Ned Sullivan, Scenic Hudson

Donna Wadsworth, International Paper

Elizabeth Wolters, New York Farm Bureau

Peter Woodbury, Cornell University

Nelson Villarrubia, Trees New York

Carbon Sequestration Strategies for Forests and Farms

Goals: return to 1990 C seq. levels by 2030 and more by 2050

> **Avoid Conversion of Forest and Farmland**

- Maintain and enhance the state's carbon stocks and carbon sequestration potential through avoided forest and farmland use conversion.

> **Forest Management**

- Increase carbon sequestration through improved, sustainable forest management practices. Secure forest regeneration, improving forest health and productivity, and restore degraded forests.

> **Soil Health**

- Reduce net GHG emissions and increase carbon sequestration/storage and other adaptation and environmental benefits through adoption of soil health management practices.

> **Agroforestry**

- Adding trees into areas of agricultural production to increase carbon sequestration and other environmental benefits.

> **Reforestation/Afforestation**

- Tree plantings focused on underutilized agricultural lands. Increasing tree density in understocked forests.

> **Climate Focused Bioeconomy**

- Renewable bio-based feedstocks, rather than fossil fuel-based feedstocks, to produce products that achieve the climate and social justice goals of the CLCPA.

Next Steps - everyone has a role....

...farms will continue to be a key part of the solution.

- Tactical plans for individual Scoping Plan priorities
- Applied research, updated tools and guidelines, training, and outreach
- Public sector funding and policy to facilitate larger pool of private sector investment and practice adoption
 - NYS AGM / SWCC, NYSERDA, NYS DEC, USDA, etc.
 - **Local Step: meet with your District and/or NRCS to start or resume project planning work**



Agricultural Environmental Management

Core Concepts

- **Open to all farmers**
- **Voluntary, incentive-based**
- **Locally-led & delivered**
 - Farmers
 - Soil & Water Conservation Districts
 - Other partners:
 - Natural Resources Conservation Service
 - Cornell Cooperative Extension
 - Farm Service Agency
 - Farmer Organizations
 - NGOs
 - Agri-Business



- **Prioritized based on natural resource needs, local AEM Strategic Plans, and farmer goals**
- **Customized with farm-specific plans**
 - **Science-based (NRCS Standards)**
 - **Wide range of practice systems available**
- **Trust and relationship building**
 - **Farmers make decisions for their farms and the environment**
- **Leads to practice adoption**
- **Promotes teamwork**
- **Coordinates assistance**
- **Adaptive to future priorities**

AEM 5-Tier Approach

AEM Tier	Purpose	NRCS 9 Step Process
Tier 1 – Inventory (Questionnaire)	Basic farm info and interests	<ol style="list-style-type: none"> 1. ID Issues & Opps 2. Determine Objectives 3. Inventory Resources 4. Analyze Resource Data 5. Formulate Alternatives 6. Evaluate Alternatives 7. Make Decisions 8. Implementation 9. Evaluation
Tier 2 – Assessment (“Tier 2 Worksheets”)	Identify existing stewardship, resource concerns, and opportunities	
Tier 3 – Planning	Develop conservation plans	
Tier 4 – Implementation	Implement conservation practices based on the plans	
Tier 5 – Evaluation	Evaluate plans, practices, and programs	



AEM Resources

AEM Tier 1 Inventory



AGRICULTURAL ENVIRONMENTAL MANAGEMENT

Tier 1

AEM Identification Number: _____

County SWCD _____

Date: ____/____/____

Evaluator Name: _____		Evaluating Agency: _____	
Watershed Identification: _____			
Farm Name: _____			
Owner's Name: _____		Operator's Name: _____	
Address: _____		Address: _____	
Phone: _____		Phone: _____	
Fax: _____		Fax: _____	
Email: _____		Email: _____	
Preferred Contact Point? (please check only one)			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator			

1) Future Status of the Farm

A) Do you anticipate any major modifications on your farm within the next 5 years? Yes No

If yes, please check the condition(s) that best describes the modification(s):

- Business Structure Expansion Retirement
 Operation Type Diversification of Farm Business Sale of Farm

B) Do you plan to subdivide any portion of your farm in the next 5 years? Yes No

2) Basic Farm Information

Average Weight: _____ Number: _____

Average Weight: _____ Number: _____

Management Questions (Please check Yes or No)

	Yes	No
Do you spread manure?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a manure storage facility?	<input type="checkbox"/>	<input type="checkbox"/>
Do you generate process washwater from the cleaning of product or facilities? <small>(i.e. milk cooler, egg wash, washing of produce)</small>	<input type="checkbox"/>	<input type="checkbox"/>
Is there a barnyard or outdoor feedlot on your farm?	<input type="checkbox"/>	<input type="checkbox"/>
Do you store silage or other high moisture feeds on the farm?	<input type="checkbox"/>	<input type="checkbox"/>
Do you utilize pastureland on your farm?	<input type="checkbox"/>	<input type="checkbox"/>
Do you use commercial fertilizer?	<input type="checkbox"/>	<input type="checkbox"/>
Do you use pesticides (herbicides, insecticides, fungicides) on your farm?	<input type="checkbox"/>	<input type="checkbox"/>
Do you store and/or mix pesticides (herbicides, insecticides, fungicides) on your farm?	<input type="checkbox"/>	<input type="checkbox"/>
Does your operation utilize cropland for row crop production?	<input type="checkbox"/>	<input type="checkbox"/>
Is the water supply on your farm from a well or a spring?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a waterbody within or adjacent to your farm?	<input type="checkbox"/>	<input type="checkbox"/>
Do you presently or do you plan to harvest timber on your farm?	<input type="checkbox"/>	<input type="checkbox"/>
Do you store fuel or other bulk petroleum products on your farm?	<input type="checkbox"/>	<input type="checkbox"/>
Have you received odor complaints or do you believe your farm has an odor concern?	<input type="checkbox"/>	<input type="checkbox"/>

NYS Agricultural Interest Assessment – check all that are of interest

- | | |
|--|---|
| <input type="checkbox"/> Agricultural Tax Relief | <input type="checkbox"/> Integrated Pest Management |
| <input type="checkbox"/> Agri-Tourism | <input type="checkbox"/> Irrigation Management |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Manure Treatment Options |
| <input type="checkbox"/> Biofuels | <input type="checkbox"/> Neighbor-Farm Relations |
| <input type="checkbox"/> Biosecurity | <input type="checkbox"/> Nuisance Wildlife Control |
| <input type="checkbox"/> Conservation Easements | <input type="checkbox"/> Organic Farming |

■ Tier 1 - Questionnaire

Farm inventory completed by the farmer and AEM team.

- Establishes basic information
- Identifies potential concerns and benefits
- Identifies farmer interests and opportunities
- Determines Tier 2 Worksheet needs



Department of
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AEM Tier 2 Assessment

Farmer completes Tier 2 Assessment with AEM Staff

- Discussion-based
- Helps gauge existing stewardship and identify resource concerns for improvement
- Worksheets arranged by land uses / management areas
- Educational opportunity
- Tier 2 Worksheets are also a guide/training tool for new AEM staff



AEM Tier 2 Assessment Worksheets

*The Tier 2 is
a whole farm
assessment
by design.*



"MAKING THE CONNECTION"
(Linking TIER 1 to TIER 2)

TIER 1 QUESTIONNAIRE	RESPONSE	TIER 2 WORKSHEET
Farm Type	All	Watershed Site Evaluation
Farm Type	All	Agriculture and the Community
Farm Type	All	Waste Disposal
Farm Type	Any Livestock	Water-borne Pathogens
Farm Type	Dairy	Management of Feed Nutrients
Farm Type	Horse Vineyard Greenhouse Fruit/Vegetable	Utilize specialized Worksheets, as well as those indicated as needed above and below.
Do you spread manure?	Yes	Nutrient Mgmt: Manure & Fertilizer
Do you have a manure storage facility?	Yes	Manure & Fertilizer Storage
Is there a barnyard or feedlot on your farm?	Yes	Heavy Use Area Protection
Do you store silage on the farm?	Yes	Silage Storage
Do you generate process wash water from the cleaning of product or facilities? <small>(i.e. milking, egg wash, washing of produce)</small>	Yes	Process Wash Water
Do you utilize pastureland on your farm?	Yes	Pasture Management
Do you use fertilizer?	Yes	Nutrient Mgmt: Manure & Fertilizer
Do you store fertilizer?	Yes	Manure & Fertilizer Storage
Do you use pesticides (herbicides, insecticides, fungicides) on your farm?	Yes	Pesticide Use
Do you store and/or mix pesticides (herbicides, insecticides, fungicides) on your farm?	Yes	Pesticide Storage, Mixing and Loading
Does your operation utilize cropland?	Yes	Soil Management
Is the water supply on your farm from a well or a spring?	Yes	Farmstead Water Supply Evaluation
Is there a defined stream within or adjacent to your farm?	Yes	Stream & Floodplain Management
Do you presently or do you plan to harvest timber on your farm?	Yes	Forest Management
Do you store petroleum products on your farm?	Yes	Petroleum & Oil Product Storage
Have you received odor complaints or do you believe you have an odor concern?	Yes	Livestock Odor Management

AEM Tier 2 Worksheet: Soil Management	Potential Concern			
Factors Needing Assessment:	Lower 1	2	3	Higher 4
What type of tillage practice(s) is used on the farm?	Only continuous no-till or strip till is used, with the exception of periodic incorporation of soil amendments.	A mulch tillage system is used, OR Mulch tillage in combination with no-till.		Full width tillage with little to no crop residue at planting.
How is crop rotation used on your farm?	Crop rotation is used and includes rotations of at least 3 years of hay crops, small grains and/or legumes.	Crop rotation is used and includes rotations of at least 1 or 2 years of hay crops, small grains and/or legumes.	Crop rotations are used but do not always include hay, small grains, or legumes.	Crops are not rotated.
What is the minimum level of crop residue cover during the rotation?	A crop residue of 50% or greater is left after planting.	A crop residue of 30% to 50% is left after planting.	A crop residue of 10% to 30% or greater is left after planting.	A crop residue of less than 10% is left after harvest.
How are cover crops managed on an average year?	Proper cover crop rates and timing are used, AND Seeding includes a diverse mix, including legumes.	Proper cover crop rates and timing are used, AND A single species seeding is used.	Cover crops are used when time and weather permits.	Cover crops are not used.

AEM Tier 2 Assessment Summary



Filmore County
Agricultural Environmental Management (AEM)
Program Team

AEM Tier 2 Summary Report

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.	Details Captured on Tier 2 Worksheet

Worksheet Name and Number	Level of Concern (1-4)	Items of Concern	Evaluation & Recommendations
3. Manure Management	3	Manure nutrient and pathogen runoff and leaching.	-Low animal stocking rate. -No manure storage. -High runoff and leaching concerns on some fields. Install manure storage and more efficient spreading schedule (see CNMP: Nutrient Management Section and Concentrated Sources Section).
4. Barnyards	4	Manure runoff from barnyard.	-Roof water mixes with barnyard manure. -No collection system for barnyard runoff. Barnyard runoff should be eliminated or appropriately treated. Roof water diverted (See CNMP: Concentrated Sources Section).
5. Silage Storage	4	Silage leachate.	-No silage leachate collection system. -Harvest management level is high. Install high flow/low flow silage leachate system (See CNMP: Concentrated Sources Section).
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 manure storage system (See CNMP: Concentrated Sources Section).
7. Management of	-		-Calf and heifer facilities could be improved for more feed use efficiency. -More groups would allow more feed use efficiency.



AEM 5-Tier Approach

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Tier 4 – Implementation	Implement conservation practices based on the plans	
Tier 5 – Evaluation	Evaluate plans, practices, and programs	

Why plan?

AEM Tier 3 – Conservation Planning



▪ **Tier 3A** – Progressive planning process starts by addressing at least 1 priority management area, below. Tier 3A Plan Component options:

- Farmstead,
- Cropland Conservation/Soil Health,
- Nutrient Mgt
 - NM-Core: requires Certified Crop Advisor (CCA)
 - Full-590: Requires AEM or NRCS Planner Certification
- Pasture Mgt,
- Pest Mgt,
- Forest Conservation, and/or
- Stream Corridor Mgt

▪ **Tier 3B** - Comprehensive Nutrient Management Plan (CNMP)

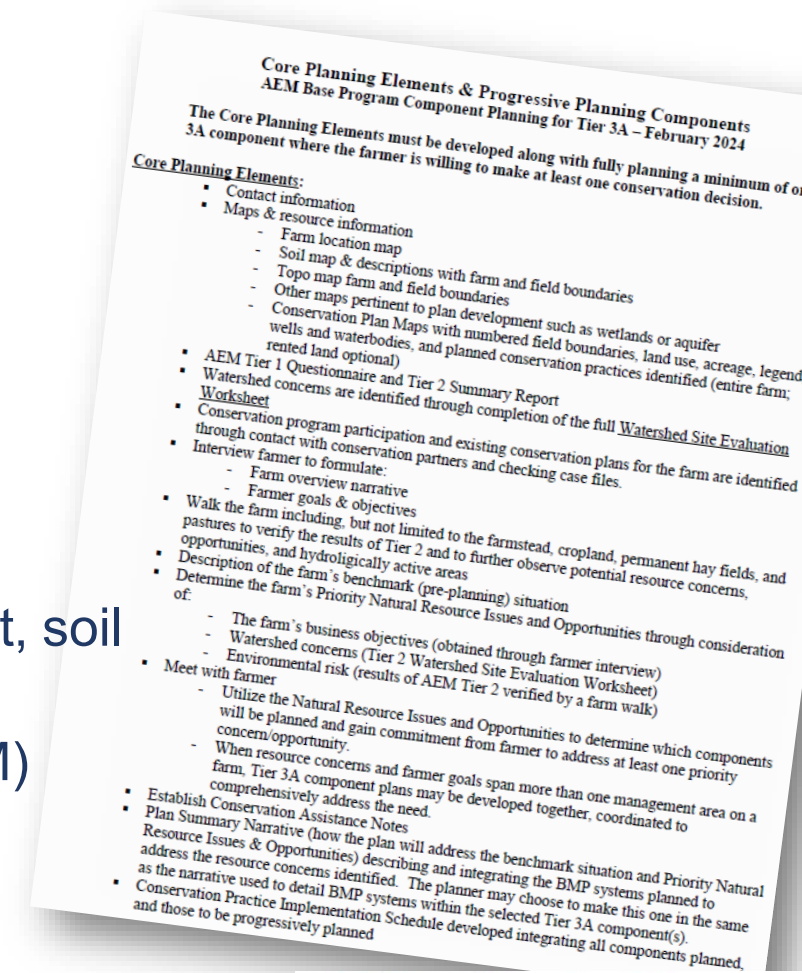
- Requires AEM or NRCS Planner Certification

▪ **Tier 3C** - Whole Farm Plan

AEM Tier 3 – Conservation Planning

Common planning threads...

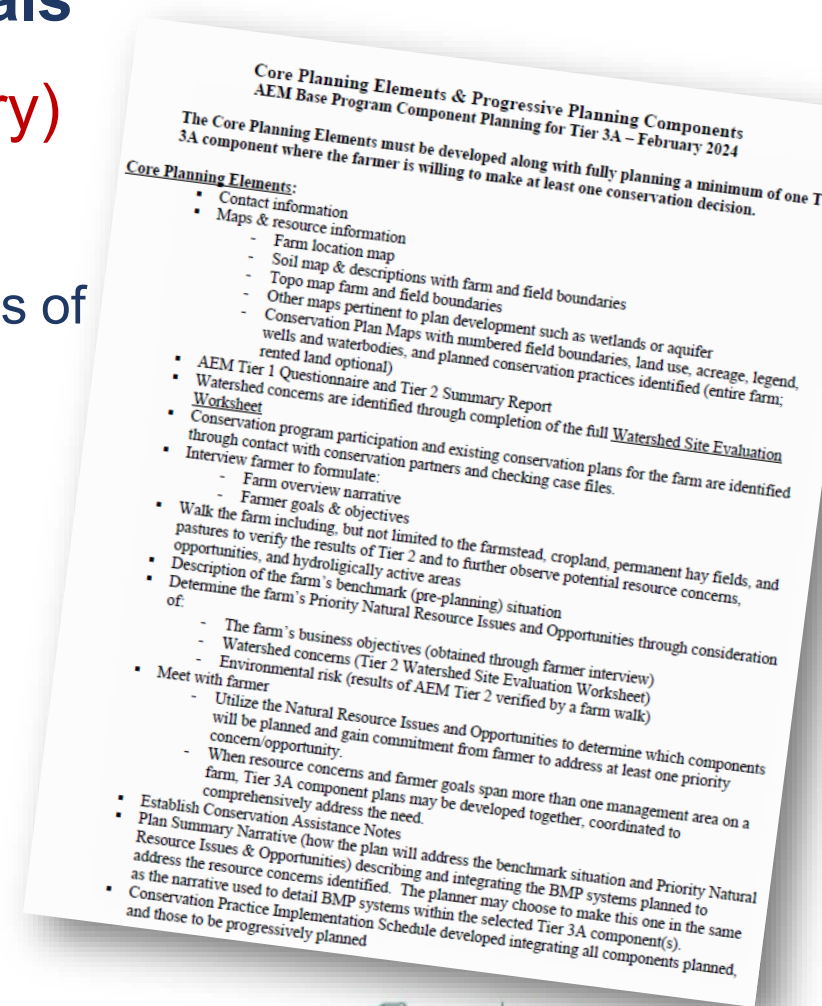
- Thorough site assessment – existing conditions
 - Farmer goals, Tier 2 results, maps, soils, topography, watercourses, wetlands, utilities, property boundaries, aspect, existing herbaceous and woody species, invasive species, existing natural regeneration potential, seed potential from seedbank or proximity to forest edge, existing soil erosion or other resource concerns, etc.
- Develop a BMP System based on NRCS Standards for....
 - Site preparation plans
 - Afforestation (natural regeneration, tree planting) plans
 - Other conservation plans (e.g., crop rotations, grazing management, soil and water management, habitat, recreation)
 - Longer-term monitoring, maintenance, and survivability plans (O&M)
 - Alternatives for farmer selection
- BMP Implementation Schedule, narratives, maps, assistance notes



AEM Tier 3 – Conservation Planning

Builds on Whole Farm Tier 2 Assessment and farmer goals

- **Tree Planting in open lands (for afforestation or agroforestry)**
 - Use AEM Tier 3A Forest Conservation Plan guideline or
 - AEM Tier 3A Cropland Conservation Plan guideline for conversions of cropland to agroforestry projects
- **Tree Planting in or adjacent to pastures**
 - Use AEM Tier 3A Pasture Management Plan guideline
- **Forestry/silvicultural projects in forest lands**
 - Use AEM Tier 3A Forest Conservation Plan guideline
- **Soil and water conservation projects in forests**
 - Use AEM Tier 3A Forest Conservation Plan guideline




Many NRCS Standards are used in AEM Tier 3 Plans

www.nrcs.usda.gov/technical/efotg

- Tree/Shrub Site Prep (NY490)
- Tree/Shrub Establishment (NY612)
- Forest Stand Improvement (NY666)
- Forest Farming (NY379)
- Brush Management (NY314)
- Herbaceous Weed Treatment (NY315)
- Fence (NY382)
- Prescribed Grazing (NY528)
- Contour Orchard and Other Perennial Crops (NY331)
- Hedgerow Planting (NY422)
- Access Control (NY472)
- Forest Trails and Landings (NY655)
- Stream Crossing (NY578) and more....

*Planned and
implemented
as systems*



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Ag Best Management Practice Systems

BMP SYSTEM NAME	BMP SYSTEM NAME
Access Control System	Pathogen Management System
Agrichemical Handling and Storage System	Petroleum and Oil Products Storage System
Composting System – Animal	Prescribed Rotational Grazing System
Erosion Control System – Structural	Process Wash Water Management System
Feed Management System	Riparian Buffer System
Forestry / Agroforestry System	Short Term Waste Collection and Transfer System
Integrated Pest Management System	Silage Leachate Control and Treatment System
Irrigation Water Management System	Soil Health System
Livestock Heavy Use Area Runoff Management System	Stream Corridor and Shoreline Management System
Manure and Agricultural Waste Treatment System	Waste Storage and Transfer System
Nutrient Management System – Cultural	<i>More to come....</i>



Ag BMP Systems Catalogue

Forestry / Agroforestry System

- **Goal: enhance tree growth for carbon sequestration and other benefits on current or proposed forest lands.**
- Example uses....
 - Tree planting for afforestation on open lands
 - Site assessment is key, esp. to gauge natural regeneration potential and forester involvement
 - Tree planting for agroforestry on open lands
 - Site assessment is key, esp. to gauge natural regeneration potential and forester involvement
 - Forestry/silvicultural projects in forests
 - Requires a forester
 - Forester also required if predominately using natural regeneration on open/scrubby lands
 - Soil and water conservation projects in forests
- Forester
 - Option 1: Certification
 - SAF or NRCS TSP for Forestry Planning and Practices
 - Option 2: Combination of Education and Experience
 - Based on college education and work experience per SAF criteria

Forestry / Agroforestry System

DEFINITION

A System of conservation practices that enhances the growth of trees for carbon sequestration and other benefits, conservation of natural resources, and farm viability on current or proposed forest lands.

WATER QUALITY PURPOSE

To reduce soil erosion and reduce/stabilize stormwater flows from existing forest lands and infrastructure (e.g., forest trails and landings, access roads, culverts, stream crossings, buffers, critical area plantings) and protect sensitive hydrologic areas (e.g., wetlands, streams). The system may also be applied to existing crop, pasture, or idle lands to further reduce soil erosion and slow stormwater flows through conversion to a forested land use (afforestation).

POLLUTANT CONTROLLED

Sediment, nutrients, pesticides, biochemical oxygen demand (BOD), or thermal modification.

WHERE USED

This System can be applied to existing forest lands on farms as well as cropland, pasture being converted to forest land (without livestock), or idle lands on farms. This System is currently designed for lands where forestry or agroforestry activities do not include integration with livestock, due to the complexity of silvopasture management. Practices such as Access Control and Fence may be used to exclude livestock and wildlife from the land involved with this System. This System is also not applied to stabilize stream banks or shorelines, as a standalone System; this System and Component BMPs may be used in conjunction with the Stream Corridor and Shoreline Management System to aid in the stabilization of stream banks or shorelines.

The Prescribed Rotational Grazing System shall be used in scenarios where trees will be planted within or immediately adjacent (e.g., Windbreak-Shelterbelt Establishment and Renovation) to existing pastures to support silvopasture objectives.

SYSTEM DESCRIPTION

A Forestry / Agroforestry System consists of conservation practices that enhance the growth of trees and conservation of natural resources on current or proposed forest lands. Projects within this System may take many forms based on the resource concerns, environmental opportunities, farmer goals, and knowledge, skills, and abilities of the those involved in planning and implementing the project with the farmer. Some of example applications of this System, follow.

Tree Planting for Afforestation on Open Lands

The System may involve site preparation, tree planting, and establishment management on existing idle land on farms (i.e., land in advanced herbaceous development with limited natural regeneration, insufficient for forest stand establishment), cropland, or pasture for the purpose of afforestation (e.g., Tree/Shrub Establishment). The intent of the System is to provide multiple benefits across resources, for example with carbon sequestration, soil conservation, water quality, stormwater peak flows, habitat, and farm productivity. Depending on complexity of the site and existing conditions (e.g., landowner goals, soils, slope, aspect, invasive species management, interfering hardwood species, existing natural regeneration potential, seed potential from seedbank or proximity to forest edge, existing soil erosion or other resource concerns), this application may be

Funding Programs to Help Advance AEM on Farms

- Locally-led and sponsored by your **Soil & Water Conservation District**
 - Projects based on an AEM or equivalent conservation plans (e.g., SWCD, NRCS, CAFO, DAP)
 - Funded through the NYS Environmental Protection Fund via NYS AGM / Soil and Water Conservation Committee
 - **AEM Base Program**
 - **Agricultural Non-Point Source Pollution Abatement and Control Program (AgNPS)**
 - **Climate Resilient Farming (CRF)**
 - **Source Water Buffer Program**
 - **Ecosystem Based Management (EBM) Programs**
 - **State Aid to Districts**
 - Other Programs from NYSDEC, USDA-NRCS (EQIP, CSP), USDA-FSA, USEPA, and others....
- + Significant, on-going investment by farmers.



SWCD Directory

AEM Base Program

Funding for Districts to provide.....

1. conservation technical assistance through AEM's 5-Tiers *and*
2. cost-share funding with farmers to implement BMP Systems in Tier 4 (\$200K max/District; two-year cycles)

AEM Tier	Purpose	NRCS 9 Step Process
Tier 1 – Inventory (Questionnaire)	Basic farm info and interests	<ol style="list-style-type: none"> 1. ID Issues & <u>Opps</u> 2. Determine Objectives 3. Inventory Resources 4. Analyze Resource Data 5. Formulate Alternatives 6. Evaluate Alternatives 7. Make Decisions 8. Implementation 9. Evaluation
Tier 2 – Assessment (“Tier 2 Worksheets”)	Identify existing stewardship, resource concerns, and opportunities	
Tier 3 – Planning	Develop conservation plans	
Tier 4 – Implementation	Implement conservation practices based on the plans	
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Ag Non-Point Source Water Quality Program

About:

- AgNPS program was created in 1993
- First Round of AgNPS was awarded in 1994
 - \$340,000
- Approximately, \$254 million has been awarded for AgNPS projects
- Approx. \$25 million available for projects in Round 30
 - RFP out in fall 2024

Program Goals:

- Water quality protection
- Reduce and/or prevent the non-point source contribution from agricultural activities in watersheds across the State
- Utilize AEM Framework and Soil and Water Conservation Districts to implement the program



Climate Resilient Farming (CRF) Grant Program

- **Launched in 2015 (Rounds 1-8)**
 - ~\$69 million awarded
 - 570 farms
 - ~574,000 metric tons of CO₂e/yr estimated emissions reduction
 - Includes 29 cover/flare projects to date
- **Four tracks (as of Round 8):**
 1. Livestock Management: Alternative Manure Management & Precision Feed Management
 2. Adaptation & Resiliency
 3. Healthy Soils NY
 4. Agricultural Forest Management
- **Goals: GHG Mitigation, C Sequestration, and Adaptation + Farm Viability**



CRF Funding Tracks

CRF Track 2

- **Adaptation & Resiliency (emphasis on water management for flood and drought)**
 - Riparian Buffer System
 - Stream Corridor and Shoreline Management System
 - Erosion Control System – Structural
 - Irrigation Water Management System
 - Access Control System
 - Prescribed Rotational Grazing System
 - Integrated Pest Management
 - Weather monitoring systems and tools
 - Green Infrastructure Systems



CRF Funding Tracks

CRF Track 3

• Soil Health

- Cover crops, conservation tillage, structural soil conservation practices, conservation crop rotations, buffers, agroforestry, etc.
- Outreach eligible expense
- Equipment eligible expense, e.g.,
 - draghose systems associated with improved NM and SH
 - yield monitors and adaptive management;
 - cover crop seeders;
 - central tire inflation systems
 - etc.



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CRF Funding Tracks

CRF Track 4 (new in Round 8)

- **Afforestation / Forest Management on Farms**
 - Tree planting (or natural forest regeneration) on underutilized Ag lands
 - Forest regeneration work in existing woodlands on farms
 - Along with landowner goals, primary goal is carbon sequestration



Agricultural Environmental Management

Daily, incremental progress is meaningful and makes the difference.

.... let's keep doing it together.

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<https://agriculture.ny.gov>

<https://agriculture.ny.gov/soil-and-water/soil-water-conservation-committee>



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Agriculture and Markets**

Web Soil Survey - websoilsurvey.sc.egov.usda.gov

The screenshot shows the Web Soil Survey interface. At the top, there is a navigation bar with links for Contact Us, Subscribe, Archived Soil Surveys, Soil Survey Status, Glossary, Preferences, Link, Logout, and Help. Below this is a secondary navigation bar with tabs for Area of Interest (AOI), Soil Map, Soil Data Explorer, Download Soils Data, and Shopping Cart (Free). The main content area is titled "View Soil Information By Use: All Uses" and includes a "Printable Version" and "Add to Shopping Cart" button. A sub-navigation bar contains tabs for Intro to Soils, Suitabilities and Limitations for Use, Soil Properties and Qualities, Ecological Sites, and Soil Reports. On the left, there is a "Search" section with a "Soil Reports" list including categories like AOI Inventory, Building Site Development, Construction Materials, Disaster Recovery Planning, Land Classifications, Land Management, Recreational Development, Sanitary Facilities, Soil Chemical Properties, Soil Erosion, Soil Health, Soil Physical Properties, Soil Qualities and Features, and Vegetative Productivity. The "Vegetative Productivity" section is expanded to show "Forestland Productivity with Site Index Base" and "Options" (Include minor soils?). The main map area, titled "Soil Map", shows a satellite-style map with various soil types labeled (e.g., LyF, PwD, CgB, KyB, VeB, CgC, KyA, VeC, CgB, AmC, CpB, NeC, CvA, VeB, KyA, VeD, RmA, VeE, VeB, VeC, VeB, KyA, VeB, AmC, CgB, CvA, VeB, KyA, VeB). A scale bar at the bottom indicates 1,000 feet.

The screenshot shows the Web Soil Survey homepage. At the top, there is a navigation bar with links for Home, About Soils, Help, and Contact Us. Below this is a secondary navigation bar with the "Web Soil Survey" logo. The main content area is titled "You are here: Web Soil Survey Home" and includes a "START WSS" button. A search box is present with the text "The simple yet powerful way to access and use soil data." Below the search box is a "Browse by Subject" section with links for Soils Home, National Cooperative Soil Survey (NCSS), Archived Soil Surveys, Status Maps, Official Soil Series Descriptions (OSD), Series Extent Explorer, Geospatial Data Gateway, eFOTG, National Soil Characterization Data, Soil Health, and Soil Geography. A "Welcome to Web Soil Survey (WSS)" section provides an overview of the service, stating that it provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for more than 95 percent of the nation's counties and anticipates having 100 percent in the near future. The site is updated and maintained online as the single authoritative source of soil survey information. Below this is a "Four Basic Steps" section with a numbered list: 1. Define. The "Area of Interest (AOI)" tab is highlighted in the "Soil Map" section. Use the Area of Interest tab to define. On the right side, there is a "I Want To..." section with links for Start Web Soil Survey (WSS), Know Web Soil Survey Requirements, Know Web Soil Survey operation hours, Find what areas of the U.S. have soil data, Find information by topic, Know how to hyperlink from other documents to Web Soil Survey, Know the SSURGO data structure, and Use Web Soil Survey on a mobile device. At the bottom right, there is an "Announcements/Events" section with a link for Web Soil Survey 3.4.0 has been released! View Web Soil Survey release history and a link for Sign up for e-mail updates via GovDelivery.