



CAFO Enhanced Nutrient and Methane Management Program (ENMP) Project Descriptions

All projects support the New York State Agricultural Environmental Management (AEM) Program by funding the implementation of agricultural Best Management Practices (BMPs) to protect natural resources while maintaining the economic viability of New York State's diverse agricultural community.

Capital Region

\$11,414.38 awarded to the **Saratoga County Soil and Water Conservation District** to work with one farm in the **Hudson-Hoosic Watershed**. This project will:

- Implement a precision feed management system with real-time monitoring of feed rates for 1,000 milking cows and heifers.
- Improve feed efficiency, reduce waste, and better utilizing nutrients in the farm's feeding plan.
- Reduce greenhouse gas emissions by 39 metric tons of CO₂e annually.

Central New York

\$763,350.00 awarded to the **Cortland County Soil and Water Conservation District** to work with one farm in the Chenango Watershed. This project will:

- Implement a waste separation facility to remove sands and solids from liquid manure.
- Improve the farm's manure spreading efficiency and increase storage capacity by upwards of one-third volume.
- Reduce an estimate 59 metric tons of CO₂e over the project's three-year duration.

\$262,399.00 awarded to the **Cortland County Soil and Water Conservation District** to work with one farm in the **Chenango Watershed**. This project will:

- Install 11 waste transfers and dragline spreading equipment on farm fields, thereby significantly reducing soil compaction and truck traffic.
- Implement critical area planting, including tree and shrub plantings on 3.5 acres of previously disturbed grass area.
- Improve soil health and reduce the need for commercial fertilizer application.
- Reduce greenhouse gas emissions by 29 metric tons of CO₂e annually.

Finger Lakes

\$2,167,334.00 awarded to the **Ontario County Soil and Water Conservation District** to work with one farm in the **Chemung Watershed**. This project will:



- Add separation units and construct two covered and flared storage facilities, that accounts for 95% of the farm's manure.
- Implement a dragline application system that will reduce on-field traffic and vehicles' greenhouse gas emissions.
- Improve nutrient management by using separated solids as bedding.
- Reduce greenhouse gas emissions by 19,099 metric tons of CO₂e annually.

\$1,532,006.00 awarded to the **Ontario County Soil and Water Conservation District** to work with one farm in the **Seneca Watershed**. This project will:

- Replace a screw-press for waste separation that will allow full-scale separation of all manure on the farm.
- Cover and flare methane emissions from one of the farm's two manure storage facilities.
- Improve transfer capabilities between waste storages though an underground line, thereby reducing the need for truck transfers.
- Reduce an estimate 6,340 metric tons of CO₂e annually.

\$1,229,520.00 awarded to the **Ontario County Soil and Water Conservation District** to work with one farm in the **Seneca Watershed**. This project will:

- Replace the farm's existing manure separation, transfer, and cover and flare systems with more efficient options.
- Install a multi-screw press manure solids separation system, thereby allowing the farm to switch completely to bedding with separated manure solids.
- Replace the existing, depleted cover and flare portions for the waste storage, accounting for 100% of the manure produced by 2,200 adult cows.
- Project will result in the continued reduction of 14,620 CO₂e metric tons annually by promoting sustainable manure management.

\$905,066.00 awarded to the **Wyoming County Soil and Water Conservation District** to work with one farm in the **Upper Genesee Watershed**. This project will:

- Install a cover and flare system on a 12.5-million-gallon manure storage.
- Reduce greenhouse gas emissions by 25,842 metric tons of CO₂e annually through methane flaring.
- Divert rainwater from the cover for reuse, thereby increasing water use efficiency and decreasing the potential for nutrient runoff.

\$431,052.00 awarded to the **Ontario County Soil and Water Conservation District** to work with one farm in the **Seneca Watershed**. This project will:

- Replace an outdated and non-functional cover and flare system on the farm's primary manure storage facility.
- Treat waste from 92% of animals on the farm.
- Reduce 7,280 metric tons of CO₂e annually.



\$228,494.20 awarded to the **Wyoming County Soil and Water Conservation District** to work with one farm in the **Upper Genesee Watershed**. This project will:

- Install a manure separation system, which will allow the farm to replace sand bedding with separated solids.
- Reduce greenhouse gas emissions by reducing truckloads of imported bedding sand and removing volatile solids from manure.
- Enhance nutrient management by improving manure application efficiency and reducing the need for fertilizer.

\$115,027.85 awarded to the **Wyoming County Soil and Water Conservation District** to work with one farm in the **Upper Genesee Watershed**. This project will:

- Permanently close a deteriorated earthen waste storage facility.
- Transition from top-dressing manure application to precision injection, which will reduce nutrient volatilization and runoff.
- Fund the farm's completion of Whole Farm Nutrient Mass Balance and Carbon Footprint Assessments.
- Enhance soil health and protect the Silver Lake Watershed from eutrophication.
- Reduce 3,763 metric tons of CO₂e annually.

Mohawk Valley

\$942,162.50 awarded to the **Montgomery County Soil and Water Conservation District** to work with one farm in the **Mohawk Watershed**. This project will:

- Install aeration systems in two existing slotted floor manure storages to reduce methane emissions.
- Construct a covered storage for dry manure which will eliminate runoff and reduce anaerobic conditions that result in methane production.
- Reduce greenhouse gas emissions by 6,878 metric tons of CO₂e annually.

\$741,861.35 awarded to **Herkimer County Soil and Water Conservation District** to work with one farm in the **Mohawk Watershed**. This Project will:

- Implement a nutrient management system focused on switching from top dressing to dragline injection on 1,075 acres of crop land, incorporating over 27.2 million gallons of manure in a sustainable way.
- Complete soil testing on the farm's 102 fields, ensuring proper placement and timing of manure applications.
- Result in the annual reduction of 150 metric tons of CO₂e.
- Reduce nutrient loading into Steel Creek and the Upper Susquehanna River

\$293,850.00 awarded to the **Madison County Soil and Water Conservation District** to work with one farm in the Oneida Watershed. This project will:

- Implement cover crops on over 1200 acres by means of a no till planter, which will result in reduced erosion and act as a GHG carbon sink.



- Use draglines for manure application, which will effectively managing the farm's greenhouse gas production by reducing fossil fuels required for traditional manure spreading.
- Result in the annual reduction of 665 metric tons of CO₂e.

\$98,483.68 awarded to the **Oneida County Soil and Water Conservation District** to work with one farm in the **Mohawk Watershed**. This project will:

- Support the farm's transition from broadcast spreading to injector application of manure, which will reduce nutrient runoff and improve soil health.
- Acquire equipment to assist in the migration in waste application technique, including a frack tank to store manure closer to distant fields and a manure injector.
- Reduce greenhouse gas emissions by an estimated 171 metric tons of CO₂e annually through efficient equipment use and manure application.

\$54,611.89 awarded to **Oneida County Soil and Water Conservation District** to work with one farm in the Oneida Watershed. This project will:

- Switch the farm's strategy for manure incorporation from top dressing to injection, thereby increasing accumulation of organic matter and reducing the need for tillage.
- Promote more sustainable manure management on 1,060 acres, resulting in over 3,500 gallons of fuel savings by not using the 3-pass system.
- Improve management of the farm's harvest, by reducing labor costs and allowing time for harvest, planting, and herbicide application.
- Result in the annual reduction of 196 metric tons of CO₂e.

North Country

\$810,571.00 awarded to the **Clinton County Soil and Water Conservation District** to work with one farm in the **Lake Champlain Watershed**. This project will:

- Implement a Manure and Agricultural Waste Treatment System to separate manure solids, eliminate sand bedding, and enable dragline manure injection on 419 acres.
- Incorporate 220 acres of cover crops annually for the duration of the grant, which will improve soil health and reduce risk of nutrient export form erosion.
- Reduce greenhouse gas emissions by an estimated 68 metric tons of CO₂e annually.

\$526,926.21 awarded to the **Franklin County Soil and Water Conservation District** to work with one farm in the **St. Lawrence Watershed**. This project will:

- Introduce manure separation practices on the farm and transition livestock bedding from sand to manure solids, thereby reducing the need for off-site sand and cutting fuel costs.



- Install a 140' x 60' steel building to house manure separation equipment and separated fiber material.
- Reduce 16,343 metric tons of CO₂e annually.

\$457,056.00 awarded to the **St. Lawrence County Soil and Water Conservation District** to work with one farm in the **St. Lawrence Watershed**. This project will:

- Implement systems to continuously apply dairy manure on growing crops to 641 acres of cropland and use real-time nutrient monitoring to enhance uptake.
- Reduce methane emissions by 60% and ammonia volatilization by up to 80%, part of estimated 9,169 metric tons of CO₂e reduced annually.
- Minimize the need to apply fertilizers on fields and reduce downstream eutrophication.

Western New York

\$1,909,650.00 awarded to the **Cattaraugus County Soil and Water Conservation District** to work with one farm in the **Cattaraugus Watershed**. This project will:

- Construct a 12.5 million-gallon manure storage with a cover and flare to remove methane.
- Increase manure storage across the entire farm's operation by eight months.
- Reduce greenhouse gas emissions by 6,550 metric tons of CO₂e annually, through a decrease in the need for 1,427 gallons of diesel fuel annually through preventing rainwater input to the manure storage.

\$1,470,815.00 awarded to the **Chautauqua County Soil and Water Conservation District** to work with one farm in the **Chautauqua-Conneaut Watershed**. This project will:

- Install a geomembrane cover over two manure storages and retrofit a barn for solid separation equipment,
- Improve waste management and reducing greenhouse gas emissions by 5,568 metric tons of CO₂e annually.
- Exclude 4.3 million gallons of rainwater from manure storages annually, thereby reducing the number of vehicle trips required for spreading.

\$608,987.20 awarded to the **Wyoming County Soil and Water Conservation District** to work with one farm in the **Lower Genesee Watershed**. This project will:

- Construct a waste separation facility which will allow the farm to reduce the need for imported nutrient
- Support long-term planning by preparing the farm's existing earthen storages for eventual cover and flare.
- Complete a yearly Whole-Farm Nutrient Mass Balance and Carbon Footprint Assessment which will inform nutrient application and support sustainable crop field management.



\$246,900.00 awarded to the **Genesee County Soil and Water Conservation District** to work with one farm in the **Oak Orchard – Twelve Mile Creek Watershed**. This project will:

- Install approximately 4,150 feet of 10-inch (HDPE) pipe to dragline manure from two seven (7) million-gallon manure storages into the farm's 750 acres.
- Protect water quality in tributaries of the impaired Oak Orchard Creek and local karst aquifer drinking water source.
- Support the farm's management plan by reducing labor and equipment costs associated with traditional manure spreading.
- Reduce 3.3 metric tons of CO₂e annually.

