Agricultural
Environmental
Management

Round 30 Agricultural Nonpoint Source Abatement and Control Program 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.

Western New York

$144,962 was awarded to the Allegany County Soil and Water Conservation District to work with two farms in the Genesee River Watershed (Bond Act). This project will:

- Implement bedded pack barns and manure storage systems to prevent runoff of nutrients and sediment
- Eliminate direct runoff from livestock heavy use areas nearby to streams and wetlands that drain to Caneadea Creek
- Contribute to water quality improvements in downstream Rushford Lake and support the goals outlined in the Genesee River Basin Nine Element Plan

$71,535 was awarded to the Allegany County Soil and Water Conservation District to work with one farm in the Genesee River Watershed (Bond Act). This project will:

- Implement a Waste Storage and Transfer System to capture and manage approximately 800 tons of manure annually
- Construct a bedded pack barn and reduce direct livestock contact with the stream
- Build upon prior conservation investments in the watershed to further improve downstream water quality

$293,075 was awarded to Allegany County Soil and Water Conservation District to work with one farm in the Genesee River Watershed (Bond Act). This project will:

- Construct a bedded pack barn to increase solid manure storage capacity for 150 mature dairy cows
- Improve nutrient management by reducing the volume of manure applied per acre
- Protect the municipal water supply for the Village of Angelica by reducing nutrient and sediment runoff into Black Creek

$910,075 was awarded to the Cattaraugus County Soil and Water Conservation District to work with one farm in the Cattaraugus Creek Watershed (EPF). This Project will:

- Eliminate winter spreading of manure through the installation of a Waste Storage and Transfer System, reducing the potential for runoff and the farm's impact on the vulnerable Cattaraugus Creek Watershed.
- Install a Riparian Buffer System to filter any remaining runoff and limit livestock access to sensitive areas to local creek water quality and reduce erosion.

$453,493 was awarded to the Chautauqua County Soil and Water Conservation District to work with one farm in the Conewango Creek Watershed (EPF). This Project will:

- Address the farm's resource concerns with the installation of a Waste Storage and Transfer System with 5-month storage capacity, eliminating the need for adverse condition manure spreading and temporary manure stockpiles.
- Install a Livestock Heavy Use Area Runoff Management System, removing the existing outdoor barnyard and livestock stream access, effectively eliminating numerous water resource concerns.

$813,782 was awarded to the Chautauqua County Soil and Water Conservation District to work with two farms in the Conewango Creek Watershed (EPF). This Project will:

- Eliminate the need for daily manure spreading in adverse winter weather and resource concerns that go along with it through the installation of Waste Storage and Transfer Systems.
- Install a Silage Leachate and Control System to provide a greater level of collection.
- Directly tie into the county Agricultural Environmental Management Strategic Plan by addressing agricultural nutrient runoff through controlling leachate and construction of manure storages.

Finger Lakes

$1,492,424 was awarded to the Ontario County Soil and Water Conservation District to work with four farms in the Upper Genesee Watershed (EPF). This Project will:

- Assist producers to build enhanced waste quality protections and climate resiliency into their farm operations.
- Assist in the development of the full system barnyard waste management infrastructure needed to collect all barnyard manure waste and eliminate contaminated runoff into clean water sources.
- Expand upon ongoing and past water quality protection efforts to follow Agricultural Environmental Management conservation plans and mitigate 121 MT of C02 equivalent GHG emissions.

$444,200 was awarded to the Ontario County Soil and Water Conservation District to work with two farms in the Upper Genesee River Watershed (Bond Act). This project will:

- Implement barnyard runoff management practices to address manure related water quality issues and reduce nutrient loading
- Eliminate over 6 acres of exposed barnyard by installing covered heavy use areas, curbs, clean water diversions, and runoff management practices

- Reduce phosphorus runoff from high-risk farmstead areas nearby to waterbodies

$533,330 was awarded to the Seneca County Soil and Water Conservation District to work with four farms in the Cayuga Lake Watershed (EPF). This Project will:

- Address critical water quality concerns by managing runoff in areas with heavy livestock use and utilizing prescribed rotational grazing systems.
- Result in the reduction of 169 tons of sediment, 2,874 pounds of nitrogen, and 1,974 pounds of phosphorus--all with the aim of reducing the occurrences of harmful agal blooms in Cayuga Lake.
- Decrease annual greenhouse gas emissions by 151 MT of CO2 equivalent GHG emissions.

$57,995 was awarded to the Wayne County Soil and Water Conservation District to work with one farm in the Oak Orchard-Twelvemile Watershed (Bond Act). This project will:

- Implement a waste storage and roof runoff practices to reduce nutrient runoff and protect the nearby tributary to Salmon Creek
- Construct a Livestock Heavy Use Area Runoff Management System to prevent further soil and nutrient loss
- Improve on-farm nutrient management practices in accordance with the farm's Comprehensive Nutrient Management Plan (CNMP)

$126,750 was awarded to the Wayne County Soil and Water Conservation District to work with one farm in the Lake Ontario Watershed (Bond Act). This project will:

- Construct two covered barnyard systems designed to reduce runoff from livestock housing areas
- Implement heavy use area protections and gutter/underground outlet systems to prevent contaminated water from entering a nearby tributary
- Address significant nutrient concerns identified through AEM planning

$874,859 was awarded to the Wyoming County Soil and Water Conservation District to work with one farm in the Buffalo-Eighteenmile Watershed (Bond Act). This project will:

- Implement a waste storage and transfer system to reduce nutrient-laden runoff and improve the farm's ability to manage manure
- Install roof runoff structures and a milkhouse waste storage system to prevent clean water from mixing with contaminants
- Establish a riparian forest buffer along a tributary to Buffalo Creek

$757,650 was awarded to the Wyoming County Soil and Water Conservation District to work with four farms in the Buffalo-Eighteenmile Watershed (EPF). This Project will:

- Protect vulnerable waterbodies through the stabilization of multiple streambanks and the installation of riparian buffer systems.
- Reduce farm runoff and increase nutrient management through the installation of multiple waste storages and silage leachate control systems.
- Mitigate 152 MT C02 equivalent GHG emissions.

$1,121,262 was awarded to the Wyoming County Soil and Water Conservation District to work with one farm in the Genesee River Watershed (EPF). This Project will:

- Address nutrient problems in the Genesee River Basin to benefit both the Genesee River and nearshore Lake Ontario water quality.
- Install Waste Storage and Transfer Systems to reduce spreading in winter months and during inclement weather.
- Reduce agricultural runoff and improved filtration through the installation of a riparian forest buffer, and overall mitigation of 5 MT of C02 equivalent GHG emissions.

$406,754 was awarded to the Wyoming County Soil and Water Conservation District to work with one farm in the Niagara River Watershed (Bond Act). This project will:

- Implement BMPs to reduce sediment and nutrient runoff from a beef and dairy operation
- Decommission a failing earthen waste storage structure and construct a new 1-million-gallon concrete storage to eliminate daily manure spreading
- Establish a 0.5-acre riparian forested buffer to reduce direct runoff into the Tonawanda Creek Tributary

$492,857 was awarded to the Wyoming County Soil and Water Conservation District to work with one farm in the Buffalo-Eighteenmile Watershed (Bond Act). This project will:

- Implement a Waste Storage and Transfer System to reduce nutrient runoff from manure and milk center waste
- Install a 0.5-acre riparian forest buffer and associated fencing along an existing grass waterway to filter runoff
- Divert clean roof runoff away from the farmstead and construct an animal mortality facility to prevent nutrient and pathogen contamination

$231,611 was awarded to the Wyoming County Soil and Water Conservation District to work with one farm in the Niagara River Watershed (Bond Act). This project will:

- Implement a Waste Storage and Transfer System and barnyard runoff management practices to eliminate a known source of sediment and nutrient pollution from a beef operation
- Establish a riparian buffer system along a tributary to the Tonawanda Creek to stabilize an eroding streambank
- Improve water quality in the Tonawanda Creek, an impaired Class A stream and drinking water source

$600,446 was awarded to the Wyoming County Soil and Water Conservation District to work with one farm in the Niagara River Watershed (Bond Act). This project will:

- Implement a Waste Storage and Transfer System to collect and store manure and milkhouse wastewater
- Improve soil health and reduce environmental risk by enabling strategic timing of manure spreading

- Address a documented source of nonpoint pollution identified through the AEM Program.

$96,995 was awarded to the Wyoming County Soil and Water Conservation District to work with one farm in the Genesee River Watershed (Bond Act). This project will:

- Implement a Livestock Heavy Use Area Runoff Management System that will address runoff from a sloped concrete barnyard
- Install a 0.25-acre riparian forested buffer to reduce nutrient runoff
- Support the goals of the AEM Strategic Plan, and DEC Genesee River 9-Element Plan

$625,000 was awarded to the Yates County Soil and Water Conservation District to work with 13 farms in the Keuka Lake Watershed (EPF). This Project will:

- Reduce phosphorus loading the in the Keuka Lake Watershed by an estimated 975 pounds per year.
- Enhance infiltration and reduce the volume and velocity of runoff to reduce nitrogen loading to the watershed by an estimated 2,250 pounds per year.
- Protect soil resources, reduce erosion, and decrease sediment loads to receiving waterbodies by an estimated 850 tons of sediment per year.

Southern Tier

$300,375 was awarded to the Chenango County Soil and Water Conservation District to work with one farm in the Upper Susquehanna River Watershed Bond Act). This project will:

- Construct a Silage Leachate Control and Treatment System to reduce nutrient runoff into the Unadilla River
- Address runoff from outdated feed storage located on permeable soils which is a potential resource concern
- Install a 9-acre riparian forest buffer to enhance habitat, filter pollutants, and improve biodiversity

$668,650 was awarded to the Delaware County Soil and Water Conservation District to work with one farm in the Delaware River Watershed (EPF). This Project will:

- Address farm water management concerns by reducing nutrient runoff and increasing resiliency to extreme precipitation events through the installation of a covered barnyard and manure storage facility.
- Installation of a 1.4-acre riparian forest buffer to filter and protect hydrologically sensitive areas from nutrient and sediment laden runoff and increase biodiversity and wildlife habitat.
- Restrict livestock access to sensitive areas to reduce nutrient loading and erosion.

$498,210 was awarded to the Delaware County Soil and Water Conservation District to assist one farm in the Upper Susquehanna River Watershed (Bond Act). This project will:

- Construct a 6,500 sq ft covered barnyard and runoff management system to reduce nutrient and sediment pollution entering a nearby stream
- Install exclusion fencing, 1.3 acres of riparian buffer, and alternative water systems to protect streams from gazing livestock
- Capture and treat milk house wastewater and clean water runoff to address high BOD levels

$367,276 was awarded to the Delaware County Soil and Water Conservation District to work with one farm in the Upper Susquehanna River Watershed (Bond Act). This project will:

- Construct a concrete bunk silo and associated Silage Leachate Control and Treatment System
- Divert leachate from flood-prone areas into an existing waste storage structure and a new 0.30-acre vegetative treatment area, thereby reducing the risk of groundwater contamination
- Restore and reseed a floodplain previously used for silage storage, stabilize soils, and reduce nutrient and sediment loading

$18,972 was awarded to the Tioga County Soil and Water Conservation District to work with four farms in the Owego-Wappasening Watershed (EPF). This Project will:

- Supports Planning and the goals of the Chesapeake Bay Total Maximum Daily Load by lessening the threat of runoff water in the watershed by improving soil health.
- Reduce the quantity of phosphorous and nitrogen fed to livestock, minimizing the excretion of nutrients into critical aquifer recharge streams, improve regional water quality.

$269,488 was awarded to the Tioga County Soil and Water Conservation District to work with one farm in Upper Susquehanna Watershed (Bond Act). This project will:

- Construct stormwater retention basins to mitigate flood impacts, reduce peak stream flows, and prevent gully erosion
- Establish a riparian forest buffer along streams and wetland areas
- Implement prescribed rotational grazing system with exclusion fencing and livestock water sources

$1,656,920 was awarded to Tompkins County Soil & Water Conservation District to work with two farms in the Owasco Lake Watershed (Bond Act). This project will:

- Construct a manure collection channel, pumping station, and transfer line to the farm’s new manure storage facility
- Upgrade and relocate manure storage to consolidate waste management, and reducing runoff
- Reduce greenhouse gas emissions and truck traffic associated with manure hauling

$812,520 was awarded to the Tompkins County Soil and Water Conservation District to work with two farms in the Owasco Lake Watershed (EPF). This project will:

- Capture and contain nutrient-rich silage leachate flows from bunk silos
- Implement practices to effectively manage silage leachate and reduce nutrient loading
- Reuse collected silage leachate for irrigation on pasture fields and establish riparian forest buffers

Central New York

$972,235 was awarded to the Cortland County Soil and Water Conservation District to work with one farm in the Otisco Lake Watershed (Bond Act). This project will:

- Construct a 1.4-million-gallon concrete manure storage system with six months of capacity
- Support water quality protection in multiple high-priority watersheds/waterbodies including the Susquehanna River/Chesapeake Bay, Otisco Lake, and the Cortland-Homer-Preble Sole Source Aquifer

$629,260 was awarded to the Cortland County Soil and Water Conservation District to work with one farm in the Tioughnioga River Watershed (Bond Act). This project will:

- Construct a 5-million-gallon synthetically lined satellite manure storage system
- Enable manure dragline application thereby decreasing truck traffic, lowering compaction, and supporting compliance with the farm's CAFO permit
- Establish a 3-acre riparian forest buffer along the East Branch Tioughnioga River

$218,605 was awarded to the Cortland County Soil and Water Conservation District to work with one farm in the Lower East Branch Tioughnioga River Watershed (EPF). This project will:

- Install a roof, concrete curbing, and a push wall over the existing uncovered livestock heavy use area
- Support the farm's manure management and prevent
- Establish a 1.7-acre riparian forested buffer along the East Branch Tioughnioga River

$720,898 was awarded to the Cayuga County Soil and Water Conservation District to work with 11 farms in the Cayuga Lake Watershed (EPF). This Project will:

- Plant 6,385 acres of cover crops and implement 25 acres of wood mulching over 5 years to increase soil water retention through an increase of organic matter and carbon supply and slow the potential for soil erosion and surface runoff into waterways.
- Prevent an estimated 28,000 tons of soil from entering Owasco Lake, Cayuga Lake, and Seneca River Watersheds.

$76,493 was awarded to the Cayuga County Soil and Water Conservation District to work with one farm in the Cayuga Lake Watershed (EPF). This Project will:

- Reduce the pollutants from the barnyard and concentrated livestock areas from entering nearby surface and groundwaters and exclude clean water from the concentrated livestock areas.

- Install a 25 ft. wide gravel heavy use area and a settling basin with gravel berm that will act as a vegetated treatment area to reduce nutrient loading of the watershed

$281,990 was awarded to the Madison County Soil and Water Conservation District to work with 15 farms in the Chenango River Watershed (EPF). This Project will:
- Implement a combination of reduced tillage practices and over 3,000 acres of cover crops in the Upper Susquehanna River Watershed to further meet the goals established in the Chesapeake Bay Total Maximum Daily Load.
- Improve soil health on these farms and protect water quality, making the watershed more resilient to a changing climate.
- Mitigate approximately 496 MT of CO_2 equivalent GHG emissions.

$728,450 was awarded to the Madison County Soil and Water Conservation District to work with four farms in the Tioughnioga River Watershed (EPF). This Project will:
- Further the goals of the AEM's Strategic Plan's for the Upper Tioughnioga River Watershed, and the goals established in the Chesapeake Bay Total Maximum Daily Load.
- Install Waste Storage and Transfer Systems, protecting valuable aquifers and reducing greenhouse gas emissions, fuel consumption, soil compaction, and fertilizer use.
- Plant 750 acres of cover crops to reduce soil erosion and improve soil health.
- Mitigate 114 MT C02 equivalent GHG emissions, reducing the greenhouse gas output of each participating farm.

$85,021 was awarded to the Onondaga County Soil and Water Conservation District to work with two farms in the Onondaga Lake Watershed (EPF). This Project will:
- Assist the goals identified in the Onondaga Lake Phosphorous Total Maximum Daily Load.
- Install Heavy Use Area Protection systems and fuel tank improvements to reduce agricultural runoff and erosion and prevent petroleum spillage, runoff, and seepage

$440,325 was awarded to the Onondaga County SWCD to work with one farm in the Chenango River Watershed (Bond Act). This project will:
- Construct a satellite manure storage tank to enable better manure management during inclement weather and field conditions
- Support manure injection and improve manure application practices
- Install a riparian buffer along nearby stream

$565,719 was awarded to the Onondaga County Soil & Water Conservation District for the to work with one farm in the Skaneateles Lake Watershed (Bond Act). This project will:
- Construct a synthetic-lined satellite manure storage enabling draglining of manure over approximately 440 acres of surrounding cropland

- Support watershed-based water quality improvement efforts documented in the Onondaga Lake TMDL and the HAB Plan for Skaneateles Lake
- Facilitate better timing and incorporation of manure

$808,151 was awarded to the Onondaga County Soil and Water Conservation District to work with two farms in the Fabius Brook Watershed (Bond Act). This project will:
- Implement two agricultural waste storage systems that will provide each farm with six months of manure storage capacity
- Replace outdated and under-capacity manure storage facilities
- Protect drinking water sources including the Cortland-Homer-Preble Aquifer System

Mohawk Valley

$934,148 was awarded to the Herkimer County Soil and Water Conservation District to work with one farm in the Mohawk River Watershed (EPF). This Project will:
- Construct a waste storage and concrete scrape area to be used to manage heifer manure.
- Meet goals of existing conservation plans and organizations such as the Mohawk River Coalition and Herkimer County Water Quality Coordinating Committee
- Allow the farm to more precisely analyze nutrient content of agricultural waste to improve the proper rate and placement of nutrients in the soil to meet the needs of crops and reduce runoff.

$569,993 was awarded to the Montgomery County Soil and Water Conservation District to work with one farm in the Mohawk River Watershed (EPF). This project will:
- Implement herbaceous and forested buffers along 1,800 feet of stream corridor to reduce nutrient and sediment runoff and improve aquatic habitat
- Install a manure storage facility equipped with an aeration system to minimize methane emissions and improve air quality
- Address critical farmstead water management concerns including silage leachate collection, barnyard runoff controls, and nutrient management to reduce direct discharges into nearby tributaries

North Country

$594,359 was awarded to the Clinton County Soil and Water Conservation District to work with one farm in the Lake Champlain Watershed (EPF). This Project will:
- Install a Silage Leachate Management System to improve environmental compliance and operational efficiency.
- Mitigate silage runoff risks by collecting and diverting silage leachate away from sensitive areas and directing it through a controlled treatment process.
- Plant 800 acres of cover crops annually for three years, equaling 2,400 total acres covered and 155 MT of CO_2 equivalent emissions mitigated

$421,347 was awarded to the Essex County Soil and Water Conservation District to work with two farms in the Lake Champlain Watershed (Bond Act). This project will:

- Construct covered barnyard to prevent nutrient-heavy runoff entering the Ausable River
- Install heavy use area protections with concrete pads to support manure handling and animal health
- Support goals of the Lake Champlain TMDL

$260,220 was awarded to the Jefferson County Soil and Water Conservation District to work with one farm in the Black River Watershed (EPF). This Project will:

- Reduce the farm's impact on the surrounding karst topography, principal aquifers, surface waters, and soils close to bedrock by installing a waste storage and transfer system.
- Provide livestock with an area to be fed and sheltered when weather conditions are not conducive for grazing through the installation of a compost bedded pack barn, eliminating the farm's livestock heavy use area along with the risk of surface and groundwater contamination.

$536,120 was awarded to the Jefferson County Soil and Water Conservation District to work with one farm in the Black River Watershed (EPF). This Project will:

- Help transition the farm away from daily manure spreading through the installation of an 8-month capacity waste storage and transfer system, allowing the farm to only apply manure to an actively growing crop, improving soil health and water quality.
- Help to reduce nutrient and sediment runoff loads reaching surface waters, helping NYS to achieve Clean Water Compliance in this high-priority watershed.

$281,400 was awarded to the Jefferson County Soil and Water Conservation District to work with one farm in the Black River Watershed (EPF). This Project will:

- Address water quality concerns in an area surrounded by and containing karst topography, principal aquifers surface waters, and soils close to bedrock.
- Install a covered barnyard to reduce runoff concerns and sediment loading of the watershed while excluding clean water from the area.

$131,599 was awarded to the Lewis County Soil and Water Conservation District to work with one farm in the Black River Watershed (Bond Act). This project will:

- Install a silage leachate control and treatment system with vegetated treatment area to collect and treat runoff from the farm’s bunk silos
- Prevent potent leachate from entering nearby stream to the farm
- Improve water quality and support the goals of the Black River Watershed Nine Element Plan and the AEM Strategy

Capital District

$75,014 was awarded to the Columbia County Soil and Water Conservation District to work with one farm in the Hudson River Watershed (EPF). This Project will:

- Establish a prescribed rotational grazing system to address sources of water quality impairment and improve the farm's grazing management.
- Construct a laneway and a solar powered water system to improve livestock access to paddocks and drinking water.
- Construct a stream crossing and install fencing to protect sensitive areas and more effectively practice rotational grazing.

$189,042 was awarded to the Schenectady County Soil and Water Conservation District to work with one farm in the Mohawk River Watershed (EPF). This Project will:

- Install a Silage Leachate Control System to reduce the generation of silage leachate and collect, store, treat, and dispose of effluents and runoff from the storage.
- Eliminate the dangerous effects of low- and high-flow leachate nutrient loading into the watershed and protect local waterways.
- Install a vegetated treatment area and fencing to filter any remaining runoff and limit livestock access to this area, ensuring it can continue to filter and improve water quality.

<u>Long Island</u>

$183,694 was awarded to the Suffolk County Soil and Water Conservation District to work with one farm in the Long Island Sound Watershed (EPF). This Project will:

- Protect Long Island's sole source aquifer and Moriches Bay Watershed from agricultural activity and fuel leakage and contamination.
- Install a Petroleum and Oil Products Storage System with n-Farm Secondary Containment Facility and Heavy Use Area Protection
- Assist the District and the farm in improving and protecting the quality of the County's ground and surface water resources.