USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

CONSERVING NATURAL RESOURCES IN NEW JERSEY

MARIA COLLAZO
Acting State Conservationist
732-537-6040
maria.collazo@nj.usda.gov
www.nj.nrcs.usda.gov

Who We Are

Inspired by a shared vision of agriculture as a valued component of the landscape, NRCS works in partnership with farmers, ranchers and many others to improve, restore and protect the Nation's natural resources.

Side-by-side with these partners, we work to sustain and improve the quality of our soil, water, air and wildlife habitat, and we develop conservation plans that work for the land and for farmers and ranchers. Farm Bill programs help with the cost of putting conservation on the ground, which benefits the farm, the watershed and the community. Conservation easement programs, also in the Farm Bill, help to protect the agricultural and natural resource values of the land over the long-term.

With our help, New Jersey is balancing economic goals with a high quality environment– ensuring productive lands to supply food, fiber, forest and energy products for the Nation and the world.

Ducks Try Out Newly Restored Wetland at Duke Farms

Wetlands Function Restored in New Jersey

Wetlands recharge ground water, store storm water flows, filter sediments and nutrients protecting adjacent landscapes (nutrient cycling), enhance wildlife habitat, and help conserve rare plant populations. Throughout New Jersey, NRCS is helping landowners restore and enhance these important habitats that have been drained on agricultural land.

The New Jersey Conservation Foundation (NJCF) requested NRCS assistance to restore wetlands at the Franklin Parker Preserve in the heart of the Pinelands National Reserve in 2004. Today 1,100 acres of wetlands have been restored, and an additional 1,100 acres of wetland buffers are being protected through a conservation easement – the largest NRCS easement in the northeast. Michele Byers, Executive Director of NJCF, recently accepted the 2011 New Jersey Governor's Environmental Excellence Award in the Healthy Ecosystems category for this work, crediting NRCS for coordinating and funding the project.

NRCS assistance for the restoration of 395 acres of wetlands at Duke Farms in Somerset County was initiated in 2010. The first phase of the wetland restoration was completed in 2011. Subsurface drainage tile, installed on these hydric soils when the land was used for crops, hay and pasture, were broken up and surface ditches were plugged to re-create wetland conditions. Since much of this area of the Raritan River Watershed experiences flooding during high rainfall events, this restoration will demonstrate practices that can be employed to help diminish flood flows in the area.

Of New Jersey's original 1.5 million acres of wetlands, a little over 900,000 acres remain. New Jersey wetland systems range from small vernal pools to expansive coastal marshes. Vernal pools, small temporary water pools that dry out part of the year, are crucial to invertebrates and amphibian breeding. New Jersey's coastal marshes are globally significant for waterfowl, wading birds, shorebirds and other migratory birds. NRCS is working with New Jersey's private landowners to restore and enhance this precious resource, and to help stop the net loss of wetland habitat in the state.

Protection of Water Quality

Dairy farmer protects stream and manages manure nutrients

Wanting to reduce the inefficiencies of his operation and protect the stream adjacent to his farm, Bill Dolbow, a Salem County dairyman, contacted NRCS for assistance. The comprehensive nutrient management plan (CNMP) he developed in 2010 specified when and where manure should be spread on the farm to maximize nutrient use by target crops. To properly time applications, manure storage facilities were necessary. Dolbow set his CNMP in motion in March 2011. By August 2011, the installation of a manure management system designed by NRCS engineers was complete. The roof gutters and other measures that were added to control and minimize runoff were completed a month later in October 2011. Thanks to Mr. Dolbow's strong commitment to the project, it was accomplished without delay. The stream is protected, and Dolbow can more efficiently manage his dairy operation while maximizing the nutrient benefits for crop production.

Facilities constructed to manage manure at this Salem County dairy operation will protect the stream adjacent to the farm.

Soil Survey for Every New Jersey County

Urbanized Hudson County does not have modern soil survey...yet

With 13,731 people per square mile (2010 Census), Hudson is the most densely populated county in New Jersey, ranking sixth overall among U.S. counties. The urban population has been largely underserved by soil survey; Hudson is the only county in the state without a modern soil survey. In 2011, however, NRCS soil scientists completed fieldwork for the Soil Survey of Hudson County. With the cooperation of Hudson Essex Passaic Soil Conservation District, Hudson County Division of Parks, and New Jersey Division of Parks and Forestry, NRCS soil scientists gained access and investigated conditions in parks across the county. The Survey characterizes disturbed or man-made fill soils and includes an inventory of hydric soils, salt marshes and other important habitat types in the county's remaining open space. This type of information is useful for restoration and revegetation efforts and storm water management. The Hudson County survey will be available on Web Soil Survey in 2012.

NRCS soil scientists and New Jersey City University Geoscience faculty discuss soil properties in JJ Braddock Park, North Bergen.

Restoration of Fish Passage

Industrial Revolution-era dam an enviromental and safety concern

Many dams installed years ago in New Jersey to power mills are now in disrepair and pose environmental and safety threats. A damaged, out-of-use dam at Finesville in Warren County had been the scene of two drownings, and the owner wanted it removed. Because the dam was creating an "ecological blockage" to fish passage, NRCS was able to partner with the Musconetcong Watershed Association and others to remove it. The safety of boaters and fishermen is improved, almost every organism in the river benefits, including macroinvertebrates, fresh water mussels, reptiles, amphibians, birds and migratory fish such as shad, herring, striped bass and eels, and the property owner is relieved of a potential liability. The Musconetcong River, a national Wild and Scenic River known locally as the "Muskie," now flows freely for seven miles from its confluence with the Delaware River. Project partners plan more work to enhance fish habitat, stabilize eroding stream banks, control invasive vegetation and plants trees and shrubs.

After conducting an environmental assessment of the site, NRCS helped restore fish passage on the Musconetcong River with the removal of the Finesville Dam.

Conservation Technical Assistance (CTA)

is simply about helping people help the land. NRCS has used CTA successfully for more than 75 years to reach out to American farmers, ranchers, and other private landowners and managers.

America's farmers and ranchers invest in conservation with help from CTA to care for the more than 70 percent of our land, water and other natural resources that are in their hands. In FY2011 New Jersey received $4.2 million in CTA funds.

NRCS employees work with customers to identify natural resource problems, inventory resources, develop conservation alternatives and help individual farmers, ranchers, Tribes, local governments and urban landowners with their conservation decisions. This prepares the way for using Farm Bill and other conservation funding.

Environmental Improvement:

Environmental Quality Incentives Program (EQIP)—promotes agricultural production, forest management and environmental quality as compatible goals.

Agricultural Water Enhancement Program (AWEP)—promotes water conservation and quality through partnered efforts.

Wildlife Habitat Incentive Program (WHIP)—improves wildlife habitat on private agricultural, forest and Tribal lands.

Agricultural Management Assistance (AMA) — encourages agricultural producers to address water management, water quality, and erosion control by incorporating conservation into their farming operations.

Conservation Easements:

Farm and Ranch Lands Protection Program (FRPP)—helps keep farm and ranch land in agriculture.

Wetlands Reserve Program (WRP)—restores wetlands and wetland habitat on marginal agricultural land

Stewardship:

Conservation Stewardship Program (CSP)—encourages long-term comprehensive conservation by maintaining and improving existing conservation measures.

Watershed and Communities:

Emergency Watershed Protection Program (EWP) —undertakes emergency measures in watersheds where there are imminent threats to life and property resulting from fire, flood and other natural disasters.

New Jersey in The National Landscape

Finding Ways to Help Conserve New Jersey's Diverse Resources

With a diversity of landscapes and resources in New Jersey, NRCS is crafting our outreach to ensure that we are "helping people help the land" throughout New Jersey.

- NRCS outreach to forestry groups and forestry Technical Service Providers resulted in an increase of 280% in the number of contracts related to forestry planning and implementation of forest management practices between 2010 and 2011. Forest health, pest and disease issues, wildfire hazards, water quality, erosion and sedimentation, carbon sequestration, rare plant and wildlife populations and cultural resources are considered in these plans.

- NRCS established three key partnerships to share technical staff in three areas to expand our outreach and improve our technical delivery:
  - Pollinator Conservation Specialist in partnership with the Xerces Society for Invertebrate Conservation
  - Organic Farming Technical Specialist in partnership with the Northeast Organic Farming Association of New Jersey
  - Wildlife Biologist in partnership with US Fish & Wildlife Service

- NRCS works with New Jersey farm and nursery operators to help them maximize irrigation water-use efficiency. Smart irrigation practices minimize runoff and soil erosion, and help protect and conserve water supplies while meeting crop needs.

  Since the beginning of the 2008 Farm Bill, NRCS has invested over $2 million in financial assistance through Farm Bill programs for water saving practices on New Jersey operations.

  In the past 3 years, NRCS has helped over 100 New Jersey growers plan and implement nearly 2,000 acres of low volume drip and sprinkler irrigation systems. On this acreage, approximately 920 million gallons of water have been saved annually, enough to provide about 36,000 New Jersey residents with water for one year. (Based on EPA estimate for New Jersey residents)

2011 Farm Bill Program Funding

NRCS Program	Number of Contracts	Financial Assistance to Producers
Farm and Ranch Lands Protection Program (FRPP)	24	$8,110,000
Agricultural Management Assistance (AMA)	15	$337,000
Agricultural Water Enhancement Program (AWEP)	5	$125,000
Conservation Stewardship Program (CSP)	5	$42,000
Environmental Quality Incentives Program (EQIP)	198	$5,000,000
Wetlands Reserve Program (WRP)	4	$1,072,000
Wildlife Habitat Incentives Program (WHIP)	17	$301,000

Financial Assistance (FA) is provided directly to producers. Conservation Technical Assistance (CTA) funding is used for professional planning and expertise to help carry out conservation activities.

Data source: Foundation Financial Information System Status of Funds Report October 2011, revised.

Primary Resource Concerns in New Jersey

Cropland: Soil Erosion, Water Quality Degradation, Soil Quality Degradation

Pastureland: Water Quality Degradation, Soil Quality Degradation, Degraded Plant Condition

Forestland: Degraded Plant Condition, Inadequate Habitat for Fish and Wildlife

Other Associated Ag Land: Water Quality Degradation, Inefficient Energy Use, Soil Erosion

State Resource Assessment - 2011

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

www.nj.nrcs.usda.gov
USDA is an equal opportunity provider and employer
May 2012