



Fiscal Year 2013 Annual Report

Natural Resources Conservation Service, Maine

Helping People Help the Land Since 1935

An Equal Opportunity Provider and Employer

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From the State Conservationist

As we finish up operating under the 2008 Farm Bill, I want to thank each and everyone one of you, whether you're an employee, partner, producer, legislator, municipality, or the general public, for all of your dedication and support of conserving Maine's natural resources. It is not a one person or one agency job...it takes each and every one of us to make it happen, because of the cost and the volume of the work involved. We're making great progress, but it will be a forever job to **preserve** and **maintain** our valuable resources. This report will summarize what work NRCS accomplished in Fiscal Year 2013. I am very proud to report these accomplishments and look forward to working with you as we continue our work under the 2014 Farm Bill.



*Juan C. Hernandez
State Conservationist
NRCS, Maine*

Who We Are

NRCS provides technical and financial assistance to help agricultural producers and others care for the land. NRCS has six mission goals that include high quality, productive soils; clean and abundant water; healthy plant and animal communities; clean air; an adequate energy supply; and working farms and ranchlands.

Vision

Productive Lands—
Healthy Environment

Mission

Helping People Help the Land

History

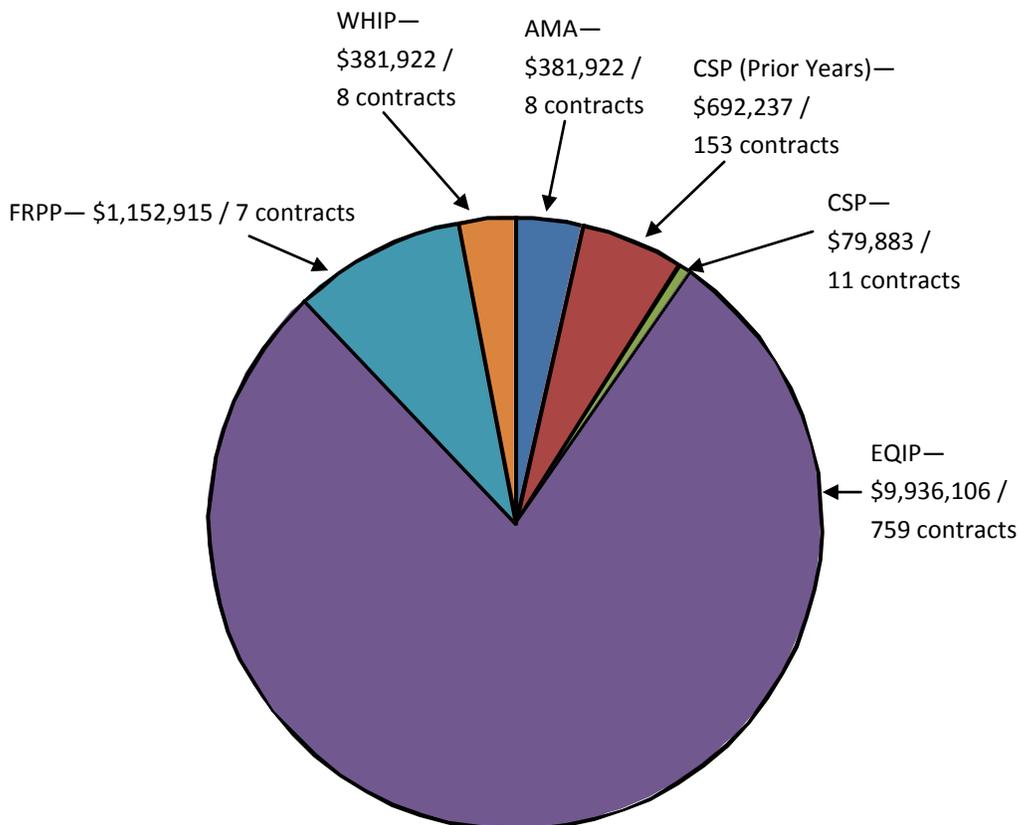
On April 27, 1935 Congress passed Public Law 74-46, in which it recognized that “the wastage of soil and moisture resources on farm, grazing, and forest lands...is a menace to the national welfare” and established the Soil Conservation Service (SCS) as a permanent agency in the USDA. In 1994, SCS's name was changed to the Natural Resources Conservation Service to better reflect the broadened scope of the agency's concerns. In doing so, Congress reaffirmed the federal commitment to the conservation of the nation's soil and water resources, first made 78 years ago.



Summary of Program Acronyms

- ⇒ **AMA**—Agricultural Management Assistance
- ⇒ **FRPP**—Farm and Ranch Lands Protection Program
- ⇒ **CSP**—Conservation Stewardship Program
- ⇒ **WHIP**—Wildlife Habitat Incentives Program
- ⇒ **EQIP**—Environmental Quality Incentives Program

Program Financial Assistance Dollars / Number of Contracts—Fiscal Year 2013



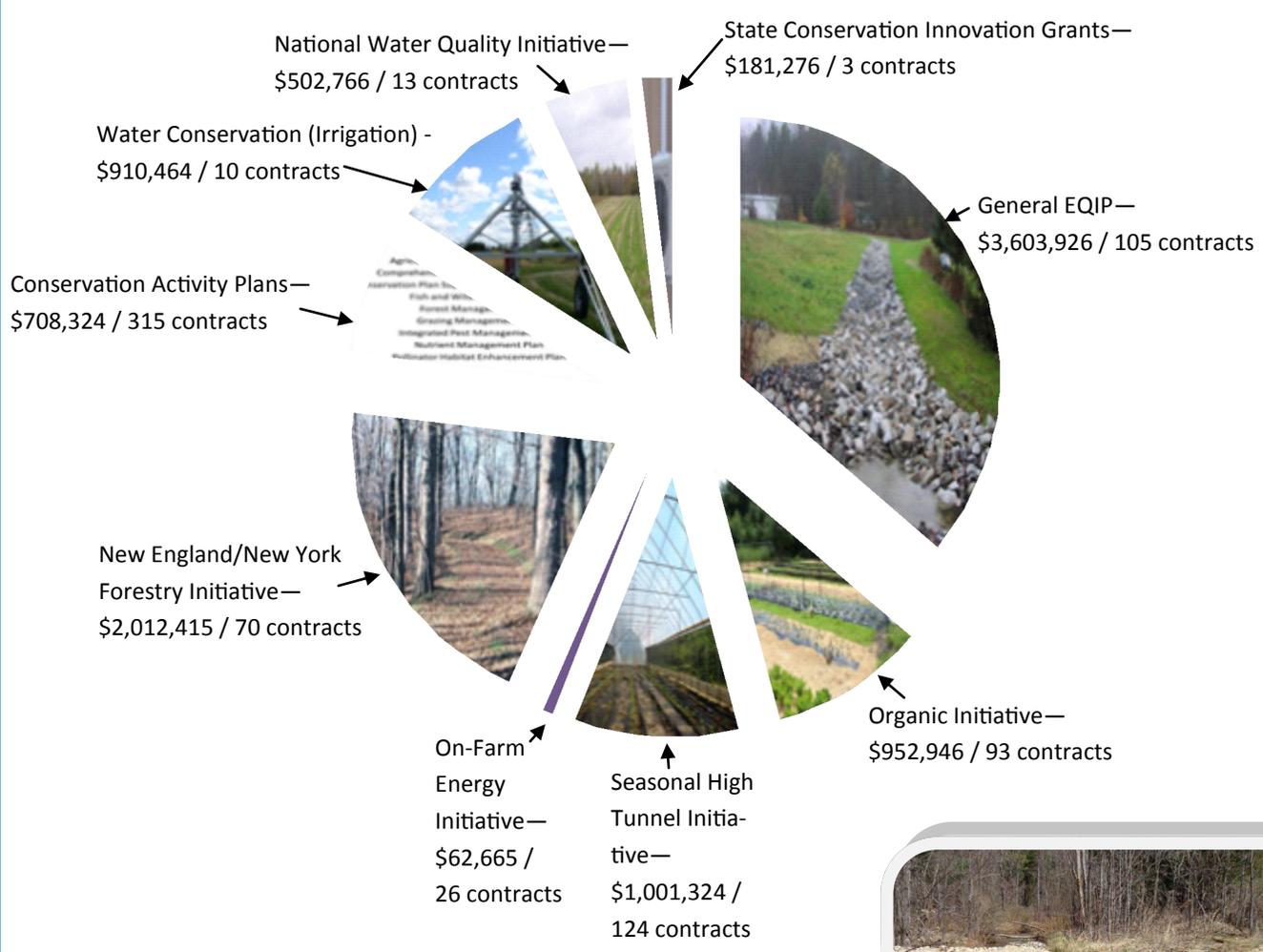
The above chart is a summary of Maine NRCS dollar obligations by program during Fiscal Year 2013. Total dollars obligated was \$12,004,051, not including payment on prior year contracts (CSP). Total number of new contracts signed with producers was 801.

Fiscal Year 2013

Conservation Systems Planned (Acres) - 124,560
 Conservation System Planned (Number) - 578
 Conservation System Applied (Number) - 969
 Conservation Systems Applied (Acres) - 217,936

Summary for EQIP National and State Initiatives

Fiscal Year 2013 Financial Assistance Dollars / Number of Contracts



Environmental Quality Incentives Program (EQIP)

EQIP is the largest financial assistance program delivered by NRCS in Maine. Obligating more than \$9.9 million, EQIP was 82 percent of the financial assistance budget in Fiscal Year 2013. Of that amount, \$3,603,926 was obligated for general EQIP projects, while the remainder of \$6,332,180 was obligated through eight National and State initiatives.

EQIP is a voluntary program that provides assistance to farmers and ranchers who face threats to soil, water, air, and related natural resources on their land. Through EQIP, the NRCS provides assistance to agricultural producers in a manner that will promote agricultural production and environmental quality as compatible goals, optimize environmental benefits, and help farmers and ranchers meet Federal, State, Tribal, and local environmental requirements.



Fish passage project completed on West Paris Tributary to Little Androscoggin River.

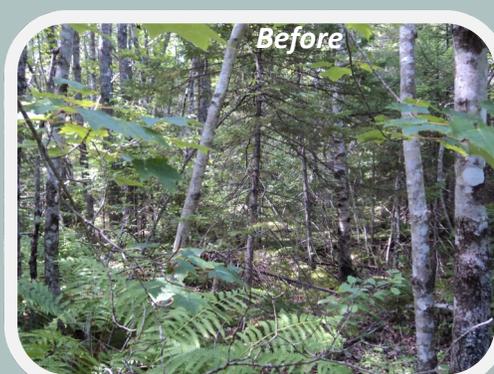


State and National EQIP Initiatives

Conservation Activity Plans

| Conservation Activity Plans Written in Fiscal Year 2013 | | |
|---|---------------------------|-------------------|
| Practice | Number of Plans Developed | Dollars Obligated |
| Forest Management Plan | 259 | \$372,656 |
| Conservation Nutrient Management Plan | 41 | \$296,613 |
| Fish and Wildlife Plans | 10 | \$28,209 |
| Nutrient Management Plans | 3 | \$6,144 |
| Pollinator Plans | 2 | \$4,702 |
| Total | 315 | \$708,324 |

Maine NRCS provides financial assistance to help develop Conservation Activity Plans (CAPS). A CAP is a specialized conservation plan prepared specifically for a conservation management unit. CAPs are developed by a Technical Service Provider, who is certified by NRCS and placed on an approved list to provide technical assistance to farmers and others for specific conservation programs administered by NRCS.



New England/New York Forestry Initiative

NRCS assists Maine's forest landowners with forest land planning and management under the New England/New York Forestry Initiative. This initiative assists private landowners

in conservation planning and management of their private forests to improve wildlife habitat, forest health and productivity, and water quality. More than \$2 million dollars was obligated through 70 contracts in Fiscal Year 2013 for such projects, such as the pre-commercial thinning in Washington County shown above.



Seasonal High Tunnels

Seasonal High Tunnels help producers expand their growing season in an environmentally-safe manner. The benefits of the steel-framed, polyethylene-covered structures include better plant and soil quality, fewer nutrients and pesticides in the environment, and better air quality due to fewer vehicles being needed to transport crops. (Left) This is one example of a seasonal high tunnel that will extend this producer's growing season. NRCS obligated more than \$1 million in Fiscal Year 2013 which will allow 124 producers to construct a similar structure.

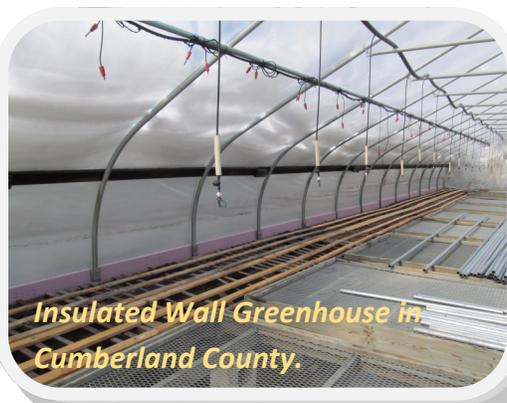
Organic Initiative

As organic production evolves among producers, NRCS' role of helping organic growers and producers achieve organic certification by installing conservation practices for organic production is more critical. In Fiscal Year 2013, NRCS obligated 952,946 through 93 contracts to help producers plan and implement conservation practices that address natural resource concerns in ways that are consistent with organic production.



(Left) This organic producer of livestock and vegetables received a contract for a culvert and access road that helped to address erosion issues.

(Right) Solar pump/watering trough installed on organic certified farm in Waldo County.



On-Farm Energy Initiative

The EQIP On-Farm Energy Initiative enables the producer to identify ways to conserve energy on the farm—while maintaining production, protecting soil and water resources, reducing the Nation's dependence on fossil fuels and saving money—through two types of Agricultural Energy Management Plans for headquarters and/or for landscape, also known as an on-farm energy audit. Through this initiative NRCS also provides financial and technical assistance to help the producer

implement various measures and practices recommended in the on-farm energy audits. While 23 of the 26 contracts in Fiscal Year 2013 were for Conservation Activity Plans, three contracts totaling \$5,753 were for implementing recommended measures and practices as a result of the energy audits.

Water Conservation (Irrigation)



Before with Solid Set Sprinkler

Priority has been given to water conservation irrigation efficiency applications that will reduce water use or where the producer agrees not to use any associated water savings to bring new land under irrigation production. NRCS offers funding for irrigation practic-

es on lands with an irrigation history of at least 2 out of the last 5 years. Technical and financial assistance is available to growers for irrigation-related practices such as irrigation water management plans, irrigation sprinkler or micro-irrigation systems, and alternative irrigation water sources. NRCS obligated \$910,464 through 10 contracts in Fiscal Year 2013 to fund such practices.



Required Filter



After with Micro Irrigation System In York County.

Before—Plowed Land in Nickerson Lake Watershed



National Water Quality Initiative

For the second year in a row the Nickerson Lake Sub-watershed located in the Meduxnekeag River Watershed in southern Aroostook County and Alder

After—Cover Crop in Nickerson Lake Watershed



Stream Sub-watershed located in the Seabasticook Lake Watershed in Penobscot County participated in the National Water Quality Initiative. This initiative helps farmers and forest landowners improve water quality and aquatic habitats in impaired streams. NRCS helps producers implement conservation and management practices through a systems approach to control and trap nutrient and manure runoff. Through 13 contracts, \$502,766 were obligated for this purpose in Fiscal Year 2013.

Conservation Innovation Grants

Community Energy Partners, LLC, Project SHARE (Salmon Habitat and River Enhancement), and Cultivating Community were recipients of more than \$181,000 in Conservation Innovation Grants (CIG) in Fiscal Year 2013. CIG is a statewide competitive grants process to address some of the state's most pressing natural resource conservation needs. The purpose of CIG is to stimulate the development and adoption of innovative conservation approaches and technologies while leveraging Federal investment in environmental enhancement and protection, in conjunction with agricultural production. Projects are expected to lead to the transfer of conservation technologies, management systems, and innovative approaches into NRCS technical manuals or guides, or to the private sector.

The grants consisted of:

- ⇒ \$50,000 to Community Energy Partners, LLC, in Freeport for "Demonstrating Innovative Implementation of Greater On-Farm Efficiency and Greenhouse Gas Reductions."
- ⇒ \$57,000 to Project SHARE in Eastport for "Stream Connectivity Outreach and Implementation: Raising the ecological bar on road/stream crossing restoration."
- ⇒ \$74,000 to Cultivating Community in Portland for "Innovative Strategies for Teaching Conservation Practices to Low Literacy, Limited Resource Beginning Farmers."



*The Piscataquis County Soil and Water Conservation District (PCSWCD) received a \$75,000 NRCS Conservation Innovation Grant in a prior year to develop a mobile, seasonal high tunnel using **Maine wood products**. Completed tunnel is shown above.*



Through a \$40,000 grant in a previous year, Maine Rural Partners demonstrated and evaluated an Air-to-Air Ductless Heat Pump in an agricultural-based application. The demonstration project (above) was established in Aroostook County in the retail farm store and processing facility of Micmac Farms and Trading Company, owned by the Aroostook Band of Micmacs.

Agricultural Management Assistance Program (AMA)

In addition to providing financial assistance to producers for irrigation through the EQIP Water Conservation Initiative, we also provide financial assistance through AMA to voluntarily address issues such as water management, water quality, and erosion control by incorporating conservation into their farming operations. Producers may construct or improve water management structures or irrigation structures; plant trees for windbreaks or to improve water quality; and mitigate risk through production diversification or resource conservation practices. NRCS contracted with 8 producers in Fiscal Year 2013 to obligate \$381,922 to address such issues.

(Right) This producer raises Elderberry trees, Choke Cherry trees, as well as other botanicals for medicinals. Micro-irrigation was installed which was critical to managing Elderberries since these plants are drought susceptible.



Conservation Stewardship Program (CSP)

CSP helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resource concerns. Participants earn CSP payments for conservation performance—the higher the performance, the higher the payment. Through CSP, participants take additional steps to improve resource condition including soil quality, water quality, water quantity, air quality, and habitat quality, as well as energy.

Eleven (11) contracts were awarded in Fiscal Year 2013, for a total obligation of \$79,883, to producers who want to go above and beyond what they have already done by improving existing conservation systems and taking on additional practices to conserve the natural resources on their private land.



(Left: Hardwood Crop Tree Release on forestland in Somerset County)

(Right: Forest stand improvement for habitat and soil quality on same property.)



Farm and Ranch Lands Protection Program (FRPP)

FRPP provides matching funds to help purchase development rights to keep productive farm and ranch land in agricultural uses. Working through existing programs, USDA partners with State, tribal, or local governments and non-governmental organizations to acquire conservation easements or other interests in land from landowners. USDA provides up to 50 percent of the fair market easement value of the conservation easement.

In Fiscal Year 2013, seven landowners accepted easement offerings for \$1,152,915 to keep 507 acres protected through agreements with four land trusts.

Two prior year FRPP contracts were closed on in Fiscal Year 2013. These two farms have been permanently protected through agricultural easements. Agricultural easements prevent the land from being developed for non-agricultural purposes and ensure the land will be forever available for farming.



Location: Marsh Field Farm, Bowdoinham,
Sagadahoc County

Grantor: Robert and Carol Lenna

Grantee: Kennebec Estuary Land Trust

Acres: 58.7

Easement Purchase Price: \$775,000

FRPP Contribution: 50% or \$387,500

Photo courtesy of Kennebec Estuary Land Trust



Location: Bog Road Farm, Albion, Kennebec County

Grantor: Brendan and Katia Holmes

Grantee: Maine Farmland Trust

Acres: 412

Easement Purchase Price: \$285,000

FRPP Contribution: \$50% or \$142,500

Photo courtesy of Maine Farmland Trust

Photo by Nina Young, MFT

Wildlife Habitat Incentives Program (WHIP)

WHIP is a voluntary conservation program that provides technical and financial assistance to landowners for developing, improving or managing wildlife habitat or for restoring natural ecosystems on eligible land.

Fiscal Year 2013 WHIP dollars were obligated through the general WHIP program and the national “Working Lands for Wildlife Initiative”.

Through 4 general WHIP applications, Maine NRCS obligated \$242,282 for developing and improving wildlife on agricultural and forest lands.



In addition, \$139,640 was obligated through 4 contracts for the Working Lands for Wildlife Initiative. Through this voluntary, incentive-based initiative, the focus in Maine is on the New England cottontail habitat, which has three primary objectives: (1) Restore populations of the New England cottontail; (2) Provide farmers, landowners and forest managers with regulatory certainty; and (3) Strengthen rural economies through productive working lands.



Replaced undersized culvert with arch culvert on tribal land to allow for fish passage through general WHIP.



EQIP National Water Quality Initiative—Sebasticook Lake Watershed

Having an initiative such as the National Water Quality Initiative helps local and state efforts to improve water quality of one or two critical water bodies by elevating public attention to the issue, fostering additional participation and putting extra technical and financial assistance resources to the issues.

Sebasticook Lake is a relatively large 4,288-acre water body located in north-central Maine within Penobscot and Somerset Counties. It has a drainage area of 54,350 acres. A Total Maximum Daily Load Assessment (TMDL) was developed in 2001 for total phosphorus, the major limiting nutrient to algal growth.

Sebasticook Lake has had a long history of impairment in large part from point sources from municipalities and industries in the watershed. Most of the point sources were removed in the 1980s. The last point source, the discharge of treated wastewater from the Town of Corinna, was eliminated in 2005. The Sebasticook Lake TMDL in 2001 reported that agriculture represented 16% of the land base (67% of the culturally impacted land area) in the watershed while

contributing 45% of the phosphorus load. Other non-point sources include: Roadways (19%), Residential (15%), Other Development (6%), Non-Cultural (10%), and Atmospheric (5%). The lake also has an internal phosphorus cycling problem where sediment phosphorus is seasonally cycled back into the water column which further feeds the algae.

Ag Waste Storage—Before



NRCS in Maine has a history of working to address water quality impairments in the Sebasticook Lake Watershed, from a PL-566 project (1981-1992), EQIP projects (1997 and 2001), and WHIP projects (2003).

From 2004-2013, NRCS applied 1,471 practices within the watershed, primarily for dairy and cropland producers. Key practices included: 7 waste storages, over 11,000 acres of nutrient management, 1,951 acres of conservation crop rotation, and 4,740 acres of cover crop.

Ag Waste Storage—After



The Penobscot County NRCS Field Office obligated 5 contracts for \$495,990 through the Sebasticook Lake-Alder Stream National Water Quality Initiative in 2012 and has expended 48% of the funds to date. The Initiative accelerated efforts in the Alder Stream sub-watershed and allowed the field office to focus on soil health practices with four key cropland and/or dairy farmers. Key practices included: Cover Crop (222 ac.), Residue Management (243 ac.), Conservation Crop Rotation (446 ac.) and Forage and Biomass Planting (626 ac.).

The majority of these practices will reduce phosphorus runoff. There is no water quality data that specifically identifies reductions due to applied agricultural conservation practices or other non-point source best management practices in the non-agricultural sector.

The coordinated partnership approach that contributed to improvements to water quality in Sebasticook Lake is a success story in itself. Partners included: NRCS, Maine Department of Environmental Protection, Penobscot County Soil and Water Conservation District, Farm Service Agency, U.S. Fish and Wildlife Service, Heart of Maine Resource Conservation and Development, University of Maine Cooperative Extension, Sebasticook Lake Watershed Association, 9 municipalities, Penobscot Valley Council of Governments, Maine Department of Marine Resources, and numerous landowners.

The Lake is dramatically better than it used to be as a result of numerous pollution reduction and lake management activities over the past 40 years.

