

2016 Explanatory Notes  
Natural Resources Conservation Service

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## NATURAL RESOURCES CONSERVATION SERVICE

### Purpose Statement

The mission of the Natural Resources Conservation Service is “Helping People Help the Land.” The agency accomplishes its mission by providing products and services that enable people to be good stewards of the Nation’s soil, water, and related natural resources on non-Federal lands. The formation of the Soil Conservation Service (SCS) marked the beginning of the Federal government’s enduring commitment to conserving natural resources on private lands. Originally established by Congress in 1935, the agency was later renamed NRCS pursuant to Public Law 103-354, the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6962). From the beginning, the agency brought a national focus to the emerging resource issues of the Dust Bowl era: prevention of wind and water erosion. Desperate to retain its productive Midwest soils, the Nation turned to SCS for technical guidance and advice on minimizing the impacts of erosion. Although the Dust Bowl has passed, the relationship between landowners and the agency remains.

Over the last 75 years, the agency expanded its services to become a conservation leader for all natural resources: soil, water, air, plants, and animals. Now, as NRCS, its primary focus is to ensure that private lands are conserved, restored, and made more resilient to environmental challenges, like climate change. NRCS is a primary contributor to achieving the USDA Strategic Goal that ensures our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing water resources. This is accomplished through a variety of programs aimed at preserving and restoring our private lands, mitigating the effects of climate change, and making the landscape more resilient. NRCS partners with private landowners to provide technical and financial assistance to help protect farm and ranch lands and private forestland.

Seventy percent of the land in the United States is privately owned, making stewardship by private landowners and land managers absolutely critical to the health of our Nation’s environment. These are the people who make day-to-day decisions about natural resource use and management on non-Federal lands, and NRCS offers them the technology, technical and financial assistance needed to benefit the resources, sustain productive lands, and maintain healthy ecosystems.

Science and technology are the critical foundation to effective conservation. NRCS experts from many disciplines come together to help landowners conserve natural resources in efficient, smart, and sustainable ways. Whether developed in a laboratory or on the land, NRCS science and technology helps landowners make the right decisions for every natural resource concern.

NRCS’s Conservation Delivery System provides services directly to the landowner or land manager in cooperation with conservation districts. Conservation districts are units of local government created by State law and exist in every county and territory of the United States. Conservation districts are responsible for providing guidance to the agency on local resource concerns and serving as the voice of the local community on resource issues.

NRCS also works in partnership with State and local agencies, locally elected or appointed farmer committees, Federal agencies, tribal governments, and private sector organizations to encourage cooperation and facilitate leveraging of the financial and technical resources these groups can offer. By bringing together groups that have a common and vested interest in the local landscape, community, or watershed, NRCS facilitates collaboration among groups that collectively support sustainable agriculture and maintain natural resource quality.

Under this umbrella of agency mission and local cooperation, NRCS employees help landowners and land managers understand the natural processes that shape their environment, how conservation measures can improve the quality of that environment, and what conservation measures will work best on their land. NRCS employees provide these services directly to the customer. Field offices at USDA Service Centers are in nearly every county and territory of the United States. NRCS employees’ technical expertise and understanding of local resource concerns and challenges result in conservation solutions that last. *In the words of the first NRCS Chief, Hugh Hammond Bennett – “If we take care of the land, it will take care of us.”*

**Conservation Operations.** Conservation Operations is authorized by the Soil Conservation and Domestic Allotment Act of 1935, P.L. 74-46 (16 U.S.C. 590a-590f) and the Soil and Water Resources Conservation Act of

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1977, (16 U.S.C. 2001-2009). The purpose of Conservation Operations is to provide technical assistance supported by science-based technology and tools that help people conserve, maintain, and improve the Nation's natural resources. Conservation Operations has four major program components: Conservation Technical Assistance (CTA); Soil Survey; Snow Survey and Water Supply Forecasting (SSWSF); and Plant Materials Centers (PMCs).

Conservation Technical Assistance Program (CTA). The CTA Program has a long history as NRCS's conservation planning program, helping to develop and deliver conservation technologies and practices to private landowners, conservation districts, tribal, and other organizations.

Through the CTA Program, NRCS helps land managers develop comprehensive conservation plans that include activities which: reduce soil loss from erosion; address soil, water quality, water conservation, air quality, and agricultural waste management concerns; reduce potential damage caused by excess water and sedimentation or drought; enhance the quality of fish and wildlife habitat; improve the long-term sustainability of all lands, including cropland, forestland, grazing lands, coastal lands, and developed or developing lands; and facilitate changes in land use as needed for natural resource protection and sustainability.

Since its inception, CTA funding has provided the agency with the infrastructure and technology needed to proactively address national conservation priorities that have significant impacts on our resources while maintaining a sustainable and productive agriculture sector. At the same time, CTA provides the flexibility required to be responsive to national priorities and ever-evolving conservation technology. The need to maintain technical capacity at the field level is imperative in developing and delivering the needed conservation assistance to landowners on privately owned land.

CTA funding is used to:

- Provide conservation technical assistance to individuals or groups of decision makers, and to communities, conservation districts, units of State, tribal and local government, and others to voluntarily conserve, maintain, and improve natural resources;
- Provide collaborative community, watershed, and area-wide technical assistance with units of government so they can develop and implement resource management plans that conserve, maintain, and improve our natural resources at appropriate scales;
- Provide conservation technical assistance to help agricultural producers comply with the Highly Erodible Land (HEL) and Wetland (Swampbuster) Conservation Compliance Provisions of the 1985 Food Security Act, as amended by subsequent Farm Bills;
- Provide conservation technical assistance to aid private landowners in complying with other Federal, State, tribal, and local environmental regulations and related requirements, and prepare them to become eligible to participate in other Federal, State, and local conservation programs;
- Collect, analyze, interpret, display, and disseminate information about the status, condition, and trends of soil, water, and related natural resources so people can make informed decisions for natural resource use and management;
- Assess the effects of conservation practices and systems on the condition of natural resources; and
- Develop, adapt, and transfer effective science-based technologies and tools for assessment, management, and conservation of natural resources.

Soil Survey. NRCS's Soil Surveys provide the public with information on the properties, capabilities, and conservation treatment needs of their soils through the use of soil maps and interpretive analyses. Soil Surveys help people make informed land use and management decisions that take into consideration various soil characteristics and capabilities, ensuring their soil is kept healthy and productive. In addition, it provides soils information and interpretation to individuals or groups of decision-makers, and to communities, States, and others to aid sound decision-making in the wise use and management of soil resources;

NRCS conducts Soil Surveys cooperatively with other Federal agencies, Land Grant Universities, State agencies, Tribes, and local governments. NRCS's major Soil Survey objectives are to:

- Inventory and map the soil resource on all lands of the United States;
- Keep soil surveys relevant to meet emerging and ever-changing needs;
- Interpret the data and make soil survey information available to meet public needs;
- Promote and provide technical assistance in the use of soil survey information; and

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- Lead the National Cooperative Soil Survey Program.

A major challenge is integrating soils data for 3,000 counties across the Nation into a single dataset that eliminates discrepancies in older Soil Surveys, which do not have the same level of detail as newer Soil Surveys and which often use outdated mapping and classification concepts. Until recently, Soil Survey information reflected the “average” condition of soil properties without providing information on differences induced by different management systems and land uses. Soil Surveys are now being updated to create a seamless soil survey across all counties and States and to provide information on soil properties that change depending on land use and management.

Soil Survey information is the foundation of resource planning conducted by land-users and policy makers. Soil Surveys provide vital information needed to support sustainable and productive soils in the United States. Emerging environmental issues (e.g., soil carbon stocks, nutrient management, and healthy soils) require that the soil survey collect and interpret new data to best inform decision makers.

In addition to providing Soil Survey data to the public, NRCS also maintains a National Soil Survey Center that integrates and adds to the current soil science and provides information for the effective application of the Soil Survey to help make good land management possible. The Soil Survey Center develops national soil policy, technical guidance, procedures, and standards. It conducts soil research investigations, operates a soil survey laboratory, develops handbooks and manuals, provides training, develops and maintains soil survey data systems; and plans regional work conferences.

Snow Survey and Water Supply Forecasts. The program collects high elevation snow data in the Western United States and provides managers and users with snowpack data and water supply forecasts. NRCS field staff collects and analyzes data on snow depth, snow water equivalent, and other climate parameters at over 2,022 remote, high elevation sites. The program is actively transitioning to a fully automated system that provides near-real time data available on the internet. At the present time, 862 of these remote data collection sites (SNOTEL) are currently automated. The data are used to provide estimates of annual water availability, spring runoff, and summer stream flows. Climate change researchers have increasingly accessed the data for evaluating trends in the Western United States. The water supply forecasts are used by individuals, Tribes, organizations, and units of government for decisions relating to agricultural production, hydroelectric power generation, fish and wildlife management, municipal and industrial water supply, reservoir management, urban development, flood control, recreation, and water quality management. Western Federal water management agencies include these forecasts in their water management functions. Reports on the snowpack characteristics are used by the ski industry, transportation departments and others to plan their seasonal work in remote mountainous areas.

The objectives of the program are to:

- Provide reliable, accurate and timely forecasts of surface water supply to water managers and water users in the west;
- Efficiently obtain, manage, and disseminate high quality data and information on snow, water, climate, and hydrologic conditions; and
- Provide climate data to support NRCS conservation planning tools.

In addition, the Soil Climate Analysis Network provides similar climate information as well as soil moisture and temperature data at lower elevations. The network consists of 191 sites in the 48 contiguous United States, Alaska, Hawaii, and Puerto Rico/Virgin Islands.

Plant Material Centers (PMCs). The PMCs identify, test, evaluate, and demonstrate the performance of plants and plant technologies to solve natural resource problems and improve the utilization of natural resources. Thus, PMCs contribute to reducing soil erosion; increasing cropland soil health and productivity; restoring wetlands, improving water quality, and improving wildlife habitat (including pollinators); protecting streambank and riparian areas; stabilizing coastal dunes; producing biomass; improving air quality; and addressing other conservation treatment needs. PMCs have a long and successful history of selecting and testing plant materials for resource conservation which has, in large part, accomplished the purpose of increasing the availability of conservation plant material to the public.

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PMCs are realigning their activities to better focus on: 1) the utilization of plants for specific objectives and purposes, such as soil health, soil stabilization, and pollinator/wildlife habitat; 2) the collection of data to improve conservation planning efforts; and 3) the validation of plant materials for use in NRCS vegetative conservation practices. The shift in focus aligns PMCs with current NRCS needs to ensure that conservation practices are scientifically-based, to improve the knowledge of NRCS field staff through PMC-led training sessions and demonstrations, and to develop recommendations to meet new and emerging natural resource issues. This new focus expands existing efforts to improve technology transfer. For example, 2,500 documents are now available online describing how to select and use plants for conserving or improving natural resources. The work at PMCs is carried out cooperatively with State and Federal agencies, universities, Tribes, commercial businesses, and seed and nursery associations. PMC activities directly benefit private landowners as well as Federal and State land managing agencies.

**Watershed and Flood Prevention Operations Program.** Through the programs, NRCS cooperates with State and local agencies, tribal governments, and other Federal agencies to prevent damage caused by erosion, floodwater, and sediment, to further the conservation, development, utilization, and disposal of water, and advance the conservation and utilization of the land. Authorization includes the Watershed Operations Program authorized by the Flood Control Act of 1944 (P.L. 78-534) and the Watershed Protection and Flood Prevention Program authorized by P.L. 83-566 (16 U.S.C. 1001-1008), as amended.

The Watershed Protection and Flood Prevention Program is available nationwide to protect and improve watersheds up to 250,000 acres in size (small watersheds). Currently, there are approximately 302 active small watershed projects throughout the country. The Watershed Operations Program is available only in areas authorized by statute; these areas cover about 38 million acres in 11 States. Objectives of the program are to provide technical and financial assistance to install watershed improvement measures to reduce flood, sedimentation, and erosion damage; improve the conservation, development, utilization, and disposal of water; and advance the conservation and proper utilization of land in authorized watersheds.

**Emergency Watershed Protection Program.** The program reduces hazards to life and property in watersheds damaged by severe natural events. An emergency exists when a watershed is suddenly impaired by flood, fire, drought, wind, or other natural causes that result in threats to life and property. The emergency area need not be declared a national disaster area to be eligible for assistance; however, a Presidential disaster declaration is one method for establishing eligibility. The program is authorized by Section 216 of the Flood Control Act of 1950 (33 U.S.C. 701b-1), as amended, and Sections 403-405 of the Agricultural Credit Act of 1978 (16 U.S.C. 2203-2205), as amended.

Objectives of the program are to provide technical and financial assistance for disaster cleanup, restoration of watershed conveyance, and subsequent stabilizing of streambanks and levees. The program also allows for relocation of properties outside floodplains in lieu of restoration in cases where it is more cost effective. Local people are generally employed on a short-term basis to assist with disaster recovery. Activities include: 1) establishing quick vegetative cover on denuded land, sloping steep land, and eroding banks; 2) opening dangerously restricted channels; 3) repairing diversions and levees; 4) purchasing floodplain easements; and 5) other emergency work.

**Watershed Rehabilitation Program.** This dam rehabilitation program provides both financial and technical assistance to communities for addressing public health, safety concerns, and environmental impacts of aging dams. The program is authorized under Section 14 of the Watershed Protection and Flood Prevention Act (16 U.S.C. 1012), as amended.

Local communities have constructed more than 11,700 watershed dams with assistance from NRCS. These dams protect America's communities and natural resources with flood control, but many also provide the primary source of drinking water for the area or offer recreation and wildlife benefits. Funding is used for rehabilitation projects to bring the dam up to current safety standards through planning, design, and construction of the rehabilitation project, but may also be used for dam removal. The program may provide up to 65 percent of the total cost of the rehabilitation projects; Federal funds cannot be used for operation and maintenance.

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**Water Bank Program.** The program focuses technical and financial assistance on flooded cropland, flooded hay and pasture land, and flooded forestland. NRCS received Water Bank Program funding in 2012 and held a sign-up in Minnesota, North Dakota, and South Dakota, which have experienced significant flooding of agricultural land. Landowners and operators have non-renewable ten-year rental agreements to receive annual payments to protect wetlands and provide wildlife habitat by preventing adverse land uses and activities, such as drainage, that would destroy the wetland characteristics of those lands. Program participants who wish to establish or maintain conservation practices may apply for financial assistance through other NRCS or State financial assistance programs where available.

**Environmental Quality Incentives Program (EQIP).** EQIP advances the voluntary application of conservation practices to promote agricultural production, forest management, and environmental quality as compatible uses. Conservation practices funded through EQIP help producers improve the condition of soil, water, air, and other natural resources. The program assists owners and operators of agricultural and forest land with the identification of natural resource problems and opportunities in their operation and provides assistance to solve identified problems in an environmentally beneficial and cost-effective manner. The program, which is authorized by Sections 1240 through 1240G and Section 1241(a) of the Food Security Act of 1985, was amended and re-authorized through 2018 by Sections 2201 through 2208 and Section 2601 of the Agricultural Act of 2014.

Although EQIP specifically addresses resource concerns on working farms and ranches, implementation of the program creates benefits that extend well beyond the farm. Conservation practices funded through EQIP contracts accrue significant environmental benefits, including improved grazing lands, improved air quality, enhanced fish and wildlife habitat, sustainable plant and soil conditions, improved water quality and quantity, reduced soil erosion, and energy conservation that provide important ancillary economic and social benefits.

In 2016, of the total EQIP funding, NRCS will again use at least \$4 million to support an initiative to increase the availability and access to nutritious forage for pollinators in a targeted multi-state area (North Dakota, South Dakota, Minnesota, Wisconsin, and Michigan) that is home to nearly 75 percent of the Nation's managed honeybee population during the prime summer forage months. This continues the pollinator efforts started in 2014 and continued in 2015.

In 2016, NRCS will take actions to ensure that riparian buffers receive priority for funding through Farm Bill conservation programs to the extent practicable and work with NOAA and EPA to jointly develop a science-based map that identifies the highest priority areas in the region for salmon habitat restoration, with the goal of using this map to target outreach efforts and federal funding.

**Conservation Security Program.** The Conservation Security Program was a voluntary program that provided financial and technical assistance for the conservation, protection, and improvement of natural resources on tribal and private working lands. It provided payments for producers who practice good stewardship on their agricultural lands and provided incentives for those who wanted to do more. Under the 2008 Farm Bill, NRCS is not authorized to enter into new Conservation Security Program contracts but continues to make payments to producers with five- to ten-year contracts from prior years.

The program was authorized by Section 2002 of the 2002 Farm Bill, which amended the Food Security Act of 1985 by adding Chapter 2, Subchapter A, Conservation Security Program. Section 2301(b) of the 2008 Farm Bill stipulated that a Conservation Security Program contract may not be entered into or renewed after September 30, 2008. Pursuant to Section 1241(a)(3) of the Food Security Act of 1985, as amended by Section 2601(a) of the Agricultural Act of 2014, the Secretary shall make payments on contracts entered into before September 30, 2008, using such sums as are necessary.

**Conservation Stewardship Program (CSP).** The purpose of CSP is to encourage producers to address resource concerns in a comprehensive manner by undertaking additional conservation activities and improving, maintaining, and managing existing conservation activities. The program, which is authorized by Sections 1238E through 1238G and Section 1241(a) of the Food Security Act of 1985, was amended and re-authorized through 2018 by Sections 2101 and Section 2601 of the Agricultural Act of 2014.

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CSP encourages agricultural and forestry producers to maintain existing conservation activities and to adopt additional ones on their operations. CSP provides opportunities to both recognize excellent stewards and deliver valuable new conservation. The program helps producers identify natural resource problems in their operation and provides technical and financial assistance to solve those problems in an environmentally beneficial and cost-effective manner. CSP addresses seven natural resource concerns (soil quality, soil erosion, water quantity, water quality, air quality, plant resources, and animal resources) as well as energy.

CSP is a voluntary program available through a continuous sign-up process, with announced cut-off dates for ranking and funding applications. This allows producers to submit their applications at any time. Applications are evaluated relative to other applications addressing similar priority resource concerns to facilitate a competitive ranking process among applications that face similar resource challenges. The 2008 Farm Bill prescribed the following factors for evaluating and ranking applications:

- Level of conservation treatment on all applicable priority resource concerns at the time of application;
- Degree to which the proposed conservation treatment on applicable priority resource concerns effectively increases conservation performance;
- Number of applicable priority resource concerns proposed to be treated to meet or exceed the stewardship threshold by the end of the contract; and
- Extent to which other resource concerns, in addition to priority resource concerns, will be addressed to meet or exceed the stewardship threshold by the end of the contract period.

**Agricultural Conservation Easement Program (ACEP).** ACEP consists of two components: 1) an agricultural land easement component under which NRCS assists eligible entities to protect agricultural land by limiting non-agricultural uses of that land through the purchase of agricultural land easements and 2) a wetland reserve easement component under which NRCS provides financial and technical assistance directly to landowners to restore, protect and enhance wetlands through the purchase of wetlands reserve easements. ACEP consolidates the purposes of three easement programs that were repealed by the Agricultural Act of 2014: the Wetlands Reserve Program, the Grassland Reserve Program, and the Farm and Ranch Land Protection Program. ACEP is authorized through 2018 by Sections 1265 through 1265D and Section 1241(a) of the Food Security Act of 1985, as amended by Sections 2301 and 2601 of the Agricultural Act of 2014.

Through the agricultural land easement component, ACEP helps farmers and ranchers keep their land in agriculture. The program also protects grazing uses and related conservation values by conserving grassland, including rangeland, pastureland and shrubland. Eligible entities include an Indian Tribe, State government, local government, or a nongovernmental organization which has a farmland or grassland protection program that purchases agricultural land easements for the purpose of protecting agriculture use and related conservation values, including grazing uses and related conservation values, by limiting conversion to non-agricultural uses of the land.

Through the wetland reserve easement component, ACEP provides technical and financial assistance directly to private landowners and Indian Tribes to restore, protect, and enhance wetlands through the purchase of a wetlands reserve easement or 30-year contract. Wetlands provide habitat for fish and wildlife, including threatened and endangered species, improve water quality by filtering sediments and chemicals, reduce flooding, recharge groundwater, protect biological diversity, and provide opportunities for educational, scientific and limited recreational activities.

To enroll land through agricultural land easements, NRCS enters into cooperative agreements with eligible entities that include the terms and conditions under which the eligible entity is permitted to use ACEP cost-share assistance, including the development of an agricultural land easement plan. This plan will promote the long-term viability of the land.

To enroll land through wetland reserve easements, NRCS enters into purchase agreement with eligible private landowners or Indian Tribes that includes the right for NRCS to develop and implement a wetland reserve restoration easement plan. This plan restores, protects, and enhances the wetlands functions and values of the land. NRCS may authorize enrolled land to be used for compatible economic uses, including activities such as hunting and fishing, managed timber harvest, or periodic haying or grazing if such uses are consistent with the long-term protection and enhancement of the wetland resources for which the easement was established.



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**Regional Conservation Partnership Program (RCPP).** RCPP promotes the implementation of conservation activities through agreements between partners and producers. RCPP combines the purposes of four former Title XII conservation programs – the Agricultural Water Enhancement Program, the Chesapeake Bay Watershed Program, the Cooperative Conservation Partnership Initiative, and the Great Lakes Basin Program. Through agreements between partners and conservation program contracts directly with producers, RCPP helps implement conservation projects that may focus on water quality and quantity, soil erosion, wildlife habitat, drought mitigation and flood control or other regional priorities. RCPP is authorized through 2018 by Sections 1271 through 1271F of the Food Security Act of 1985, as amended by Section 2401 of the Agricultural Act of 2014.

RCPP partners include agricultural or silvicultural producer associations or other groups of producers, State or local governments, Indian Tribes, farmer cooperatives, municipal water treatment entities, irrigation districts, conservation driven nongovernmental organizations, and institutions of higher education are eligible. Agricultural and nonindustrial private forest lands may enter into RCPP contracts to receive financial and technical assistance as part of an RCPP partner agreement. Producers may receive assistance without a partner if the land is located in a partner project area or a critical conservation area designated by NRCS. RCPP contracts with producers are implemented through the Agricultural Conservation Easement Program, the Environmental Quality Incentives Program, the Conservation Stewardship Program, or the Healthy Forests Reserve Program.

RCPP increases the restoration and sustainable use of soil, water, wildlife and related natural resources on regional or watershed scales by encouraging partners to cooperate with producers. Producers receive technical and financial assistance through RCPP while NRCS and its partners help producers install and maintain conservation activities. Partners contribute and leverage funding for partnership projects and assess the results.

**Agricultural Management Assistance Program (AMA).** AMA provides technical and financial assistance in 16 States: Connecticut, Delaware, Hawaii, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Utah, Vermont, West Virginia, and Wyoming. AMA is funded through the Commodity Credit Corporation. The program is authorized by Section 524(b) of the Federal Crop Insurance Act (7 U.S.C 1524(b)), as amended. Section 524(b)(4)(B) provides \$10,000,000 each year for the program, of which 50 percent is allocated to NRCS (\$15,000,000 was provided for each fiscal year from 2008 through 2014).

Under the program, NRCS provides technical and financial assistance to producers to construct or improve water management structures or irrigation structures; plant trees for windbreaks; and take actions to improve water quality. In addition, the Risk Management Agency provides AMA financial assistance to producers purchasing crop insurance to reduce revenue risk. The Agricultural Marketing Service also provides AMA financial assistance to program participants receiving certification or continuation of certification as an organic producer.

**Voluntary Public Access and Habitat Incentives Program (VPA-HIP).** The program encourages private landowners to voluntarily make their land available to the public for wildlife-dependent recreation. States and Tribes approved for funding in program use the funds as incentives to encourage private landowners of farms, ranches, and forests to make that land available to the public for wildlife-dependent recreation. This may include hunting or fishing. The overall goal of VPA-HIP is to enhance wildlife habitat and management and to boost local economies through activities that attract wildlife enthusiasts.

**Healthy Forests Reserve Program.** The program assists landowners in restoring, enhancing, and protecting forest ecosystems to: promote the recovery of threatened and endangered species; improve biodiversity; and enhance carbon sequestration. The program is authorized by Sections 501 through 508 of the Healthy Forests Restoration Act of 2003 (P.L. 108-148) as amended by Section 8203 of the Agricultural Act of 2014 (P.L. 113-79).

**Programmatic and Landscape Conservation Initiatives.** To address critical, regionally important conservation needs, NRCS and its partners have established programmatic and landscape-scale initiatives to provide additional support to voluntary conservation on private lands. NRCS has targeted funding to support the initiatives through a variety of Farm Bill conservation programs. NRCS technical assistance is also provided through its CTA Program. Technical and financial support may also come from partners.

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Each initiative is intended to raise awareness of a specific resource concern or opportunity, to stimulate interest and commitment for voluntary action, to help focus funding, and to optimize conservation results. By coordinating NRCS' efforts with other Federal agencies, State and local governments, and other groups, efficiency and effectiveness are optimized; additional resources are generated from partners to expand capacity and accelerate action; and mutual support is established for core conservation practices/systems that benefit the watershed, ecosystem, or species of concern.

Following are some of the initiatives of national significance.

National Water Quality Initiative. NRCS works with farmers and ranchers in small watersheds throughout the Nation to improve water quality where this is a critical concern. NRCS worked collaboratively with the Environmental Protection Agency at the national level to develop a framework for selecting high-priority watersheds where State water quality agencies and NRCS could target outreach and assistance to demonstrate improvements in water quality. NRCS identified priority watersheds through the help of local partnerships and State water quality agencies. Partners sometimes offer financial assistance in addition to NRCS programs. NRCS will continue to coordinate with local and State agencies, conservation districts, nongovernmental organizations and others to implement this initiative. This strategic approach will leverage funds and provide streamlined assistance to help individual agricultural producers take needed actions to reduce the runoff of sediment, nutrients and pathogens into waterways where water quality is a critical concern. Water quality-related conservation practices benefit agricultural producers by lowering input costs and enhancing the productivity of working lands. Eligible producers will receive assistance under EQIP for installing conservation systems that may include practices such as nutrient management, cover crops, conservation cropping systems, filter strips, terraces, and in some cases, edge-of-field water quality monitoring.

Sage-Grouse Initiative. This initiative focuses on protecting and conserving sage-grouse habitat in California, Colorado, Idaho, Montana, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. The objective is to alleviate or reduce threats to sage-grouse habitat and facilitate the sustainability of working ranches. The Sage-Grouse Initiative targets conservation delivery within high sage-grouse abundance centers or 'core areas' rather than provide palliative care to small and declining populations. NRCS and the U.S. Fish and Wildlife Service completed a range-wide conference report under the Endangered Species Act in which NRCS identified a suite of 40 conservation practices that are beneficial to sage-grouse. Landowners benefit from the conference report because it provides predictability regarding identified conservation activities if sage-grouse are listed under the Endangered Species Act.

Longleaf Pine Initiative. Longleaf pine forests once covered more than 90 million acres in the Southeastern United States, serving as one of the most diverse ecosystems outside of the tropics. Today only 3.4 million acres remain and provide critical habitat for 29 threatened or endangered species. The longleaf pine ecosystem range includes portions of Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia. The objective of this initiative is to protect and restore longleaf pine forest ecosystems in these States.

Bay-Delta Initiative. The Bay-Delta Initiative covers important estuary ecosystems within California's Sacramento/San Joaquin River Delta and the San Francisco Bay Estuary (Bay-Delta). The Bay-Delta supplies water for 22 million people, and supports a \$28 billion a year agriculture industry in California. In response to the Administration's Interim Federal Action Plan, NRCS has made the Bay-Delta a nationally recognized conservation initiative based on a Federal and State partnership in support of balancing water quality concerns, water supply, and ecosystem restoration in the Central Valley.

Gulf of Mexico Initiative. NRCS and its conservation partners developed this initiative in response to the Deepwater Horizon oil spill and it incorporates what the public and communities requested through their input into the Gulf Coast Ecosystem Restoration Task Force Strategy to restore the Gulf Coast. Through this initiative, NRCS assists farmers and ranchers to address water quality and wildlife resource concerns with voluntary conservation in priority areas along seven major rivers that drain to the Gulf.

Lesser Prairie-Chicken Initiative. NRCS developed this initiative to provide landowners assistance in priority areas of the lesser prairie-chicken's current and historic range for the protection, enhancement, and expansion of suitable

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habitat, while also helping agricultural producers sustain their agricultural operations. Lesser prairie-chicken populations can be found in parts of Colorado, Kansas, New Mexico, Oklahoma, and Texas. Because of habitat loss and population decline, the lesser prairie-chicken is Federally-listing as a threatened species. NRCS hopes to aid in the sustainability and population increase of the lesser prairie-chicken and has cooperated with the U.S. Fish and Wildlife Service to develop a conference opinion for the lesser prairie-chicken, through which farmers and ranchers can receive predictability under the Endangered Species Act.

Mississippi River Basin Healthy Watersheds Initiative. The MRBI was established in 2010 and covers Arkansas, Kentucky, Illinois, Indiana, Iowa, Louisiana, Minnesota, Mississippi, Missouri, Ohio, South Dakota, Tennessee, and Wisconsin. It was established to improve the health of watersheds within the Mississippi River Basin through the reduction of nutrient runoff, restoration and enhancement of wildlife habitat, wetland restoration, and maintenance of agricultural productivity. Through 2012, NRCS had 123 partnership agreements in place to implement projects in 640 small watersheds under this initiative.

Great Lakes Restoration Initiative (GLRI). GLRI was authorized as an Environmental Protection Agency program in October 2009, and is implemented through a taskforce of 16 Federal departments and agencies who developed the Great Lakes Restoration Action Plan (2010 – 2014) to guide restoration efforts. GLRI aggressively addresses five priorities: 1) clean up the most polluted areas of the Great Lakes; 2) combat invasive species; 3) protect watersheds and shorelines from run-off; 4) restore wetlands; and 5) work with strategic partners on education, evaluation, and outreach. With GLRI funding, NRCS is able to accelerate assistance to farmers working to address phosphorous loading and other critical resource concerns in priority watersheds of the Great Lakes basin.

Ogallala Aquifer Initiative (OAI). The OAI is designed to reduce the quantity of water removed from the aquifer and to improve water quality using conservation practices on cropland and rangeland. Nebraska, Texas, Kansas, Colorado, New Mexico, Oklahoma, South Dakota, and Wyoming are all part of the OAI. Groundwater withdrawal from the aquifer exceeds the natural recharge rate and intensive agricultural practices have increased the potential for long-term water quality degradation. The goals of the OAI are to re-establish the equilibrium of water recharge and water removal from the aquifer over time, and to maintain water quality.

North Central Wetlands Conservation Initiative. The Prairie Pothole Region of North Dakota, South Dakota, Minnesota, and Iowa, is critical to North American waterfowl. Under the terms and conditions of 7 CFR 12.6, NRCS is required to make certified wetland determinations in this region, and to identify the sites that meet applicable wetland criteria.

**Technical Service Provider Assistance (TSP).** Under the TSP, individuals or entities are certified by NRCS to assist landowners and agricultural producers in applying conservation practices on the land. TSPs expand and accelerate NRCS's ability to plan and apply conservation practices that enhance, restore or conserve the Nation's soil, water, and related natural resources on non-Federal land.

Use of third parties to conduct conservation work is authorized under Section 1242 of the Food Security Act of 1985, as amended, which requires the Secretary of Agriculture to provide technical assistance under the Food Security Act Title XII conservation programs to a producer eligible for that assistance 1) directly; 2) through an agreement with a third-party provider; or 3) at the option of the producer, through a payment to the producer for an approved third-party provider, if available. Section 1242 also requires that USDA establish a system for approving individuals and entities to provide technical assistance to carry out conservation programs, and establish the amounts and methods for payments for that assistance. Technical assistance includes conservation planning and conservation practice design and implementation.

**Repealed Programs.** The Agricultural Act of 2014 repealed several Title XII Conservation Programs as of the date of enactment, including three easement programs – the Wetlands Reserve, Grassland Reserve, and Farm and Ranch Lands Protection Programs; three financial assistance programs – the Agricultural Water Enhancement, Wildlife Habitat Incentive, and Chesapeake Bay Watershed Programs; and the Cooperative Conservation Partnership Initiative. The purposes for many of these programs have been transferred to other programs, including new programs authorized by the current act. For example, the purposes of the easement programs are now served by ACEP, while the purposes of Agricultural Water Enhancement Program, Chesapeake Bay Watershed Program and

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Cooperative Conservation Partnership Initiative are now served by the RCPP. The purposes of Wildlife Habitat Incentive Program are now included in EQIP.

The Agricultural Act of 2014 includes language for the repealed programs that preserves the validity of existing contracts, agreements, and easements (i.e., those entered into before the date of enactment of the Agricultural Act of 2014). There is also language that makes funding that was made available for the repealed programs between 2009 and 2013 available to carry out those existing contracts, agreements, and easements. When the prior year funding is exhausted, the Agricultural Act of 2014 allows the Secretary to use funding from the successor programs (ACEP, RCPP, and EQIP, as appropriate), to continue to carry out those existing contracts, agreements, and easements.

**Workforce Status and Locations.** As of September 30, 2014, NRCS had 10,117 full time employees with permanent appointments. Of this total, 386 employees were located in the Washington, DC metropolitan area, and 9,731 employees were located outside of the Washington, D.C. metropolitan area.

**Organizational Structure.** NRCS is a line and staff organization. The line of authority begins with the Chief and extends down through: the Associate Chiefs for Conservation and Operations; Four Regional Conservationists (Northeast, Southeast, Central, West); State Conservationists, Deputy Chiefs; Assistant State Conservationists, District Conservationists and Division Directors. Line officers are responsible for direct assistance to the public. Staff positions provide specialized technical or administrative assistance to line officers.

During 2014, NRCS had 2,605 offices located across the Nation. This represents the number of locations where NRCS operates or conducts mission-related activities (e.g., offices, warehouses, Plant Materials Centers, etc.) and reports at least one full time equivalent at the location. In addition, this number includes locations used for conservation testing, research and storage. This year's number reflects work done to clean up the Corporate Property Automated Information System as part of the Center of Excellence project and remove duplications, inactive and cooperative agreements from the database.

National Headquarters. NRCS assumes Departmental leadership for programs and other activities assigned by the Secretary of Agriculture, through the Under Secretary for Natural Resources and Environment. The Chief, Associate Chiefs, Regional Conservationists, and Deputy Chiefs carry out national headquarters functions. The functions include: 1) planning, formulating, and directing NRCS programs, budgets, and activities; 2) developing program policy, procedures, guidelines, and standards; 3) leading and coordinating with other agencies, constituent groups, and organizations; and 4) strategic planning and development of strategic initiatives.

Primarily located in the Washington, DC metropolitan area, national headquarters is responsible for the framework for national technology development and delivery within the agency. Natural resource technology is developed and delivered through Headquarters and Management Offices including: Office of the Chief; Office of the Associate Chief for Conservation; Office of the Associate Chief for Operations; Office of the Deputy Chief Areas; Regional Conservationists, and other management or leadership components.

Centers. Technological guidance and direction is also provided through the NRCS Centers, including the National Design, Construction and Soil Mechanics Center; National Soil Survey Center; National Water and Climate Center; Information Technology Center; National Water Management Center; National Employee Development Center; National Geospatial Center of Excellence; National Agroforestry Center; and three National Technology Support Centers (NTSCs) located in the eastern, central, and western areas of the Nation. NTSCs acquire and/or develop new science and technology in order to provide cutting-edge technological support and direct assistance, and to transfer technologies to States, the Pacific Islands Area, and the Caribbean Area. NTSCs also develop and maintain national technical standards and other technological procedures and references. Centers are co-located with other NRCS field offices whenever possible.

State Offices. State Offices provide program planning and direction, consistency and accountability, and administration of a comprehensive soil, water, and related resource conservation program for each State, the Pacific Islands Area (including Hawaii), and the Caribbean Area. State Offices also have the responsibility for the technical integrity of NRCS activities, technology transfer and training, marketing of agency programs and initiatives, and administrative operations and processing. State Offices partner with other Federal and State agencies to provide

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solutions to State resource issues. A State Conservationist heads each State Office. In the Pacific Islands Area and the Caribbean Area offices, a Director serves in a leadership role similar to that of a State Conservationist.

**Service Center Offices.** Personalized, one-on-one service is provided by NRCS employees located in Service Centers or specialized offices, which is the majority of NRCS employees. Service Centers and specialized offices support customers to prevent or solve natural resource problems on their land and in their communities. Service Center staff work side-by-side with employees of local conservation districts and State conservation agencies. The Service Centers function as clearinghouses for natural resource information and help people gain access to knowledge and assistance available from local, State, regional, and national sources. They are located in all States, Puerto Rico, U.S. Virgin Islands, American Samoa, Guam, the Northern Mariana Islands, Micronesia, Palau, and the Marshall Islands. The specialized offices are located across the Nation and deliver technical or financial assistance for specific resource concerns such as water quality improvement.

**Support Offices.** Support offices provide critical technical and administrative support to Service Centers and other NRCS offices. Support offices include: 1) area offices that provide administrative and technical support to a group of Service Centers; 2) project offices that are headquarters for watershed or river basin planning and construction activities; 3) soil survey offices and Major Land Resource Areas offices that inventory and map the soil resource on private lands, resulting in current and consistent interpretations and data sets; and 4) plant material centers that test, select, and release plants for conservation purposes in selected plant growth regions throughout the United States.

**Accountability.** NRCS regularly collects program performance data through a set of data collection tools, processes, and related software that provide information on a routine basis to support agency strategic and performance planning, budget formulation, workforce planning, and accountability activities. This Accountability Information Management System tracks and evaluates field and State level conservation planning efforts and practice implementation through the Performance Results System. In addition to the Accountability Information Management System, NRCS implements a suite of actions to improve accountability:

### **Compliance Activities.**

- Conducted three functional reviews, nine program delivery reviews, two national reviews and ten civil rights reviews to ensure compliance is monitored throughout the agency on a consistent basis. NRCS's priority is to improve agency quality assurance and quality controls by reforming financial processes, streamlining business processes, enhancing the workforce, and increasing information quality.
- Conducted HEL Conservation and Swampbuster Compliance reviews on 23,627 tracts.
- NRCS had a total of 50 audits open in 2014, including 43 open audits at the start of 2014. NRCS closed 16 of the open audits, leaving 34 audits open at the end of the year. Of the 16 audits closed, 11 had no recommendations for NRCS follow-up. Within the open audits, there were 33 audit recommendations closed in 2014, while 51 recommendations remain open.

### **Data Collection, Management, and Analysis.**

- Security of Data - Continued to upgrade agency accountability software applications and hardware security to correctly safeguard all private and sensitive information, including Personally Identifiable Information, in order to remain in compliance with the Federal Information Security Management Act and National Institute of Standards and Technology Special Publication 800-53.
- Completeness of Data – The reported performance measures are based on data reported through September 30, 2014. Numerous data quality mechanisms within PRS ensure the completeness of each performance record entry. Each performance record must adhere to a set of quality assurance requirements during the upload process. Business rules, definitions, and internal controls enforce accountability policies or business requirements and diagnose potential entry errors. Error reports are generated for managers at multiple levels to review for completeness or rejected entries, including the Strategic Planning and Accountability Deputy Area staff. On an annual basis the State Conservationists certify that the data is complete.
- Reliability of Data – The data reported for performance measures was determined within PRS based on information validated and received from the National Planning and Agreements Database (NPAD). NPAD receives data from both Customer Service Toolkit (Toolkit), the agency's approved conservation planning software, and the Program Contracts System (ProTracts). ProTracts is a web-enabled application used to manage NRCS conservation program applications, cost-share contracts, and program fund management.

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Conservation plans are developed in consultation with the customer, created with Toolkit, and warehoused in the NPAD. Applied conservation practices are date-stamped, geo-referenced, and linked to a variety of agency data enabling detailed quality-assurance reviews. Periodic reviews are conducted by State office and headquarters personnel to assess the accuracy of reported data.

- Linking Performance to Programs – To ensure program accountability and evaluate program efficiency, data on performance measures for conservation applied must be linked to the program that funded the practice and staff time needed to carry out each activity. Where more than one program is used to apply practices on the same land unit, each program is credited under the performance measure. The chief sources of data for these performance measures are NPAD for all conservation practices, and the National Easement Staging Tool for all easement-related data.

### **Completed and On-going Audits.**

#### **2014 Government Accounting Office (GAO) and Office of Inspector General (OIG) closed audits:**

- GAO 361379, Federal Wind Energy Initiatives (GAO-13-136), (February 2011). Final Report issued March 11, 2013. No USDA recommendations. Closed for NRCS effective January 14, 2014.
- GAO 361404, Great Lakes Restoration Initiatives (GAO-13-797), (July 2012). Final report issued September 27, 2013. No USDA recommendations. Closed for NRCS effective September 27, 2013.
- GAO 361418, USDA Implementation of Adjusted Gross Income Limitations for Farm Programs, (GAO-13-741), (June 2012). Final report issued August 29, 2013. No USDA recommendations. Closed for NRCS effective June 23, 2014.
- GAO 361444, Workforce Decision Mission Linkage and Leading Practice use (GAO-14-288), (October 2012). Final report issued March 31, 2014. NRCS had no recommendations in this audit. Audit recommendations were directed to OHRM, FSA and RD. Closed for NRCS effective August 28, 2014.
- GAO 361452, NUCLEAR NONPROLIFERATION: Additional actions needed to increase the Security of U.S. Industrial Radiological Sources, (GAO-14-293), (November 2012). Final report issued June 6, 2014. NRCS had no recommendations in this audit. Closed for NRCS effective June 12, 2014.
- GAO 361454, FRESHWATER: Supply concerns continue and uncertainties complicate planning, (GAO-14-430), (November 2012). Final report issued May 22, 2014. No recommendations issued. Closed for NRCS effective May 22, 2014.
- GAO 361465, Potential Overlap and Duplication among Federal Farm Safety Net Programs, (GAO-14-428), (February 2013). Final report issued July 19, 2014. No NRCS recommendations. Closed for NRCS effective August 7, 2014.
- GAO 542215, Selected agencies plan to use workforce mobility to reduce space, but most efforts are too new to have realized savings, (GAO-14-41), (February 2013). Final report issued Oct 17, 2013. Closed for NRCS effective January 23, 2014.
- OIG 10601-0001-22, Oversight and Compliance Activities, (August 2011). Final report issued February 7, 2013. Closed for NRCS effective June 10, 2014.
- OIG 10601-0006-KC, Disaster Assistance EWP, (January 2009). Final report issued April 5, 2011. Closed for NRCS effective January 14, 2014.
- OIG 10703-0001-31, Recovery Act-Emergency Watershed Protection Program-Floodplain Easements and Watershed Operations Program-Phase III, (February 2012). Final report issued March 14, 2013. Closed for NRCS effective May 6, 2014.
- OIG 10703-0004-KC, Recovery Act, Watershed Protection and Flood Prevention Operations Program, Field Confirmations, Phase II, (July 2010). Final report issued July 24, 2012. Closed for NRCS effective January 15, 2014.
- OIG 50024-0003-11, Calendar Year 2012 Executive Order 13520, Eliminating Improper Payments, High-Dollar Overpayments Report Review, (December 2012). Final report issued August 22, 2013. NRCS addressed all reporting requirements. Closed for NRCS effective June 23, 2014.
- OIG 50024-0004-11, Improper Payment Elimination and Recovery Act of 2010 (IPERA) Compliance Review for Fiscal Year 2012, (December 2012). Final report issued March 14, 2013. Single NRCS-applicable recommendation closed January 14, 2014. Closed for NRCS effective January 14, 2014.

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- OIG 50501-0004-12, Fiscal Year 2013 Federal Information Security Management Act (FISMA), (April 2013). Final Report issued November 26, 2013. No NRCS recommendations. Closed for NRCS effective March 20, 2014.
- OIG 50703-02-13, Analysis of Jobs Reported for American Recovery and Reinvestment Act-USDA Federal Reporting, Gov Data Quality –Review, (January 2012). Final report issued November 30, 2012. Single OCFO-directed recommendation has final action. Closed for NRCS effective August 21, 2014.

### **2014 Government Accounting Office (GAO) and Office of Inspector General (OIG) active audits:**

- GAO 360644, Agricultural Conservation: USDA should improve its process for allocating funds to States for the Environmental Quality Incentives Program, (GAO-06-969), (September 2006). GAO closed both recommendations—one as implemented and one as not-implemented. Will close for NRCS effective December 2014.
- GAO 361251, Nonpoint Source Water Pollution: Greater oversight and additional data needed for key Environment Protection Agency Water Program (GAO-12-335) (November 2010). Final report issued July, 2012. NRCS report on a 319 Watershed contract review to address the September 20, 2012, USDA Statement of Action is under executive review.
- GAO 361397, USDA Payments to the Deceased (GAO-13-503) (April 2012). Final Report issued June 28, 2013. Statement of Action has one NRCS recommendation. The MOU between Social Security Administration and USDA was fully executed in April 2014. NRCS has continued the monthly adjudication process for Do Not Pay.
- GAO 361435, Missouri River Flood and Drought: Experts agree the US Army Corps of Engineers took appropriate action given the circumstances, but should examine new forecasting techniques (GAO-14-741), (November 2012). Final report issued September 12, 2014. Report recommendations are for the US Army Corps of Engineers.
- GAO 361488, Ocean Acidification: Federal response under way, but actions needed to understand and address potential impacts, (GAO-14-736), (August 2013). Final report issued September 12, 2014. GAO advised on October 28, 2014 that they do not need a Statement of Action from USDA on this job.
- GAO 361531, Climate Change: USDA's Ongoing efforts can be enhanced with better metrics and more relevant information for farmers, (GAO-14-755) (September 2013). Final report released September 26, 2014. USDA to develop performance measures that better reflect the breadth of USDA climate change efforts.
- GAO 361551, Great Lakes Restoration (February 2014), NRCS has addressed several questionnaires. Review ongoing.
- GAO 361619, Status of implementation of the February 2013 upper Missouri River basin soil and snowpack monitoring proposal (November 2014), Entrance conference conducted December 8, 2014. Review ongoing.
- OIG 10099-0001-31, NRCS's Administration of Easement Programs in Wyoming (March, 2013). Final report issued September 27, 2013. Recommendations 5 and 6 are closed. Recommendations 1 through 4 and 7 remain open.
- OIG 10401-0002-FM, NRCS Financial Statements for Fiscal Year 2008, (January 2008). Final report issued November 13, 2008. Will close for NRCS effective October 9, 2014.
- OIG 10401-0003-FM, Financial Statement Audit Fiscal Year 2009, (October 2009). Final report issued November 10, 2009. Will close for NRCS effective November 24, 2014.
- OIG 10401-0004-FM, Natural Resources Conservation Service's Financial Statements for Fiscal Year 2010 (January 2010). Final report issued November 2010. Recommendations 1, 2, 3, 4, 6 and 7 are closed. Recommendation 5 remains open.
- OIG 10401-0001-11, NRCS Financial Statement Audit Fiscal Year 2011 (February 2011). Final report issued November, 2011. Recommendations 1, 2, 3, 6 and 7 are closed. Recommendations 4 and 5 remain open.
- OIG 10401-0002-11, NRCS Financial Statement Audit Fiscal Year 2012 (March 2012). Final report issued November 9, 2012. Recommendations 1, 2, 4, 5 and 7 are closed. Recommendations 3 and 6 remain open.
- OIG 10601-0001-23, Controls over Land Valuations for Conservation Easements (September 2013), Review ongoing.
- OIG 10601-0001-31, Environmental Quality Incentives Program (December 2012). Final report issued July 24, 2014. Recommendations 1 through 3 are open. Recommendations 4 through 6 are closed.
- OIG 10601-0001-32, NRCS Conservation Stewardship Program (October 2013). Field work in progress.

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- OIG 10601-0002-31, NRCS Conservation Easement Compliance (May 2013). Final report issued July 30, 2014. All 11 recommendations remain open.
- OIG 10601-0003-31, NRCS: Wetland Conservation Provisions in the Prairie Pothole Region (August 2014). Field work in progress.
- OIG 10601-0004-KC, NRCS Conservation Security Program (CSP) (November 2006). Final report issued June, 2009. Recommendations 1 through 7 and 10 through 23 are closed. Recommendations 8 and 9 remain open.
- OIG-10703-0001-AT, ARRA-Rehabilitation of Flood Control Dams (September 2010). Final report issued March 25, 2013. Recommendations 2 through 4 are closed. Recommendations 1 and 5 remain open.
- OIG 10703-0001-KC, (Phase I) Emergency Watershed Protection Program Floodplain Easements (April 2009). Final report issued September, 2010. Report includes Fast Reports dated August 19, 2009 and November 19, 2009. Recommendations 1 through 3 and 5 through 7 are closed. Recommendation 4 remains open.
- OIG-10703-0003-KC (Phase 2), Emergency Watershed Protection Program, Easement Applications on Non-Agricultural Lands (January 2010). Final report issued March 4, 2012. Recommendations 1 and 3 are closed. Recommendation 2 remains open.
- OIG 10703-0005-KC (Phase 2), ARRA Emergency Watershed Protection Program Floodplain Easements (July 2010), Final report issued March 14, 2013. Recommendations 1 through 4, 6 and 7 are closed. Recommendation 5 remains open.
- OIG 10704-0001-32, Migratory Bird Habitat Initiative: NRCS response to issues caused by the Deepwater Horizon/British Petroleum Oil Spill (BP) (December 2010). Final report issued August 9, 2012. Recommendations 2 through 5 are closed. Recommendation 1 remains open.
- OIG 50024-0005-11, Improper Payments Elimination and Recovery Act Compliance Review for Fiscal Year 2013 (January 2014). Final report issued April 15, 2014. All recommendations directed to OCFO. NRCS Office of CFO will have subsidiary responsibilities.
- OIG 50024-0006-11, EO 13520, Reducing Improper Payments, High-Dollar Overpayments Reports Review for Fiscal Year 2013 (January 2014). Final report issued August 13, 2014. Audit has one NRCS recommendation, which remains open.
- OIG 50024-0007-11, EO 13520, Reducing Improper Payments, High-Dollar Overpayments Reports Review for Fiscal Year 2014 (October 2014), Entrance Conference conducted on December 1, 2014. Review ongoing.
- OIG 50024-0008-11, Improper Payments Elimination and Recovery Act Compliance Review for Fiscal Year 2014 (October 2014), Entrance Conference conducted on December 1, 2014. Review ongoing.
- OIG 50099-0001-23, USDA's Controls over Economy Act Transfers and Green Book Program Charges (August 2012). Final report issued September 18, 2014. OCFO and NRCS to jointly review applicable agreements, and take necessary corrective actions.
- OIG 50501-0006-12, Fiscal Year 2014 Federal Information Security Management Act (FISMA) (March 2014). Audit in progress.
- OIG 50501-0005-12, Cloud Computing Initiative – Status of Cloud–Computing Environments within the Federal Government (December 2013). Final report issued September 26, 2014. Audit has one NRCS recommendation which remains open.
- OIG 50601-0003-31, Beginning Farmers and Ranchers (January 2014), Discussion Draft received December 1, 2014. Exit conference is pending.
- OIG 50601-0003-22, Coordination of USDA Farm Program Compliance – Farm Service Agency, Risk Management Agency, and NRCS (October 2014), Entrance Conference conducted October 23, 2014. Field work in progress.



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Available Funds and Staff Years (SYs)  
(Dollars in thousands)

Item	2013 Actual		2014 Actual		2015 Enacted		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
<u>Discretionary Programs:</u>								
Private Lands Conservation Operations.....	\$830,998	5,345	812,939	5,916	846,428	6,077	831,231	5,920
Watershed & Flood Prevention Operation.....	245,454	81	-	67	78,581	70	200,000	77
Watershed Rehabilitation Program.....	14,700	29	273,880	40	165,120	34	-	-
Water Bank.....	-	-	4,000	1	4,000	1	-	-
Total, Discretionary Appropriation.....	1,091,152	5,455	1,090,819	6,024	1,094,129	6,182	1,031,231	5,997
Recission.....	-23,620	-	1,968	-	-	-	-20,100	-
Sequestration.....	-52,434	-	-11,880	-	-11,178	-	-	-
Transfers In.....	144	-	144	-	-	-	774,612	5,532
Adjusted Appropriation.....	1,015,242	5,455	1,081,051	6,024	1,082,951	6,182	1,785,743	11,529
Balance Available, SOY.....	231,936	-	419,080	-	385,873	-	154,121	-
Unobligated Balance of Approp, Reduced.....	-	-	-	-	-	-	-68,942	-
Other Adjustments (Net).....	85,584	-	37,529	-	-8,726	-	-60,812	-
Total Available.....	1,332,762	5,455	1,537,660	6,024	1,460,098	6,182	1,810,110	11,529
Lapsing Balances.....	-146	-	-144	-	-	-	-	-
Balance Available, EOY.....	-419,574	-	-385,873	-	-154,174	-	-	-
Obligations.....	913,042	5,455	1,151,643	6,024	1,305,924	6,182	1,810,110	11,529
<u>Obligations under other USDA appropriations:</u>								
Farm Security & Rural Investment Program.....	3,238,427	5,019	2,945,932	4,269	3,747,300	5,001	3,814,221	5,532
Transfers Out.....	-	-	-	-	-	-	-774,612	-5,532
<u>Reimbursements for technical services to Federal and Non-Federal:</u>								
USDA Planning & application (FSA-CRP)	64,920	611	-	-	-	-	-	-
Other Federal and Non-Federal Reimbursements	72,066	197	50,667	189	67,000	143	67,000	143
Total Reimbursements.....	136,986	808	50,667	189	67,000	143	67,000	143
Total, NRCS.....	4,288,455	11,282	4,148,242	10,482	5,120,224	11,326	4,916,719	11,672

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Permanent Positions by Grade and Staff Year Summary

Item	2013 Actual			2014 Actual			2015 Enacted			2016 Estimate		
	D.C.	Field	Total	D.C.	Field	Total	D.C.	Field	Total	D.C.	Field	Total
SES.....	22	2	24	22	4	26	22	4	26	22	4	26
GS-15.....	95	73	168	88	91	179	76	81	157	79	83	162
GS-14.....	206	177	383	132	250	382	118	223	341	121	230	351
GS-13.....	120	553	673	70	652	722	62	581	643	64	599	663
GS-12.....	60	2,886	2,946	33	3,005	3,038	29	2,679	2,708	30	2,761	2,791
GS-11.....	66	2,412	2,478	26	2,507	2,533	23	2,235	2,258	24	2,303	2,327
GS-10.....	1	38	39	-	36	36	-	32	32	-	33	33
GS-9.....	62	1,639	1,701	22	1,832	1,854	20	1,633	1,653	20	1,683	1,703
GS-8.....	18	449	467	18	872	890	16	777	793	17	801	818
GS-7.....	35	1,466	1,501	14	1,729	1,743	12	1,541	1,553	13	1,588	1,601
GS-6.....	2	347	349	1	420	421	1	374	375	1	386	387
GS-5.....	8	237	245	2	454	456	2	405	407	2	417	419
GS-4.....	4	205	209	2	222	224	2	198	200	2	204	206
GS-3.....	1	39	40	2	157	159	2	140	142	2	144	146
GS-2.....	3	34	37	1	40	41	1	36	37	1	37	38
GS-1.....	-	1	1	-	1	1	-	1	1	-	1	1
<hr/>												
Total Perm.												
Positions.....	703	10,558	11,261	433	12,272	12,705	386	10,940	11,326	398	11,274	11,672
Unfilled, EOY..	320	576	896	47	2,541	2,588	-	-	-	-	-	-
Total, Perm.												
Full-Time												
Employment,												
EOY.....	383	9,982	10,365	386	9,731	10,117	386	10,940	11,326	398	11,274	11,672
Staff Year Est..	724	9,947	10,671	1,080	9,402	10,482	386	10,940	11,326	398	11,274	11,672

## NATURAL RESOURCES CONSERVATION SERVICE

### Size, Composition and Cost of Motor Vehicle Fleet

As a field-based agency, NRCS has a significant number of employees who require vehicles to visit field offices, job sites (farms and ranches), and other areas where public transportation is non-existent, uneconomical, or inadequate. Because they drive on agricultural land to provide technical assistance to farmers and ranchers, and often transport large engineering and other field equipment, employees need access to pickup trucks and sport utility vehicles. NRCS maintains a fleet of vehicles distributed among service centers and field, area, and State offices in the 50 States, the Caribbean, and the Pacific Basin areas. The majority of the vehicles are owned by the agency, others are leased through the General Services Administration (GSA). The vehicles are assigned to an office location, and several employees use a single vehicle. Efforts are made to share vehicles with other co-located USDA agencies when feasible to minimize the number of vehicles at a location and maximize their use in the most efficient and cost-effective manner.

To ensure that vehicles are safe and reliable, NRCS requires annual vehicle inspections per States' motor vehicle regulations. The Federal Management Regulation 102-34.280 sets forth the minimum number of years or number of miles an agency must keep its vehicles before replacement. NRCS policy is to replace motor vehicles based on economy, environmental, and safety requirements.

Changes to the motor vehicle fleet. At the end of 2014, NRCS had a fleet of 8,791 vehicles, of which 8,517 were agency owned, and 274 were GSA leased vehicles. NRCS fleet size was decreased by 125 vehicles from 2013 to 2014. In 2014, NRCS commenced using the Wright Express fleet card program which records and provides extensive data on fleet operation costs. NRCS is also planning to replace a large number of older vehicles from inventory that do not meet the Department of Energy and Environmental Protection Agency guidelines in 2015 and 2016.

Development of the NRCS Vehicle Management Strategy. NRCS chartered a Vehicle Management Strategy Workgroup, which developed a three-year plan outlining a proactive approach to optimize the use of NRCS vehicles. Full implementation of this plan will further reduce costs, address vehicle replacements to aid in reducing greenhouse gas emissions, and ensure the NRCS vehicle allocation methodology meets Federal fleet guidelines and policies, while also meeting mission needs.

Managing the motor vehicle fleet to reduce greenhouse gas emissions. In order to meet Federally-mandated requirements to reduce greenhouse gas emissions, NRCS purchases alternative fuel vehicles, where such fuels are available, and hybrid vehicles where they are not. In remote rural areas, there may be few or no alternative fuel options. In the coming year, the agency will continue to focus on purchasing alternative fuel vehicles where there is adequate access to such fuels, and hybrid vehicles in other locations in order to meet greenhouse gas emission targets.

NATURAL RESOURCES CONSERVATION SERVICE

Size, Composition, and Annual Operating Costs of Vehicle Fleet

Fiscal Year	Number of Vehicles by Type <sup>1</sup>							Annual Operating Costs (\$ in 000)	
	Sedans and Station Wagons	Light Trucks, SUVs, and Vans		Medium Duty Vehicles	Ambulances	Buses	Heavy Duty Vehicles		Total Number of Vehicles
		4x2	4x4						
2013	792	2,794	4,928	379	-	1	22	8,916	15,584
Change	-16	-9	-95	-7	-	-	+2	-125	+1,715
2014	776	2,785	4,833	372	-	1	24	8,791	17,299 <sup>2</sup>
Change	-41	-141	+76	-5	-	-	-	-111	-48
2015	735	2,644	4,909	367	-	1	24	8,680	17,251
Change	-4	-35	+80	-15	-	-	-1	+25	+222
2016	731	2,609	4,989	352	-	1	23	8,705	17,473

<sup>1</sup> Vehicles reported are both agency-owned and GSA-leased.

<sup>2</sup> The FY14 annual operating cost was reported from the Wright Express fleet card program.

NATURAL RESOURCES CONSERVATION SERVICE

PRIVATE LANDS CONSERVATION OPERATIONS

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Private Lands Conservation Operations

- For necessary expenses for carrying out the provisions of the Act of April 27, 1935 (16 U.S.C. 590a-f), including preparation of conservation plans and establishment of measures to conserve soil and water (including farm irrigation and land drainage and such special measures for soil and water management as may be necessary to prevent floods and the siltation of reservoirs and to control agricultural related pollutants); operation of conservation plant materials centers; classification and mapping of soil; dissemination of information; acquisition of lands, water, and interests therein for use in the plant materials program by donation, exchange, or purchase at a nominal cost not to exceed \$100 pursuant to the Act of August 3, 1956 (7 U.S.C. 428a); purchase and erection or alteration or improvement of permanent and temporary buildings; and operation and maintenance of aircraft, [\$846,428,000]\$831,231,000, to remain available until
- 1 September 30, [2016]2017: *Provided*, That appropriations hereunder shall be available pursuant to 7 U.S.C. 2250 for construction and improvement of buildings and public improvements at plant materials centers, except that the cost of alterations and improvements to other buildings and other public improvements shall not exceed \$250,000: *Provided further*, That when buildings or other structures are erected on
  - 2 non-Federal land, that the right to use such land is obtained as provided in 7 U.S.C. 2250a.: *Provided further*, That of the amounts made available under this heading, \$5,600,000, shall remain available until expended for the authorities under 16 U.S.C. 1001–1005 and 1007–1009 for authorized ongoing watershed projects with a primary purpose of providing water to rural communities.]
  - 3 In addition, \$774,612,000, to be available for the same time period and for the same purposes as the appropriation from which transferred, shall be derived by transfer from the Farm Security and Rural Investment Program for technical assistance in support of conservation programs authorized by Title XII of the Food Security Act of 1985, as amended (16 U.S.C. 3801-3862); Section 524(b) of the Federal Crop Insurance Act, as amended (7 U.S.C. 1524(b)); and Section 502 of the Healthy Forests Restoration Act of 2003, as amended (16 U.S.C. 6572): *Provided further*, That, upon a determination that additional funding is necessary for technical assistance for the purposes provided herein, additional such amounts may be derived by transfer from the Farm Security and Rural Investment Program: *Provided further*, That any portion of the funding derived by transfer deemed not necessary for the purposes provided herein may be transferred to the Farm Security and Rural Investment Program: *Provided further*, That the transfer authority provided under this heading is in addition to any other transfer authority provided elsewhere in this Act.

The first change in language proposes deletion of “2016” and insertion of “2017” to provide two year funds availability.

The second change in language proposes deletion of language for authorized ongoing watershed projects with a primary purpose of providing water to rural communities.

The third change proposes insertion of language to allow the transfer of funds from the Farm Security and Rural Investment Program for technical assistance in support of conservation programs. See page 27-34 for more details on the Private Lands Conservation Operations Appropriation Language Changes.

NATURAL RESOURCES CONSERVATION SERVICE

PRIVATE LANDS CONSERVATION OPERATIONS

Lead-Off Tabular Statement

Budget Estimate, 2016.....	\$831,231,000
2015 Enacted.....	846,428,000
Change in Appropriation.....	<u><u>-15,197,000</u></u>

Adjusted Appropriations

Budget Estimate, Current Law 2016.....	\$831,231,000
Change Due to Proposed Appropriations Language Changes.....	+774,612,000
Net 2016 Request.....	<u><u>+1,605,843,000</u></u>

PRIVATE LANDS CONSERVATION OPERATIONS

Summary of Increases and Decreases

(Dollars in thousands)

Program	2013 Actual	2014 Change	2015 Change	2016 Change	2016 Estimate
Discretionary Appropriations:					
Private Lands Conservation Operations:					
Conservation Technical Assistance .....	\$675,771	+\$38,612	+\$33,345	-\$14,698	\$733,030
Soil Survey.....	73,809	+6,191	-	+94	80,094
Snow Survey & Water Supply Forecasting.....	8,580	+720	-	-363	8,937
Plant Materials Centers.....	8,673	+727	-	-230	9,170
	<u>766,833</u>	<u>+46,250</u>	<u>+33,345</u>	<u>-15,197</u>	<u>831,231</u>
Transfer from Mandatory Programs.....	-	-	-	+774,612	774,612
Total Private Lands Conservation Operations....	<u><u>766,833</u></u>	<u><u>+46,250</u></u>	<u><u>+33,345</u></u>	<u><u>+759,415</u></u>	<u><u>1,605,843</u></u>

NATURAL RESOURCES CONSERVATION SERVICE

PRIVATE LANDS CONSERVATION OPERATIONS

Project Statement

Adjusted Appropriations Detail and Staff Years (SYs)

(Dollars in thousands)

Program	2013 Actual		2014 Actual		2015 Enacted		Inc. or Dec.		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Appropriations:										
Private Lands Conservation Operations:										
1. Technical Assistance.....	\$675,771	4,691	\$714,383	5,387	\$747,728	5,547	-\$14,698 (1)	-157	\$733,030	5,390
2. Soil Survey.....	73,809	517	80,000	402	80,000	403	+94 (2)	-	80,094	403
3. Snow Survey.....	8,580	52	9,300	50	9,300	50	-363 (3)	-	8,937	50
4. Plant Materials.....	8,673	85	9,400	77	9,400	77	-230 (4)	-	9,170	77
Total Adjusted Approp.....	766,833	5,345	813,083	5,916	846,428	6,077	-15,197	-157	831,231	5,920
Rescissions and										
Transfers (Net).....	22,503	-	-144	-	-	-	-	-	-	-
Sequestration.....	41,662	-	-	-	-	-	-	-	-	-
Total Appropriation.....	830,998	5,345	812,939	5,916	846,428	6,077	-15,197	-157	831,231	5,920
Transfers In:										
Congressional Relations.....	144	-	144	-	-	-	-	-	-	-
Rescission.....	-22,503	-	-	-	-	-	-	-	-	-
Sequestration.....	-41,662	-	-	-	-	-	-	-	-	-
Bal. Available, SOY 1/.....	57,135	-	44,361	-	61,417	-	-45,605	-	15,812	-
Recoveries, Other (Net).....	9,816	-	4,141	-	-	-	-15,812	-	-15,812	-
Total Available.....	833,928	5,345	861,585	5,916	907,845	6,077	-76,614	-157	831,231	5,920
Bal. Available, EOY 1/.....	-44,361	-	-61,417	-	-15,812	-	15,812	-	-	-
Total Obligations.....	789,567	5,345	800,168	5,916	892,033	6,077	-60,802	-157	831,231	5,920
<u>1/ Includes Reimbursable carryover.</u>										
Total Appropriation.....	830,998	5,345	812,939	5,916	846,428	6,077	-15,197	-157	831,231	5,920
Proposed Language Changes:										
Transfer from Farm Bill TA....	-	-	-	-	-	-	+774,612	+5,532	774,612	5,532
Adjusted Appropriation.....	830,998	5,345	812,939	5,916	846,428	6,077	+759,415	+5,375	1,605,843	11,452

NATURAL RESOURCES CONSERVATION SERVICE

PRIVATE LANDS CONSERVATION OPERATIONS

Project Statement

Obligations Detail and Staff Years (SYs)

(Dollars in thousands)

Program	2013 Actual		2014 Actual		2015 Enacted		Inc. or Dec.		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Private Lands Conservation Operations:										
1. Technical Assistance.....	\$698,655	4,691	\$700,069	5,387	\$787,696	5,547	-\$54,666	-157	\$733,030	5,390
3. Soil Survey.....	73,925	517	81,777	402	83,910	403	-3,816	-	80,094	403
4. Snow Survey.....	8,007	52	9,599	50	10,136	50	-1,199	-	8,937	50
5. Plant Materials.....	8,980	85	8,723	77	10,291	77	-1,121	-	9,170	77
Total Obligations.....	789,567	5,345	800,168	5,916	892,033	6,077	-60,802	-157	831,231	5,920
Bal. Available, EOY 1/.....	44,361	-	61,417	-	15,812	-	-15,812	-	-	-
Total Available.....	833,928	5,345	861,585	5,916	907,845	6,077	-76,614	-157	831,231	5,920
Transfers In.....	-144	-	-144	-	-	-	-	-	-	-
Rescission.....	22,503	-	-	-	-	-	-	-	-	-
Sequestration.....	41,662	-	-	-	-	-	-	-	-	-
Bal. Available, SOY 1/.....	-57,135	-	-44,361	-	-61,417	-	+45,605	-	-15,812	-
Recoveries, Other (Net).....	-9,816	-	-4,141	-	-	-	+15,812	-	15,812	-
Total Appropriation.....	830,998	5,345	812,939	5,916	846,428	6,077	-15,197	-157	831,231	5,920
Proposed Language Changes:										
Transfer from Farm Bill TA.....	-	-	-	-	-	-	+774,612	+5,532	774,612	5,532
Adjusted Appropriation.....	830,998	5,345	812,939	5,916	846,428	6,077	+759,415	+5,375	1,605,843	11,452

<sup>1/</sup> Includes Reimbursable carryover.



## NATURAL RESOURCES CONSERVATION SERVICE

### PRIVATE LANDS CONSERVATION OPERATIONS

#### Justification of Increases and Decreases

The Private Lands Conservation Operations account has a net decrease of \$15,197,000 and a decrease of 157 staff years from the 2015 levels for the account (\$846,428,000 and 6,077 staff years available in 2015). NRCS will manage the decrease by continuing the controls on the hiring process at National Headquarters to ensure there is a proper business justification for filling critical hires; reducing the funding level for all support cost (including travel, training, and maintenance of facilities); and curtailing the level of agreements and contracts implemented with local, state and private entities that assist with the implementation of conservation.

In addition to the activities and functions specifically described in the budget request, current year and budget year base funds will be used to carry out activities and functions consistent with the full range of authorities and activities delegated to the agency.

The other changes in the account include increases of \$14,670,000 for the Conservation Delivery Streamlining Initiative (CDSI) to implement at the field level; \$6,402,000 for the proposed pay increase; \$5,000,000 for the Conservation Effects Assessment Project (CEAP) national reassessment; \$3,781,000 for the decentralization of General Services Administration Rental Payments and Department of Homeland Security payments; and \$248,000 for Federal Employee Health Benefits costs.

The changes in the programs funded in this account are as follows:

- (1) A net decrease of \$14,698,000 and a decrease of 157 staff years for Conservation Technical Assistance (CTA) (\$747,728,000 and 5,547 staff years available in 2015):

CTA is the foundation for NRCS's ability to deliver effective conservation. CTA provides the flexibility to work with agricultural producers to prepare foundational conservation plans so that they can wisely invest in conservation actions on their operations, as well as with partner organizations to develop innovative responses to conservation challenges and opportunities. Base funding for CTA will continue to provide important technical assistance helping land managers to reduce soil loss from erosion; address soil, water quality, water conservation, air quality, and agricultural waste management concerns; reduce potential damage caused by excess water and sedimentation or drought; enhance the quality of fish and wildlife habitat; improve the long-term sustainability of all lands, including cropland, forestland, grazing lands, coastal lands, and developed or developing lands; and facilitate changes in land use as needed for natural resource protection and sustainability.

NRCS works to support and enhance sustainable, economically viable and resilient landscapes and communities, which supports USDA Strategic Goal 2: Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources. NRCS draws on a long history of helping people help the land. We work in close partnership with farmers, ranchers, forest landowners, local and State governments, other Federal agencies, and numerous non-governmental entities to maintain healthy and productive working landscapes.

In 2016, NRCS proposes to accelerate proven approaches to conservation that generate results at broader scales, leverage tools and resources to gain efficiencies in service delivery, and optimize use of existing authorities that will strengthen rural communities. NRCS proposes to: 1) accelerate conservation results at the landscape scale, building on partnerships and new science and policy tools to focus resources and create non-traditional incentives; 2) support farm- and ranch-specific conservation results producers rely on to achieve their economic objectives and regulatory requirements; 3) afford conservation access to more producers and leverage State and local government technical capacity; and 4) take a new look at existing authorities to amplify community action to build natural resource based economic opportunities and accelerate preparedness planning related to climate-driven natural resource effects. More specifically, NRCS proposes to:

## NATURAL RESOURCES CONSERVATION SERVICE

- Target technical and financial resources to achieve landscape-scale conservation objectives and address the most pressing issues affecting landscape resilience. NRCS will work to protect ecosystems, address water resource concerns, and restore habitat for at-risk species in large-scale ecosystems. NRCS will also bring to bear the best available science and work collaboratively with partners to strategically target conservation investments in priority landscapes to generate the most cost-effective return for producers and taxpayers. NRCS will accelerate the achievement of natural resource conservation outcomes by dedicating financial assistance to priority landscapes and systems of practices mitigating impacts of short- and long-term drought. NRCS will also coordinate investments on public and private land to accelerate implementation of soil health management systems to improve and sustain the soil's capacity for mitigating extreme drought and flooding events.
- Leverage partnerships to increase financial resources, expand technical capacity, and accelerate conservation implementation by partnering with State, Federal, and other stakeholders to leverage Federal funds for delivering and assessing conservation investments in healthy soils, and to accelerate efforts to adapt and mitigate the effects of a changing climate on functioning landscapes. NRCS will participate in and support Departmental efforts to address short-term and long-term impacts of the drought on agriculture. NRCS will also collaborate with natural resource partners to implement Ecological Site Descriptions to interpret and project changes in vegetative communities based on both natural disturbances and management activities to inform and guide conservation planning, programs, and natural resources management. NRCS will target and coordinate with partners (National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, Federal Emergency Management Agency, Animal and Plant Health Inspection Service, and others) the data and technology tools required for rapid response and recovery to disasters in order to mitigate damage to natural and human resources and minimize economic impacts. NRCS will support USDA's Regional Hubs for Risk Adaptation and Mitigation to Climate Change with natural resource, inventory, and forecasting data and information; provide input and guidance on applied research, information, and technology needs to help individuals and communities collaborate to restore, protect, and enhance landscape resilience in the face of climate change. Finally, NRCS will establish competitive grants that leverage non-Federal partnerships to identify and implement community based approaches for mitigating and adapting to climate change, including risk reduction, green development, and community based resource planning.
- Accelerate innovation and program process improvement by supporting development of ecosystem markets to improve natural resource conditions at a lower cost, to accelerate the adoption of voluntary conservation measures on private land, and to attract new funding sources to private lands conservation. This will integrate regulatory "certainty" for private landowners to work cooperatively with us to restore critical habitat and improve water quality - provide certainty through our Federal and State partners to producers that they can continue making a living off of their farms and ranches no matter the decision in the future for a given species or watershed. NRCS will develop and adapt conservation systems, including engineering standards and plant materials, to address increased climate variability, increase focus on air quality issues, including NRCS assistance with combustion system improvements, including engine replacements and other technologies, and develop and optimize conservation systems for carbon sequestration and greenhouse gas reductions.
- Inform conservation-based decision-making through prioritized investments in science-based tools and data, including advancing knowledge of dynamic soil properties (how soils change with land use) to improve and develop conservation practices and soil health management systems to help adapt to climate change, to minimize land degradation, and to improve the health of the soil, water, animal, plant, air, and energy ecosystems. NRCS will support applied research and modeling to identify cost effective strategies to maximize the benefits of conservation and improve soil health. Through the CEAP initiatives, NRCS will establish a continuing, statistically-valid survey process to track progress in conservation adoption and conservation investment benefits to the Nation's water quality, soil health, and agricultural productivity.

In FY 2016, NRCS will continue efforts to increase resiliency across the agency, which supports USDA Strategic Goal 5: Create a USDA for the 21<sup>st</sup> century That Is High-Performing, Efficient, and Adaptable. NRCS proposes to continue to improve its administrative processes and to streamline conservation delivery.

NRCS proposes to continue the investment in the CDSI, which implements a more effective, efficient, and sustainable business model for delivering conservation assistance. Through reduced document handling,

## NATURAL RESOURCES CONSERVATION SERVICE

reduced decision and approval times, improved access to best-available information and technology, and staffing strategies that are aligned with streamlined processes, NRCS and USDA will benefit from a more efficient business model. More critically, NRCS customers will benefit by:

- Reducing the average number of trips that clients will have to make to an NRCS field office;
- Enabling NRCS and clients to finalize conservation planning and decision-making while in the field;
- Accelerating the timeline between applying for a program and having a signed contract;
- Accelerating the time between applying a practice and receiving payment for that practice; and
- Offering clients 24/7/365 service for many tasks.

NRCS will complete implementation of Administrative Transformation, which will build a better business and administrative structure for the future. NRCS is standardizing how we provide services by establishing a single, consistent set of standards to guide the work and a common set of tools to support the work. These changes will improve the efficiency of our administrative business operations. This will improve consistency in the quality of business and administrative services, lower the costs of delivering our business and administrative services, achieve effectiveness and efficiency in our operations, and introduce innovation to enhance performance.

NRCS will continue to assess and reduce its office space to ensure the agency is able to provide service to our customers in a cost-effective manner. This will be especially critical as CDSI continues to be implemented because the new technology will change how NRCS interacts with its customers. States will continue to lead this effort because they have the greatest knowledge regarding local needs. However, NRCS will provide an incentive to States that voluntarily reduce their physical footprint by using space as a factor in the fund allocation process to States. States that reduce space costs will be able to realize additional resources to support boots on the ground conservation activities.

NRCS will also streamline its compliance review activities while ensuring appropriate oversight for programs with a higher risk for improper payments. The NRCS Compliance Strategy: FY 2014 through FY 2017 presents an integrated framework to manage compliance and oversight activities and includes goals, objectives, and strategic initiatives tailored to meet NRCS needs, Government Accountability Office's internal control standards and the OMB Circular A-123, Management's Responsibility for Internal Controls. The NRCS Compliance Strategy is designed to help the agency improve internal controls and increase accountability by reforming financial procedures, address risks within the changing business and statutory environment, be proactive and responsive to shifting priorities, and provide overall guidance to identify risks for fraud, waste, abuse and mismanagement.

In summary, NRCS will work to create more resilient and sustainable landscapes through its conservation programs, and will work to create a more resilient and efficient organization to support and deliver those conservation programs in the future.

- a. An increase of \$5,791,000 for pay costs (\$1,165,000 for annualization of the 2015 pay increase and \$4,626,000 for the 2016 pay increase).

The increase for pay will enable NRCS to maintain a staffing only technical assistance level critical to the agency's mission. The pay cost funds are needed to avoid any disruption or delays in the CTA program activities and will be used to pay the increased salaries and benefits cost for the 5,390 staff years funded in the 2016 Budget Request.

- b. An increase of \$14,670,000 to continue the investment in the Conservation Delivery Streamlining Initiative (CDSI), which will improve the cost effectiveness, timeliness, and accountability of NRCS's program delivery.

CDSI is a multi-year effort to integrate information technology and business process improvements that will eliminate duplicative program administrative tasks, reduce overhead costs, and free NRCS technical field staff to refocus on conservation planning and customer service. Ultimately, implementation of CDSI should reduce the time agency staff in state and field offices devote to administrative processes.

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FY 2016 will be a critical year for the implementation of CDSI, as NRCS rolls out the mobile tool to field staff. To accomplish this will require a significant increase in the development activities for the Client Gateway, Conservation Desktop, and the Mobile Planning Tool, including integrating resource assessment tools into these systems. In addition, NRCS will need to invest in a Customer Relationship Management tool. The total increase in development costs is \$13,158,000 (from \$15,386,000 in 2015), and 2016 should be the peak year for such costs. Other areas of increase include Operations and Maintenance costs (\$920,000) and planning (\$592,000).

- c. An increase of \$5,000,000 for the Conservation Effects Assessment Project (CEAP) National Re-Assessment.

CEAP provides quantitative, science-based estimates of the effects of conservation practices on the condition of the Nation's natural resource base and environment. CEAP also quantifies the effects of conservation practices and programs on fish and wildlife and informs decision making to maximize benefits for species of concern while maintaining sustainable agricultural production. CEAP collaborates with nearly 60 partners and works very closely with several USDA and other Federal and State agencies as well as universities and non-governmental organizations. This funding increase will support the CEAP project refresh through data collection, analyses, and development of additional benefits for a seven year period, and will include additional support for developing quantifiable conservation benefits for wetlands, wildlife, and grazing lands. The benefit estimates will be scientifically supported by watershed level research by our partners. The original CEAP survey provided the agency the ability to provide estimates of benefits and conservation outcomes from the conservation that was in place during the 2003 to 2006 time period. Without a refresh of this information and continued development of benefit estimates, the existing data will no longer support agency activities as it grows older and less relevant to the ever changing challenges for American agriculture and the environment.

- d. An increase of \$3,781,000 for the decentralization of General Services Administration Rental Payments and Department of Homeland Security payments (\$28,720,000 available in 2015).

In FY 2015, the President's Budget proposed to eliminate the centralized account for General Services Administration Rents and DHS costs and distribute those costs to the agencies based on space occupancy (NRCS's share of those costs was \$28,720,000). In addition, NRCS is a service center agency and occupies non-General Services Administration space throughout the country to ensure access for producers to NRCS's conservation programs. Although NRCS is working to meet the Department's goal of reducing space by 25 percent, it must ensure that changes in the space occupied do not negatively affect access to the conservation programs. It is anticipated that the complete implementation of CDSI will provide opportunities to consolidate space in 2017 and beyond, but the final effect will not be known until after 2016.

- e. An increase of \$248,000 to partially fund increased Federal Employees Health Benefits costs. Remaining cost will be absorbed by the program.

The Office of Personnel Management issued a final rule that modified eligibility for coverage under the Federal Employees Health Benefits Program to certain temporary, seasonal, and intermittent Federal employees. The request includes a total of \$248,000 to cover this cost.

- f. A decrease of \$44,188,000 and a reduction of 157 staff years in Conservation Technical Assistance (CTA) in support of conservation plans written and delivery of conservation programs.

Conservation planning is a continuous, iterative process whereby resource assessment and evaluation of alternatives are funded through the CTA account while final plan implementation and evaluation are provided with mandatory Farm Bill funding. It is anticipated that this reduction will have measurable effect on the number of plans written and the assistance provided to producers. In terms of environmental

## NATURAL RESOURCES CONSERVATION SERVICE

outcomes, the funding reduction will result in lost conservation opportunities and reduced natural resource benefits. NRCS estimates that the reduction in CTA will result in the following lost benefits:

- Almost 694,000 tons of sediment loss prevention.
- Almost 9.8 million pounds of nitrogen loss prevention.
- Over 1.7 million pounds of phosphorus loss prevention.
- Over 18,200 tons of carbon sequestration in soils.

The agency has already implemented a number of cost-saving measures because of sequester and the constrained budget circumstances anticipated for the foreseeable future. For example, NRCS has implemented controls on the hiring process at National Headquarters to ensure there is a proper business justification for filling critical hires. NRCS has also realized cost savings in travel, partially through implementation of enhanced communications tools, including video conferencing capabilities. Information Technology costs have been a focus of attention as NRCS has improved its overall practices, including procurement practices (moving to fixed-cost contracts, for example), and ensuring that the correct inventory of software applications is available without waste or redundancy. NRCS has reduced its vehicle fleet and the associated operating costs, and is working to ensure it has the proper mix of vehicles to provide service to producers without having surplus capacity. Finally, NRCS has also worked to lower its contracting costs, ensuring that the agency manages its contracts for goods and services by doing more streamlined acquisitions, including utilizing more strategic sourcing initiatives.

In addition, NRCS has worked towards implementing Administrative Transformation, which rationalizes and streamlines administrative functions for the agency, including human resources, finance, acquisitions, and property. This effort will ensure the agency has the right mix of skills and abilities to manage its resources and support conservation delivery at the lowest possible cost.

- (2) A net increase of \$94,000 in funding and no change in staff years for the Soil Survey Program (\$80,000,000 and 403 staff years available in 2015).

The major NRCS objectives of the National Cooperative Soil Survey Program are to:

- Inventory the soil resources on all lands of the United States;
- Keep soil surveys relevant to meet emerging and ever-changing needs;
- Interpret the data and make soil survey information available to meet public needs;
- Collaborate with State technical staff and partners to develop ecological site descriptions;
- Promote and provide technical assistance in the use of soil survey information; and
- Lead the National Cooperative Soil Survey Program.

The agency conducts soil surveys cooperatively with other Federal agencies, Land Grant Universities, State agencies, Tribes, and local governments. Base funding for Soil Survey will continue to fund mapping and interpretative analyses that provide the public with information on the properties, capabilities and conservation treatment needs of their soils through soil surveys. The vital work of the NRCS soil survey program will continue in improved ways to address user needs. The program provides soil maps, databases, and soil interpretative data for all lands of the U.S. as well as direct technical support to the American public.

- a. An increase of \$493,000 for pay costs (\$122,000 for annualization of the 2015 pay increase and \$371,000 for the 2016 pay increase).

The increase for pay will enable NRCS to maintain current staffing levels, which are critical to the agency's mission. The pay cost funds are needed to avoid any disruption or delays in the Soil Survey program activities and will be used to pay the increased salaries and benefits cost for the 403 staff years funded in the 2016 Budget Request.

## NATURAL RESOURCES CONSERVATION SERVICE

b. A decrease of \$399,000 and no change in staff years within program activities.

The decrease in funding will be managed through cost savings and efficiencies in the program. The Soil Survey Program within NRCS provides information to meet current and future needs, interpret soil and ecosystem services for various uses, and makes these data and information available for public use. NRCS proposes to deliver the program through the following activities:

- Harmonize soils data across county and State lines, including multiple land uses, new and archived information to develop new digital soil mapping efforts to meet geospatial modeling requirements for multiple needs. Develop data models and collect validation data for dynamic soil properties to allow the prediction of management and natural disturbance effects on ecosystem services at various spatial and temporal scales;
- Standardize and maintain policy and protocols for the taxonomic, soil property and ecological site information and to make data collection, storage, and delivery more efficient and effective;
- Develop integrated technical tools and information to assist planners and land managers predict and assess soil health, ecosystem and landscape sustainability and implement sustainable management systems; and
- Develop innovative data sharing and information delivery tools and products to reach multiple stakeholders from underserved audiences to the most technically advanced.

(3) A net decrease of 363,000 and no change in staff years for Snow Survey and Water Supply Forecasting (SSWSF) (\$9,300,000 and 50 staff years available in 2015):

The (SSWSF) Program's mission is to measure snow and other climatic data in order to provide water supply forecasts and products that interpret the effect of current and future weather conditions on conservation practices. Base funding for SSWSF will continue to fund snowpack data and water supply forecasts. Continuing base funding is crucial to ensuring the continued success of the program for NRCS to provide land managers and users with snow pack data and water supply forecast for the Western United States, including water managers, other agencies, municipalities and private individuals who access the National Water and Climate Center annually.

a. An increase of \$51,000 for pay costs (\$13,000 for annualization of the 2015 pay increase and \$38,000 for the 2016 pay increase).

The increase for pay will enable NRCS to support staffing levels that are critical to the agency's mission. The pay cost funds are needed to avoid any disruption or delays in the SSWSF program activities and will be used to pay the increased salaries and benefits cost for the 50 staff years funded in the 2016 Budget Request.

b. A decrease of \$414,000 and no change in staff years for program activities.

NRCS will continue to make available critical snow/water forecasting data to Western States and water managers, other agencies, municipalities and private individuals who access the National Water and Climate Center annually.

The SSWSF program has been a cooperative program since funding began in 1935. Traditionally, the program has partnered with individuals; Federal, State, and local governments; Tribal councils; and Canadian and Mexican agencies to administer the snow survey activities and collect valuable climate data. Federal partners include the National Weather Service, United States Forest Service, Bureau of Reclamation, Army Corps of Engineers, Bureau of Land Management, United States Geological Survey, Bonneville Power Administration, and NRCS field offices. Representatives from 12 Western States have traditionally participated in the data collection and funding. Tribal entities collect climate data for use in water supply forecasts that directly benefit them. Snow and climate data collection activities are very important for managing water resources and complying with long established treaties between Canada and Mexico.

## NATURAL RESOURCES CONSERVATION SERVICE

The SSWSF operates, maintains, and controls the only operational, quality-controlled, high elevation climate network in the world. The SNOTEL network is designed to collect snowpack and related climatic and soils data at 880 (currently) remote sites in the western U.S. and Alaska. This network, which has been operating continuously since 1978, uses meteor-burst communications technology to collect data in near real-time at two receiving master stations.

The major function of the SNOTEL network is to provide data that are used to provide water supply forecasts at over 700 locations in the West in support of irrigated agriculture. Many of these locations are major reservoirs that are managed for multiple uses. Besides river and reservoir management, the network also provides data for emergency decisions for floods and droughts, administration of recreational resources, power generation, climate variability studies, air and water quality investigations, climate change, and endangered species habitat. It is used to make adjustments for satellite modeling of spatial snow cover extent, water content, snow depth, and soil moisture worldwide. SNOTEL data will become increasingly more valuable to estimate water availability in the West as the demand increases.

Programs have been developed and guidelines are being written to discontinue manual snow courses that are not deemed essential to water supply forecasting. All essential snow courses will be converted to SNOTEL sites. This will result in field labor cost savings, provide for more daily climate stations for model use, and provide a safer work environment for program and partnered personnel by decreasing time spent in a harsh winter environment.

(4) A net decrease of \$230,000 in funding and no change in staff years for the Plant Materials Centers (PMCs) (\$9,400,000 and 77 staff years available in 2015):

Our Nation continues to be challenged by environmental stresses, both natural, such as extreme drought challenging the productivity of cropland, pastures, and rangeland, and human-induced, such as heavy nutrient loads which impair the quality of our water and productivity of our streams, lakes, and oceans. Plants and vegetative technologies specific for a location or purpose are tools to help mitigate these challenges and build resilient landscapes to mitigate future stresses.

PMCs evaluate plants and plant technologies to meet the specific conservation requirements of diverse environments. PMCs have a long and successful history of selecting and releasing plants and plant technologies that serve a variety of natural resource needs. Much of that success is due to their unique nationwide network and ability to test vegetative solutions in a variety of environments. PMCs provide vegetative tools and information to increase the efficiency of conservation planning and effectiveness of conservation treatments. These vegetative tools increase the reliability of efforts to improve soil health; establish high quality livestock forage; create buffers of all kinds; stabilize soil in crop fields, along stream banks and shorelines, and after disturbances; improve water and air quality; and improve wildlife habitat, including habitat for managed and native pollinators. The work of PMCs increases the resiliency of our agricultural systems and ecosystems by providing appropriate plants for unique geographic locations and environmental conditions.

Funding for PMCs will continue to allow for the testing, evaluation, and demonstration of plant technologies used to solve natural resource problems. Improving the utilization of natural resources such as increasing diversity in plant communities; building resiliency in rangeland and pasture plants to mitigate the effects of drought; supporting certainty efforts for at-risk wildlife, water, and air quality; improving recommendations for cover crops to increase cropland soil health; and developing buffer recommendations to improve air and water quality are critical. PMCs will continue their tradition of delivering high quality, timely, science-based products to support NRCS conservation activities, initiative and emphasis areas, and delivery of Farm Bill programs.

As a result of these efforts, NRCS field staff, Federal and State partners, and land owners and land managers, will have vegetative guidance to meet specific conservation challenges. The availability of these products will improve the efficiency of NRCS conservation planning as well as the consistency and success of vegetative conservation treatments.

## NATURAL RESOURCES CONSERVATION SERVICE

NRCS continues to improve the structure and function of the Plant Materials Center Program. Recent activities include facility assessments and an examination of PMC structure and function. The facility assessments examined facility condition, energy use, and sustainability to gain a better understanding of our owned real property assets and opportunities to more effectively manage them. As NRCS begins to use this information, it will help the agency implement the Freeze the Footprint initiative, address deferred maintenance issues, and improve energy efficiency. Improvements to PMC processes will ensure that the program remains focused to its tradition of high-quality products.

- a. An increase of \$67,000 for pay costs (\$17,000 for annualization of the 2015 pay increase and \$50,000 for the 2016 pay increase).

The increase for pay will enable NRCS to maintain current staffing levels, which are critical to the agency's mission. The pay cost funds are needed to avoid any disruption or delays in the PMCs activities and will be used to pay the increased salaries and benefits cost for the 77 staff years funded in the 2016 Budget Request.

- b. A decrease of \$297,000 and no change in staff years for program activities.

The decrease in funding will be managed through cost savings and efficiencies in the program. The PMC program provides vegetative solutions to our Nation's natural resource challenges. PMCs will continue to provide field demonstrations and training sessions to field staff and landowners to disseminate new tools and techniques. PMCs will also continue their tradition of delivering high quality, timely, science-based products to the extent possible to support NRCS conservation activities, initiative and emphasis areas, and delivery of Farm Bill programs.



NATURAL RESOURCES CONSERVATION SERVICE

PRIVATE LANDS CONSERVATION OPERATIONS

Geographic Breakdown of Obligations and Staff Years (SYs)

(Dollars in thousands)

State/Territory	2013 Actual		2014 Actual		2015 Enacted		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Alabama.....	\$7,966	71	\$9,643	82	\$10,755	84	\$10,045	82
Alaska.....	3,882	34	3,807	29	4,193	30	3,884	29
Arizona.....	5,977	52	6,135	62	6,866	64	6,375	62
Arkansas.....	10,399	73	10,025	94	11,261	97	10,471	94
California.....	17,573	127	17,529	149	19,628	153	18,278	149
Colorado.....	10,948	97	12,522	106	13,973	109	12,961	106
Connecticut.....	3,000	21	3,031	21	3,385	22	3,157	21
Delaware.....	1,584	12	1,894	14	2,115	14	1,973	14
Florida.....	8,341	65	8,458	82	9,489	81	8,826	79
Georgia.....	6,802	85	10,759	97	12,074	102	11,237	99
Hawaii.....	6,468	46	6,952	60	7,814	60	7,263	58
Idaho.....	8,297	70	8,923	86	9,969	88	9,226	86
Illinois.....	15,848	98	14,905	138	16,721	145	15,573	141
Indiana.....	10,433	77	12,041	103	13,478	106	12,559	103
Iowa.....	22,787	145	20,514	181	23,029	186	21,443	181
Kansas.....	17,565	129	17,359	193	19,473	199	18,124	193
Kentucky.....	11,160	83	10,862	100	12,185	103	11,348	100
Louisiana.....	9,982	60	10,359	105	11,625	108	10,815	105
Maine.....	3,899	35	4,241	38	4,745	39	4,422	38
Maryland.....	4,044	35	4,869	37	5,456	38	5,068	37
Massachusetts.....	3,001	25	3,469	26	3,857	27	3,600	26
Michigan.....	10,998	71	9,835	90	11,041	93	10,271	90
Minnesota.....	11,343	92	12,757	108	14,270	111	13,300	108
Mississippi.....	13,874	93	12,961	115	14,554	118	13,545	115
Missouri.....	17,501	138	25,243	217	28,371	223	26,399	217
Montana.....	12,699	111	13,479	134	15,047	138	13,956	134
Nebraska.....	15,739	114	14,608	136	16,371	140	15,250	136
Nevada.....	3,179	27	3,487	27	3,884	28	3,596	27
New Hampshire.....	2,783	16	2,934	27	3,281	28	3,058	27
New Jersey.....	3,875	29	4,085	35	4,592	36	4,261	35
New Mexico.....	7,350	60	7,425	55	8,328	56	7,732	55
New York.....	8,485	63	8,542	74	9,594	76	8,922	74
North Carolina.....	7,884	68	8,175	76	9,139	78	8,518	76
North Dakota.....	12,255	95	12,505	124	14,043	128	13,060	124
Ohio.....	10,395	80	10,104	89	11,329	92	10,552	89
Oklahoma.....	14,695	101	13,355	150	14,980	154	13,951	150
Oregon.....	9,219	78	10,030	74	11,152	76	10,330	74
Pennsylvania.....	9,483	65	9,292	80	10,411	82	9,699	80
Puerto Rico.....	3,174	22	3,070	30	3,435	30	3,199	30
Rhode Island.....	1,985	12	2,330	20	2,603	21	2,427	20
South Carolina.....	6,267	51	6,612	57	7,411	59	6,904	57
South Dakota.....	10,564	89	10,684	105	11,975	108	11,155	105
Tennessee.....	11,936	81	10,954	106	12,278	109	11,437	106
Texas.....	32,762	261	33,726	304	37,874	313	35,228	304
Utah.....	5,377	45	6,658	55	7,394	49	6,838	55

NATURAL RESOURCES CONSERVATION SERVICE

PRIVATE LANDS CONSERVATION OPERATIONS

Geographic Breakdown of Obligations and Staff Years (SYs)  
(Dollars in thousands)

State/Territory	2013 Actual		2014 Actual		2015 Enacted		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Vermont.....	3,008	24	3,533	31	3,949	39	3,682	31
Virginia.....	6,297	58	8,077	82	9,052	84	8,432	82
Washington.....	10,028	73	10,446	97	11,713	99	10,886	97
West Virginia.....	6,390	49	6,675	67	7,485	70	6,930	67
Wisconsin.....	11,274	85	11,513	113	12,913	115	12,026	113
Wyoming.....	6,569	53	6,372	58	7,107	59	6,641	58
National Hdqtr.....	307,945	1,415	290,568	1,377	322,155	1,410	300,898	1,381
National Centers.....	4,274	289	11,835	-	12,211	-	11,500	-
Undistributed FB TA*.....	-	-	-	-	-	-	-	-
Obligations.....	789,567	5,345	800,168	5,916	892,033	6,077	831,231	5,920
Bal. Available, EOY.....	44,361	-	61,417	-	15,812	-	-	-
Total, Available.....	833,928	5,345	861,585	5,916	907,845	6,077	831,231	5,920

Private Lands Conservation Operations Account to consolidate technical assistance funding in the Private Lands Conservation Operations Account.

NATURAL RESOURCES CONSERVATION SERVICE

PRIVATE LANDS CONSERVATION OPERATIONS

Classification by Objects

(Dollars in thousands)

	2013	2014	2015	2016
	Actual	Actual	Enacted	Estimate
<b>Personnel Compensation:</b>				
Washington, D.C.....	\$26,609	\$23,751	\$27,112	\$53,855
Field.....	351,891	348,838	358,545	712,199
11 Total personnel compensation.....	378,500	372,589	385,657	766,054
12 Personal benefits.....	121,032	129,501	134,068	264,481
13.0 Benefits for former personnel.....	468	287	300	373
Total, personnel comp. and benefits.....	500,000	502,377	520,025	1,030,908
<b>Other Objects:</b>				
21.0 Travel and transportation of persons.....	37,738	27,809	28,858	38,146
22.0 Transportation of things.....	1,443	1,045	1,090	1,382
23.1 Rental payments to GSA.....	-	995	26,379	30,160
23.2 Rental payments to others.....	33,041	37,651	14,008	41,697
23.3 Communications, utilities, and misc. charges..	3,069	2,901	3,012	5,628
24.0 Printing and reproduction.....	1,426	470	489	619
25.2 Other services.....	46,217	77,682	90,790	62,098
25.4 Operation and maintenance of facilities.....	137,283	115,956	172,571	336,196
26.0 Supplies and materials.....	13,169	10,752	11,178	19,623
31.0 Equipment.....	15,163	22,611	23,501	39,234
32.0 Land and structures.....	182	-140	5	18
41.0 Grants.....	-43	-36	-	-
42.0 Insurance Claims and Indemnities.....	879	95	127	134
Total, Other Objects.....	289,567	297,791	372,008	574,935
99.9 Total, new obligations.....	789,567	800,168	892,033	1,605,843
<b>Position Data:</b>				
Average Salary (dollars), ES Position.....	\$165,337	\$169,567	\$170,364	\$172,068
Average Salary (dollars), GS Position.....	\$66,606	\$69,075	\$68,631	\$69,317
Average Grade, GS Position.....	10.0	10.0	10.0	10.0

NATURAL RESOURCES CONSERVATION SERVICE

Private Lands Conservation Operations – Appropriations Language Changes

Explanation of Changes:

The 2016 President's Budget proposes renaming the Conservation Operations account to Private Lands Conservation Operations (PLCO), and would consolidate the discretionary and mandatory technical assistance funding into a single account for reporting purposes.

NRCS utilizes this funding to provide technical assistance that helps people conserve, maintain, and improve the Nation's natural resources. This technical assistance, supported by science-based technology, provides agricultural producers and others with the knowledge and conservation tools they need to enact conservation activities on the lands they manage. Technical assistance funding also supports mandatory conservation programs managed by NRCS in the Farm Security and Rural Investment Program (FSRI) account, which is funded by transfers from the Commodity Credit Corporation.

The proposed account would consolidate the technical assistance funding currently provided in the Conservation Operations (discretionary) and FSRI (mandatory) accounts. Of the amounts provided in the FSRI account, \$775 million of technical assistance funding would transfer to PLCO, with allowance for additional transfers, if needed.

This proposed change consolidates all technical assistance funding into a single account for reporting purposes, and would not increase or decrease the amount available for technical assistance. This proposal also would not change the authorities or the period of availability of the mandatory funding.

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS ACCOUNT

STATUS OF PROGRAMS

**Current Activities.**

**Background.** Conservation Operations is authorized by the Soil Conservation and Domestic Allotment Act of 1935 (P.L. 74-46; 16 U.S.C. 590a-590f) and the Soil and Water Resources Conservation Act of 1977 (RCA) (16 U.S.C. 2001-2009). The purpose of Conservation Operations is to provide technical assistance supported by science-based technology and tools that help people conserve, maintain, and improve the Nation's natural resources. Conservation Operations has four major program components: Conservation Technical Assistance (CTA); Soil Survey; Snow Survey and Water Supply Forecasting (SSWSF); and Plant Materials Centers (PMCs).

Funding in the Conservation Operations account provides for the development and delivery of a major portion of the products and services associated with four of the agency's five business lines: 1) Conservation Planning and Technical Consultation; 2) Conservation Implementation; 3) Natural Resource Inventory and Assessment; and 4) Natural Resource Technology Transfer. The fifth business line, Financial Assistance, is funded primarily through other conservation programs.

**Agency Strategic Plan.** The Natural Resources Conservation Service (NRCS) Strategic Plan (2011-2015) sets the vision, direction and priorities for NRCS in helping people use science-based technology and tools to conserve, maintain, and improve the Nation's natural resources. This plan is used to develop tactics to deliver on this core mission. The plan is focused on three overarching priorities:

- 1) **Get more conservation on the ground** – This is the agency's mission. NRCS is committed to developing, implementing, and evaluating strategic conservation solutions; delivering the highest quality technical expertise; and proactively addressing emerging natural resource issues.
- 2) **Increase organizational effectiveness and efficiency** – NRCS will change as needed to ensure that the right people with the right skills are in the right places to get conservation on the ground and produce the results that our customers and stakeholders expect.
- 3) **Create a climate where private lands conservation will thrive** – Voluntary, incentive-based conservation is the best way to achieve positive environmental results, and that requires strong partnerships and coalitions to promote an ethic of conservation stewardship among America's private landowners.

In 2014, the agency further refined key outcome-based performance measures that were supported by available conservation science and agency business tools. The selected measures reflect the effect of NRCS's efforts while working with private landowners and managers. These measures are also compliant with the Government Performance and Results Modernization Act of 2010, and provide a transparent link between budgetary investment, outputs, and outcomes.

CONSERVATION TECHNICAL ASSISTANCE

**Current Activities.**

NRCS is USDA's principal agency for providing Conservation Technical Assistance to private landowners, conservation districts, Indian Tribes, and other organizations. Through the CTA Program, NRCS helps land managers reduce soil loss from erosion; address soil, water quality, water conservation, air quality, and agricultural waste management concerns; reduce potential damage caused by excess water and sedimentation or drought; enhance the quality of fish and wildlife habitat; improve the long-term sustainability of all lands, including cropland, forestland,

grazing lands, coastal lands, and developed or developing lands; and facilitate changes in land use as needed for natural resource protection and sustainability.

**Program Objectives.** The CTA Program provides agricultural producers and others with the knowledge and conservation tools they need to conserve, maintain, and improve the natural resources on the lands they manage. Through the program, NRCS conservation professionals and partners provide science-based technical assistance to land managers so they can take appropriate actions on their farms, ranches, and watersheds to conserve resources, enhance the environment, and ensure the commercial viability of agriculture.

**Program Operations.** Technical assistance starts with a science-based assessment of the resource concerns and opportunities on farms and ranches and in watersheds. NRCS professionals then provide farmers and ranchers with the best options for addressing resource concerns and taking advantage of opportunities. Trained NRCS conservationists understand the synergies of various conservation practices and activities and can recommend the best strategies to get desired results on the land. Through the development of a conservation plan, resource-related problems are addressed as producers and NRCS work together to use the information gleaned from the planning process to make decisions, implement plans, and put conservation practices in place.

Technical assistance does not stop with implementation; annual follow up or reassessment helps determine the effectiveness of the plan for the land manager. Technical assistance is an ongoing process of science-based assessment, action, reassessment, and adjusted action. Science-based technical assistance helps producers understand how their operations affect the environment, and how they can manage their operations to make a profit while improving the natural resources. It connects what happens on one farm with what happens on neighboring farms so that measurable natural resource improvements can be made on the broader landscape. Finally, technical assistance is about innovation - developing, testing, and transferring new conservation practices and systems that better meet the needs of producers and the environment.

NRCS conservation technical assistance addresses at the local level, where public policy truly supports private action, those natural resource conservation issues that are of State and national concerns. The NRCS Chief establishes CTA Program national priorities and initiatives on a yearly or multi-year basis in order to focus agency resources on specific program objectives. States may establish additional priorities and initiatives for the CTA Program. The agency utilizes various approaches to focus CTA Program resources on national and State priorities and initiatives. These approaches include, but are not limited to:

- Strategically positioning staff to address natural resource needs;
- Locating program funds to address natural resource needs based upon priorities and initiatives;
- Establishing short-term and long-term performance measures and goals;
- Formulating, enhancing, and expanding partnerships through memoranda of understanding and cooperative agreements;
- Developing and transferring new and innovative technologies;
- Delivering conservation planning and other technical assistance to help producers meet eligibility requirements for USDA programs and other Federal, State, and local conservation programs;
- Conducting technical and program evaluations and assessments on the effectiveness of conservation practice implementation;
- Conducting resource inventories and assessments;
- Developing and delivering training;
- Expanding technical capacity, including the use of Technical Service Providers (TSPs); and
- Developing public information and outreach strategies.

#### **2014 Activities.**

In 2014, CTA Program activities included:

- Continued from FY 2013 technologies and conservation practices that addressed emerging challenges and opportunities for producers in areas including organic production systems, on farm energy management, air quality improvement, and enhancement of pollinator populations, to improve on farm resource conditions ;
- Provided assistance to producers to improve soil health and productivity in States impacted by the historic drought to improve production yields;

- Continued implementation of the Working Lands for Wildlife, a partnership between NRCS and the U.S. Fish and Wildlife Service to use agency technical assistance combined with financial assistance to combat the decline of seven specific wildlife species;
- Addressed on farm resource concerns for a growing number of specialized production enterprises that include aquaculture, specialty crops, and sustainable and organic farming;
- Engaged producers who are new to production agriculture and have higher demands for technical assistance or had not previously participated in NRCS programs, but who are critical in solving the identified resource concerns in special initiative areas;
- Entered into agreements with conservation partnerships in order to leverage local funds and provide additional focused technical assistance through landscape-scale conservation initiatives such as the Chesapeake Bay, Great Lakes, Sage Grouse, Gulf of Mexico, and the Mississippi River Basin;
- Addressed continued growing producer demand for pre-program conservation planning support for Farm Bill programs such as the Environmental Quality Incentives Program, and Conservation Stewardship Program to increase program participation;
- Designed natural resource conservation systems to reduce the risk of loss from climatic events such as drought, fire and flood, and to mitigate their effects and reduce risk to production;
- Initiated changes to business processes that will support implementation of the Conservation Delivery Streamlining Initiative (CDSI). This effort is referred to as Foundational Maintenance Improvement and included migrating all conservation planning data from the National Conservation Planning Database (NCP) to the new National Planning and Agreements Database (NPAD), modifying Customer Service Toolkit, the planning software used by field planners, to work in the new database, and implementing a corporate document management system to enhance technical assistance capabilities to producers.

#### **Get Conservation on the Ground.**

Through the CTA Program, NRCS's field staff provides technical assistance to customers in the planning and application of science-based conservation practices and systems on non-Federal private lands. This technical assistance provides public and private benefits through soil and water quality improvements, water conservation, healthier grazing and forest land ecosystems, and wildlife habitat improvement. The 2014 examples of CTA Program results are:

Maintain productive working farms and ranches. NRCS helps ensure soil health, which is the foundation for productive working farms and ranches. Soil health leads to sustained production of a safe, healthy, and abundant food supply.

- In 2014, NRCS assisted in developing conservation plans on 28.6 million acres. In accordance with those plans, conservation practices and systems designed to improve soil quality were applied to 6.2 million acres of cropland, with CTA program support.
- With CTA program support, NRCS helped the owners and managers of grazing and forest land apply conservation to improve the resource base on 12.3 million acres.

Eliminate and reduce impairments to water bodies. NRCS works with agricultural producers to help them conserve water and reduce the potential for pollutants to move off-site into water bodies, streams, and rivers. This reduces input costs to the producer and protects water quality.

- Over 18.2 million acres of agricultural land had conservation practices applied as designed by NRCS to improve off-site water quality.
- Nearly 0.8 million acres of conservation practices were applied to improve irrigation water use efficiency, which reduces costs to the producer and reduces groundwater withdrawals and surface runoff.

Decrease threats to "candidate" and threatened and endangered species. Nearly 70 percent of the fish and wildlife habitat in the United States is on privately-owned lands. The creation and restoration of wildlife habitat on private lands is vital to decreasing the threats to species already listed as threatened or endangered or have potential to be listed ("candidate" species). NRCS works with landowners and managers to assist them with wildlife habitat improvement and wetland restoration, providing increased recreational opportunities and vital ecosystem services.

- Nearly 6.1 million acres had conservation practices and systems applied to improve wildlife habitat.

- Creation, restoration, and enhancement of wetlands which provide critical wildlife habitat, was accomplished on over 12,000 acres.

### **Grazing Lands Conservation.**

Grazing lands comprise an economic resource base in all 50 States and provide food, fiber, clean air and water, wildlife habitat, and open space. According to the NRCS National Resource Inventory (NRI), the 528 million acres of privately-owned range and pasture lands make up over 27 percent of the total acreage of the contiguous 48 States. These lands constitute the largest private land use category, exceeding both forestlands (21 percent) and cropland (18 percent). Properly managed grazing land has multiple benefits, including reduced storm water runoff, improved carbon storage in the soil, wildlife habitat, and beautiful open space. In 2014, NRCS conservationists helped ranchers and farmers understand the basic principles of rangeland and pastureland soil health; install facilitating practices (such as pipelines, tanks, ponds, fences, erosions control structures) as needed; and begin the management regimen necessary to conserve, protect, and properly utilize these resources.

NRCS partners with the Grazing Lands Conservation Coalition, a non-governmental nationwide consortium of individuals, organizations, and agencies working together to maintain and improve the management and the health of the Nation's grazing lands. This coalition has spurred major increases in the knowledge and skills of NRCS conservationists and the planning and application of conservation of grazing land management, which facilitates adoption of grazing conservation practices. In 2014, over 25 million acres of grazing land had conservation practices applied. NRCS also partners with the National Cattlemen's Foundation to recognize outstanding ranch and farm managers/conservationists through the Environmental Stewardship Awards. This program encourages all producers in America to strive for better land management on their farm or ranch for the future generations.

The additional focus on grazing lands conservation conveyed by the Coalition also had additional benefits. For example, grazing lands conservation partners worked with NRCS helped to expand the NRI of non-forested Bureau of Land Management (BLM) lands in order to provide a statistically-based sample design that is common to both agencies. This new partnership is expanding both agencies' understanding of the ecology of the "greater landscape" encompassing the intertwined public and privately managed lands. Understanding of management needs for the Sage Grouse now aids the efforts of private ranchers, agencies, and non-government organizations that dedicate their time and knowledge to habitat restoration for this species. BLM is providing NRCS \$12.5 million over five years for the service, and data collection is planned through 2015. This inventory is critical for both agencies since these Federal lands are intertwined with non-Federal rangelands where land management units typically span both ownership types.

NRCS's Ecological Site Information System (ESIS) continues to provide the capability to produce automated ecological site descriptions from the data stored in its database. Joint policy between Department of Interior Bureau of Land Management, NRCS and the Forest Service efficiently pools the agencies' technical resources behind the development and use of Ecological Site Descriptions (ESDs) to describe site characteristics, plant communities, and use interpretations for grazing land and forestland. ESD development training is ongoing and all three agencies provide staff support and participation. NRCS partners with the Society for Range Management (SRM) to provide multi-agency training in ESD development. This technology improves land management planning capabilities for agencies and the public by providing consistency among the agencies' classification, technology development, planning, and blueprints for ecological improvement of grazing lands across the Nation, and will have implications and applications in other countries.

Clean Water Activities. NRCS promotes the implementation of conservation practices on America's working lands to address key water quality issues and help safeguard the Nation's streams, lakes, rivers, and coastal and ocean resources. These conservation practices help mitigate the potential environmental risks posed by animal feeding operations and the impairment of water resources by nutrients, sediment, and pesticides. NRCS works with the agricultural community and implements conservation actions to address water quality resource concerns at the farm and field scales. The agency also provides the leadership needed to enhance coordination with the Environmental Protection Agency (EPA), Army Corps of Engineers, National Oceanic and Atmospheric Administration, and other Federal agencies in areas of mutual interest. Specific areas in which NRCS provides technical leadership include: Concentrated Animal Feeding Operation (CAFO) Rule implementation; nutrient management; pesticide drift under the Clean Water Act; Chesapeake Bay, Great Lakes, and Mississippi River Basin restoration efforts; Gulf of Mexico Initiative; National Ocean Policy; U.S. Coral Reef Task Force; and conservation assistance to reduce hypoxia and improve water quality across the landscape.



NRCS has embarked upon a series of national and regional conservation initiatives that protect and conserve water quality and quantity. For example, under the National Water Quality Initiative, which began in 2012, each State identified one to three watersheds in which to concentrate efforts and coordinate with State water quality agencies. In 2014, NRCS provided nearly \$33 million in financial assistance to help farmers and ranchers implement conservation systems that reduce nitrogen, phosphorous, sediment and pathogen contributions from agricultural land in 174 priority watersheds where water quality is a critical concern. The goal of this initiative is to improve water quality and eventually delist stream segments from the EPA's 303(d) list of impaired streams. The landowners and producers participating in the initiative receive conservation payments to work on the land in a sustainable way, which provides cleaner water while keeping the land productive into the future. Communities benefit by having clean waterways, safer drinking water, and healthy habitat for fish and wildlife. The National Water Quality Initiative is also piloting use of the Water Quality Index for Agricultural Runoff for prescribing conservation practices that will improve overall quality of the water leaving the farm fields. This tool is useful for easily communicating conservation practice benefits on water quality to the public.

Comprehensive Nutrient Management Plans (CNMPs). The release of nutrients from agricultural operations (e.g., over-fertilization, animal waste disposal, and dairy runoff) is a recognized source of contamination for the Nation's waterways. Voluntary CNMPs are an effective tool for addressing these water quality problems associated with agriculture. An average CNMP takes approximately 100 hours of staff time to develop. Since 2011, NRCS, conservation partners, and TSPs assisted over 7,500 livestock and poultry producers in developing new CNMPs. Because these plans are voluntary in nature and may at times involve large financial investments on the part of the landowner or manager, this is viewed as a relatively high level of success.

Pathogens. The protection of food products from pathogen contamination, and the need for pathogen management from the standpoint of food safety, continues to be a growing issue. In partnership with the University of California, to address the role of conservation in food safety and disease control, NRCS revised its waterborne pathogen publication to reflect current science, and developed a web-based training course for NRCS personnel. Today, the training tool provides a means to understand waterborne pathogens in agricultural watersheds including their fate and transport, their importance to agriculture, and their control.

Hypoxia. USDA continued to participate on the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force in 2014. NRCS served as the USDA point of contact on the Task Force Coordinating Committee. NRCS also participated in four Task Force sub-committees with assigned responsibility to provide technical assistance and guidance to the Deputy Under Secretary and the Task Force in implementing the Hypoxia Action Plan. The Hypoxia Action Plan is designed to reduce the size of the hypoxic zone in the Gulf, thus restoring and protecting the waters within the Mississippi/Atchafalaya River Basin and improving community and economic conditions across the Basin. In 2014, the mid-summer northern Gulf of Mexico hypoxic zone was down to 5,052 square miles in size, which is slightly below the 5-year average, but still much larger than the size goal (1,930 square miles or 5,000 square kilometers) set by the Hypoxia Task Force.

Water Quality Leadership. During 2014, NRCS led the development, advancement, and demonstration of new and innovative approaches to improving water quality. The following activities highlight some of these advances:

- In 2014, NRCS made available for implementation of two new conservation activities for edge-of-field water quality monitoring—one for system installation and one for data collection and evaluation. Edge-of-field monitoring can provide defensible information on the efficacy of conservation practices, helping farmers improve and verify the effectiveness of agricultural conservation practices and systems on their farm and fields. Using these new conservation activities, NRCS provided financial assistance to producers through EQIP for 22 edge-of-field monitoring projects located in National Water Quality Initiative and regional water quality initiative watersheds.
- NRCS has developed a web-based tool to help producers easily calculate the quality of water flowing off their fields. The web-based tool, the Water Quality Index for Agricultural Runoff (WQIag), allows a producer to input variables for a field, such as slope, soil characteristics, nutrient and pest management, tillage, and conservation practices. The WQIag takes the complex scientific information of the variables and synthesizes them into a single number. NRCS scientists chose a solution inspired by the Dow Jones Industrial Average and worked to develop a tool that could clearly communicate to farmers and ranchers with a single, easy-to-understand number.
- NRCS continues to complete regional reports from the Conservation Effects Assessment Project (CEAP). In 2014, the agency completed Assessment of the Effects of Conservation Practices on Cultivated Cropland report

for the Souris-Red-Rainy Basin, which drains eastern North Dakota, western and northern Minnesota, and a small part of northeastern South Dakota. This assessment, as with others in the series, uses a sampling and modeling approach to quantify the environmental benefits that farmers and conservation programs are currently providing to society, and explore prospects for attaining additional benefits with further conservation treatment. Computer modeling simulations indicate that farmers' use of conservation practices in the Souris-Red-Rainy Basin has helped reduce sediment and nutrient losses from farm fields and loadings in rivers and streams in the region. However, these model simulations also show that additional water quality benefits can be achieved in the area. It is estimated that 75 percent of the cultivated cropland acres in the region have a low level of need for additional conservation practices, while 25 percent of the acres have a moderate need for additional treatment, all to reduce sediment and nutrient losses associated with wind erosion.

- NRCS continues to collaborate with agricultural groups and States to gather agricultural data for use in meeting the EPA requirements for watershed implementation plans as a result of the Chesapeake Bay Total Maximum Daily Load (TMDL). NRCS participates in a poultry litter working group that has gathered "real world" numbers on litter production and nutrients of the Delaware-Maryland-Virginia area that suggests previous estimates may have been excessive. The working group has also enlisted the cooperation of the poultry integrators to provide real numbers of producers and birds produced that will assist Chesapeake Bay modelers in increasing the accuracy of the next model run.
- NRCS, through the Watershed Partnership program of the U.S. Coral Reef Task Force, is working with producers in watersheds to voluntarily implement conservation practices to avoid, control, and trap sediment and nutrient runoff and improve wildlife habitat while maintaining agricultural productivity. NRCS provides outreach and technical assistance to landowners enrolled in the EQIP program that propagate native trees to plant in critical areas and help ensure wildlife conservation practices are properly implemented with certified conservation practices. NRCS is also working to engage local landowners in adopting conservation practices by offering cost-share incentives through several voluntary land conservation programs.

National Resources Inventory (NRI) Program and Conservation Effects Assessment Project (CEAP). NRCS acquires, analyzes, interprets, and delivers data and information on natural resources through the NRI program and CEAP. Several pieces of legislation authorize the NRI, in particular the Rural Development Act of 1972. CEAP was authorized under the Farm Security and Rural Investment Act of 2002 Conference Report to Accompany H.R. 2646 (4a, b) and the Soil and Water Resources Conservation Act of 1977 (RCA) (as amended by the Food, Conservation and Energy Act of 2008, P.L. 110-246, 122 Stat. 1651) [16 U.S.C. 2001-2009].

Natural resources data and information, conservation program data, and data from other Federal and non-Federal sources are compiled in the NRI. These data provide the basic scientific information necessary to inform sound natural resource planning and decision-making at many landscape levels. The NRI assesses natural resource conditions and trends on non-Federal lands, including privately-owned land, tribal and trust lands, and lands controlled by State and local governments. In all, the NRI provides information on over 75 percent of the Nation's land area. Data and analyses from the NRI are essential for developing appropriate and effective conservation programs, sound agricultural policy, realistic strategic and performance plans, and informing national farm policy discussion through the Farm Bill process. The NRI program is designed to provide data for assessing outcomes of existing legislative mandates, such as the appraisals required by the RCA and the periodic Farm Bills. NRI data provide the scientific basis for the development of practical programs and sensible policies that support and promote agricultural development, expand the economy, restore and preserve the quality of the environment, and advance social values.

The NRI is a statistical survey that inventories scientifically selected sample sites located in every county across the United States and in the Caribbean Area and Pacific Basin. From 1977 to 1997, NRI was conducted on five-year cycles. Since 2001, a statistically sound subset of the 800,000 NRI sample sites nationwide has been selected every year for data collection. Collecting NRI data on an annual basis provides NRCS with the flexibility and capability to gather scientific information on emerging natural resource issues. The most valuable aspect of the NRI is its ability to capture long-term trends. This trending information is instrumental in evaluating the effects of conservation programs and policies over time. Major releases of NRI data are mandated by law and scheduled for every five years; data from the 2012 Annual NRI are being processed for release in August 2015. An interim release of 2010 NRI data occurred in December 2013 as described below. The NRI is performed in cooperation with the Iowa State University Center for Survey Statistics and Methodology. 2014 NRI activities included:

- NRI Production Work. In 2014, the Remote Sensing Laboratories were collecting 2013 NRI data from images of over 73,000 sample sites and over 200,000 points. The contracts to acquire aerial photography have been awarded for over 66,000 segments for the 2014 NRI.
- 2010 NRI Release. In December 2013, the first NRI “mid-cycle” release occurred with the posting of the 2010 NRI Summary Report on the NRI website. An extensive set of tables of estimates was developed for the report; additional tables were provided to each NRCS State office, and numerous requests for custom tables and datasets were filled.
- NRI Rangeland Resource Assessment Report. In June 2014, an assessment was released on the status of the Nation’s non-Federal rangeland. The NRI Rangeland On-site Survey, conducted from 2004-2011, provided the data for this report.
- 2010 NRI Wetlands Module. A module analyzing wetlands using data from the newly released 2010 NRI was released in September 2014.
- Update of Geospatial Data. The geospatial data that help define the NRI domain were updated to more accurately represent current and historical Federal land ownership, current and historical water acre totals, and changes resulting from updated hydrologic unit boundaries.
- NRI Survey of Farming and Conservation Practices. NRCS and the National Agricultural Statistics Service (NASS) continued their partnership in an effort to obtain updated NRI CEAP survey data in order to develop a revised assessment of the environmental effects of conservation programs and practices implemented within the Chesapeake Bay Watershed, the Des Moines River and Western Lake Erie Basins, the California Bay-Delta Watershed, and the Lower Mississippi-St. Francis Watershed. This work updates CEAP results based on data collected in the first CEAP survey from 2003 to 2006. Data review, database construction, and modeling activities for the Chesapeake Bay were completed in the fourth quarter of 2013; the report was released in December 2013. The Western Lake Erie Basin and Des Moines River Watershed, data review, database construction, and modeling activities were performed in late 2013 and continued into the first half of 2014. Draft reports will be prepared, reviewed, and released in early 2015. Data collection activities supporting the California Bay-Delta area occurred in late 2013 and early 2014. Planning for the Lower Mississippi-St. Francis Watershed survey started in early 2014. Data collection for this area began in late 2014.
- On-site Data Collection on Bureau of Land Management (BLM) Lands. NRCS is continuing an interagency agreement with the BLM to implement a national approach for monitoring rangeland resources by expanding NRI data collection on BLM lands and intensifying sampling in core Sage Grouse habitat. The agreement, scheduled for 2011 to 2015, may be renewed. A survey system, developed with BLM funding, regularly provides scientifically credible information on the status of non-forested BLM lands in 13 Western and Midwestern States. Data collected as part of this agreement are being reviewed by an interagency team and will be used in reports for the Sage Grouse and Great Basin initiatives and will contribute to BLM’s ongoing monitoring program. Adoption of standardized NRI protocols on BLM-managed landscapes enhances NRCS’s leadership on grazing lands, benefits BLM surveys by providing a well-proven sampling framework, and enables compilation of a consistent and comprehensive database. Combining information derived from NRI data collected on BLM-managed lands with data obtained from NRI points on non-Federal lands provides a statistically sound, thorough, area-wide representation of all western grazing lands.
- Implementation of Remote Sensing to Monitor Stewardship Lands (Easements). In 2012, NRCS Resource Inventory Division’s Remote Sensing Laboratories, the NRCS Easement Programs Division, and the National Geospatial Center for Excellence completed a research pilot to evaluate a web-based Geographic Information System (GIS) tool, GeoObserver, which was modified for the purpose of conducting remote sensing of stewardship lands. Using high resolution imagery, staff at the Remote Sensing Laboratories established baseline measurements on easements in 2013. Beginning in 2014, remote sensing is being used to detect change on easements by comparing baseline measurements with current year imagery. The use of remote sensing promotes efficiency and national standardization of easement monitoring.
- Prairie Pothole Wetland Determinations. The Central Remote Sensing Laboratory (CRSL) is assisting States with the backlog of NRCS wetland determinations in the Prairie Pothole Region. The CRSL provided preliminary determinations on the location and extent of wetlands, as well as other information compiled from imagery, soils maps, and other sources, based on criteria designated by the wetland specialist from each State. Deliverables to the States for this effort include the Wetland Certification Form (ND-CPA-340A), wetland determination base map, and digitized wetland shape files. In 2013, 450 wetland determinations were completed; 947 determinations were made in 2014. This partnership supports the North Central Wetlands Conservation Initiative for NRCS.

CEAP is a multi-agency effort designed to quantify the environmental benefits of applying conservation practices on agricultural land, and to provide a scientific basis for managing the agricultural landscape for environmental quality. Findings from projects completed under CEAP are used to guide USDA conservation policy and program development and to help conservationists, farmers, and ranchers make more informed conservation decisions.

CEAP assessments are carried out at national, regional, and watershed scales. The national assessments for cropland, grazing lands, wetlands, and wildlife are designed to provide summary estimates of conservation practice benefits. Additional “what-if” scenarios are run in various models to assess the potential of USDA conservation programs to meet the Nation’s environmental and conservation goals. Watershed assessment studies provide more detailed, in-depth assessments of smaller areas.

The 2014 CEAP activities included:

Cropland Assessment. Reports 8, 9, and 10 in the nationwide series of CEAP-Cropland assessment reports were released to the public in 2014. The reports on the Pacific Northwest Basin and the South Atlantic-Gulf Basin were released in June, followed by the report on the Souris-Red-Rainy Basin in August. An updated Chesapeake Bay report was released in December 2013. This report not only quantified conservation gains in the region between the benchmark study (2003-2006) and re-survey (2011), but also clearly demonstrated the value derived from the benchmark survey. Findings for the ten basins assessed showed that, on average, the use of conservation practices reduced:

- Edge-of-field sediment losses by 51.2 percent, with reduction magnitudes ranging from 27 in the Lower Mississippi Basin to 73 percent in the Missouri Basin;
- Nitrogen losses with surface runoff by 44.1 percent, with reduction magnitudes ranging from 26 percent in the Lower Mississippi Basin to 67 percent in the Souris-Red-Rainy drainage;
- Nitrogen losses through subsurface pathways by 32.2 percent, with reduction magnitudes ranging from 5 percent in the Lower Mississippi Basin to 71 percent in the Souris-Red-Rainy; and
- Total phosphorus losses by 43.6 percent, with reduction magnitudes ranging from 33 percent in the Ohio-Tennessee Basin to 59 percent in the Missouri Basin.

Reports for the Delaware and Texas Gulf regions are being finalized and prepared for official release in early 2015. These reports will complete the nationwide series of benchmark CEAP Cropland assessment reports. Planning is underway and funding is being secured for the second national CEAP cropland survey, to be conducted from 2015 to early 2017.

In addition, analyses of the environmental effects of applying conservation practices continue to provide Agency leadership with vital information for decision making in optimizing the use of available conservation resources while increasing ecosystem benefits and minimizing the risk of agricultural yield losses. The CEAP Cropland component scientists participated in several collaborative efforts with interagency and university groups related to potential improvements in conservation efforts in the context of numerous initiatives, including the Grazing Land Conservation Initiative, Mississippi River Basin Healthy Watersheds Initiative, and Gulf of Mexico Initiative. Assistance was provided for the Great Lakes Restoration Initiative II in setting reasonable conservation practice adoption goals in the Western Lake Erie Basin. The CEAP Cropland team also collaborated with the CEAP Wildlife component leader to assist in a project, led by the Nature Conservancy, on the development of appropriate water quality goals in the Great Lakes region. Additionally, Cropland CEAP provided estimates of benefits to soil health from adoption of practices supported by NRCS programs (CSP and EQIP), initiated the use of climate change estimates with NRI CEAP data to develop techniques to assess conservation needs under projected climate challenges, and cooperated with EPA to develop improved protocols for representing nutrient addition in the Chesapeake Bay Model.

Wetlands Assessment. Five project reports were completed in 2014: “Functional Differences between Natural and Restored Wetlands in the Glaciated Interior Plains,” a final version of “Integrating CEAP-Wetlands Integrated Landscape Model Outputs into the National Resources Inventory Framework: A Pilot Effort in the Great Plains,” “Land Use and Conservation Reserve Program Effects on the Persistence of Playa Wetlands in the High Plains,” “Phosphorus Speciation as an Indicator of Land Use and Conservation Practices on Prairie Pothole Region Wetland Condition,” and an Integrated Landscape Model report – Potential models for predicting pesticide residues and occurrence in Great Plains wetlands. In addition to the reports, two CEAP Science Notes were published in 2014: “Light Detection and Ranging (LiDAR) for Improved Mapping of Wetland Resources and Assessment of Wetland

Conservation Practices” and “Conserving Prairie Pothole Wetlands and Surrounding Grasslands: Evaluating Effects on Amphibians.”

Wetlands activities include:

- The Glaciated Interior Plains report on wetlands and the effects of conservation programs contained several significant findings. Soil properties (organic carbon) and nutrient pools (nitrogen, phosphorus), denitrification, and Phosphorus Sorption Index (PSI) were measured in natural depressional wetlands, depressional wetlands restored through the USDA Wetland Reserve Program, adjacent natural riparian buffers, adjacent riparian buffers restored through the USDA Conservation Reserve Program, and agricultural fields. The study objective was to determine the effects of conservation, based on the extent to which ecosystem services are provided through restoration in different hydrogeomorphic settings. Organic carbon and nutrient pools (nitrogen, phosphorus), PSI, and denitrification were greater in natural than in 5- to 10-year old restored wetlands.
- In riparian soils, carbon and nutrient pools, PSI, and denitrification were comparable between restored and natural systems, suggesting that these services develop quickly after restoration. Restored depressional wetlands had lower soil organic carbon, nitrogen, and phosphorus relative to agricultural soils, whereas the opposite trend was observed in restored riparian soils.
- Restored riparian buffers achieved equivalence to natural riparian buffers within four years; whereas, restored depressional wetlands took longer to provide these ecosystem services at levels comparable to natural wetlands.
- Restored depressional wetlands and riparian buffers provide ecosystem services lost through previous conversion to agriculture; however, development of these ecosystem services depends on hydrodynamics, soil parent material and soil texture, and disturbance regime of the site.

Wildlife Assessment. CEAP-Wildlife regional assessments completed in 2014 include:

- Application of Ground-truth for Classification and Quantification of Bird Movements on Migratory Bird Habitat Initiative Sites in Southwest Louisiana;
- A regional assessment of the relationships of conservation practices to Northern Bobwhite and other priority grassland bird breeding populations in the Central Hardwoods Bird Conservation region;
- Evaluation of Sage-Grouse and habitat responses to Sage-Grouse-friendly livestock grazing strategies in Montana;
- CEAP Conservation Insight – Farm Bill Conservation Programs Can Help Meet the Needs of Spring-Migrating Waterfowl in Southern Oregon-Northeastern California (late CY 2013);
- CEAP Conservation Insight – Relationship of Lesser Prairie-Chicken Lek Presence and Density to Grassland Conservation Programs (2014);
- CEAP Conservation Insight – Wyoming’s Core Area Policy and Conservation Easements Benefit Sage-Grouse (2014); and
- CEAP Conservation Insight – Targeted Conifer Removal: A Proactive Solution to Conserving Sage-Grouse (2014).

Assessments initiated in prior years were continued in 2014, including assessments of the effects of conservation practices associated with the Working Lands for Wildlife effort involving Golden-Winged Warblers, New England Cottontails, and Southwestern Willow Flycatchers. Work also continued on producing science-based outcome reporting and technical tools for effective delivery of the Lesser Prairie-Chicken and Sage Grouse Initiatives (LPCI and SGI, respectively). The multi-partner effort to develop biological endpoints, particularly aquatic biota metrics, for CEAP water quality modeling efforts in the Western Lake Erie Basin continued in 2014. This is a major effort to link CEAP wildlife and cropland components. The CEAP wildlife component also continued efforts to integrate biodiversity metrics with CEAP grazing lands modeling in the desert Southwest. Efforts to integrate findings from SGI and LPCI were undertaken as well.

Grazing Lands Assessment. As with other CEAP components, the Agricultural Research Service (ARS) and several Universities remain key partners with the Grazing Lands component. Additionally, various NRCS State Offices are providing needed technical input.

Primary CEAP Grazing Lands component activities and accomplishments in 2014 include the following:

- Incorporation of the Rangeland Hydrology and Erosion Model (RHEM) into the Agricultural Policy/Environmental eXtender Model (APEX) is almost complete. APEX is the over-arching model that will be

used by the CEAP Modeling Team to run conservation scenario simulations on the Nation's grazing lands. RHEM is expected to be fully operational by December 2014.

- Collaboration with the National Ecological Site Team, Ecological Site Specialists, and ARS in Las Cruces, New Mexico, is producing generalized State-and-Transition Models for groups of ecological sites. Current work is in Major Land Resource Areas (MLRA) 74 (Kansas) and 77C (Texas/New Mexico). This project will align CEAP modeling needs on grazing lands with spatial resolution at the MLRA scale, which is necessary for analysis. It also will provide products to teams developing Ecological Site Descriptions.
- Plant growth data and rangeland monitoring projects are ongoing with partners in Arizona (private ranchers and San Carlos Apache Tribe) and Montana (NRCS and ARS at Fort Keogh). One of the Arizona projects is tracking production and leaf area of woody plants, using techniques not previously attempted. A new ARS/NRCS joint publication on the topic is planned for 2015 or 2016.
- The CEAP Modeling Team is collaborating with the Texas A&M Blackland Research and Extension Center on improving grazing and plant growth algorithms in APEX. The team has made some changes and identified additional routines required to simulate grazing and plant growth/response in a more realistic manner. Some of the new additions to APEX grazing lands modeling routines include variable forage intake rate based on forage quality factors, forage preference, variable manure output, and evaluation of animal performance.
- Collaboration with ARS-Tucson has produced a remote sensing woody plant map and cover estimation technique using no-cost imagery. Validation of the resulting algorithm was performed using very high resolution (0.3 m) National Resources Inventory imagery. The newly developed spatial maps of woody cover can be used to assess the effectiveness of brush removal treatments (currently for two sites on the Empire Ranch in southeastern Arizona, MLRA 41). Results showed the developed algorithm produced viable (root-mean-square error equal 8.7 percent) maps of woody cover that could be used to successfully track the occurrence of brush removal, as well as monitor presence or lack of subsequent reemergence. This work provides land managers with an operational means of determining where to allocate resources to implement brush management, as well as a cost-effective method of monitoring the effects of their efforts. Continued collaboration is ongoing for more MLRA's. The study will be published in the Journal of Applied Remote Sensing.

CEAP Watershed Assessment Studies. This was a milestone year for the CEAP Watershed Assessment Studies, being the 10<sup>th</sup> year for long-term watershed assessment projects.

CEAP activities include the following:

- A symposium highlighting key findings of the CEAP Watershed Studies was presented at the annual meeting of the Soil and Water Conservation Society. The latest science and conservation insights relevant to nitrogen management, phosphorus control, and targeting within watersheds were synthesized and presented. A new factsheet describing approaches to targeting conservation in watersheds for water quality improvements, "Identifying Critical Source Areas," was published on the CEAP website. This factsheet is the seventh in a series produced from the National Institute of Food and Agriculture (NIFA)-CEAP Watershed Synthesis Study.
- To highlight key findings from the ARS CEAP Benchmark Watershed Assessment Studies over the last 10 years, a special section of the Journal of Soil and Water Conservation was published in the September/October 2014 issue. The section included five articles: 1) "Impact of the ARS Watershed Assessment Studies on the CEAP Cropland National Assessment;" 2) "A decade of conservation effects assessment research by the USDA-ARS: Progress overview and future outlook;" 3) "Impact of weather and climate scenarios on conservation assessment outcomes;" 4) "Surface soil quality in five Midwestern cropland CEAP project watersheds;" and 5) "Fine sediment sources in CEAP project watersheds."
- Key conservation insights from ARS CEAP Watershed Assessments published during the past ten years suggest encouraging 1) wider adoption of minimum disturbance technologies to reduce runoff risks associated with applying manure, nutrients, and agrichemicals; 2) sowing winter cover crops; and 3) a renewed emphasis on riparian corridors to control loads of sediment, phosphorus, and other contaminants originating from within (and near) stream channels. However, substantial assessment and research needs remain, including: 1) effective social engagement of agricultural communities, 2) use of multiple conservation practices to minimize environmental tradeoffs, 3) improved models to simulate the dynamics of nutrient retention and movement in watersheds, and 4) an understanding of ecosystem responses to changes in water quality.
- Numerous papers also have been published this year from individual CEAP Watershed Study sites or collections of sites. An example is, "Influence of Integrated Watershed-scale Agricultural Conservation Practices on Lake Water Quality," (JSWC, April 2014). Findings on sediment and phosphorus reductions from conservation

presented in this paper were summarized and included in a presentation to the Hypoxia Task Force (HTF) at their spring meeting. Two papers published this year from across several sites addressed the challenge of modeling in tile-drained watersheds. Algorithm developments improved the ability of the Soil and Water Assessment Tool (SWAT) model to simulate water and nitrogen budgets more accurately in tile-drained watersheds.

### **Getting Conservation on the Ground.**

This year, an opportunity arose to directly support NRCS-targeted conservation efforts for the new Regional Conservation Partnership Program (RCPP), which promotes coordination between NRCS and its partners to deliver conservation assistance to producers and landowners. Briefings were delivered on key lessons learned from the CEAP Watershed Assessment Synthesis Study for the Financial Assistance Programs Division and for the Conservation Initiatives Team. Subsequently, these findings were used in preparing guidance for the Announcement for Program Funding (APF) for the new RCPP. Specifically, science-based lessons learned were used to help develop the guidance to support targeting conservation in the RCPP projects and to support the evaluation of water quality outcomes at edge-of-field and watershed scales for both the APF and (later) the application review process. A web link to the NIFA-CEAP Watershed Synthesis web page was posted as a key resource for applicants on the main RCPP website, under Watershed Planning and Water Quality Monitoring information.

CEAP supported the USDA Agency Priority Goal (APG) for water, in particular, the pilot projects aspect of this goal. This report was completed in November 2013 as the final report on USDA's collective accomplishments on water-related conservation needs. Two CEAP watershed studies were used as APG pilot watershed projects for this report and the findings from those efforts were written up in the 30-page report. This activity represented a strong collaboration between the NRCS Resource Assessment Division and the Strategic Planning and Performance Division to support Agency and Department-wide performance reporting efforts directly tied to the USDA Strategic Plan, which is available at: (<http://www.usda.gov/documents/usda-fy12-annual-performance-report.pdf>). Collaboration with USDA's Farm Service Agency and U.S. Forest Service also were critical to this effort. This was a major accomplishment for CEAP integration and application of agency business lines. More information on USDA's Agency Priority Goal for Water, including excerpts of the final report, can be found at: [http://goals.performance.gov/goal\\_detail/usda/343/print](http://goals.performance.gov/goal_detail/usda/343/print).

CEAP continues to provide assessments of the conservation efforts in various NRCS Initiative areas: the Mississippi River Basin Healthy Initiative, the Chesapeake Bay Watershed Initiative and related Executive Order, the Great Lakes Restoration Initiative, the National Water Quality Initiative, the Sage Grouse Initiative, the Lesser Prairie Chicken Initiative, the Migratory Bird Habitat Initiative, and Working Lands for Wildlife. Assessments conducted by all components of CEAP at regional and watershed scales inform the prioritization of conservation needs enabling NRCS to focus resources in more effective ways for the American public.

Specifically, CEAP Watersheds and Wildlife components are working to support the NRCS Conservation Initiatives Outcomes Team within the agency to help identify and document measureable outcomes of on-the-ground conservation efforts. The GIS Laboratory of the Resource Assessment Division is also contributing critical information and analysis to this team effort in addition to the materials provided by these CEAP components.

### Natural Resource Technology Transfer.

NRCS ensures field staff has the appropriate resources and necessary training to utilize the latest scientific research and technology for natural resources assessment, conservation planning, conservation system installation, and program delivery. In 2014, training was available as needed via webinars, video teleconferences, and individual computer-to-computer support to a greater extent than in previous years while reducing travel costs.

Key activities in 2014 included:

- Completed and released the National Ecological Site Handbook in April 2014 to provide standards, guidelines, and procedures for conducting the collaborative process of Ecological Site Description (ESD) development;
- As part of NRCS's goal of making the latest technology available to our field offices, 15 updated national conservation practice standards were released in April 2014. These practices will help producers do a better job of managing irrigation water, treating animal waste, and improving energy efficiency. In addition, 18 national conservation practice standards were revised and updated in 2014, and will be released after final review and approval;

- Working with the Agricultural Research Service (ARS) to develop an improved tool to assess pasture conditions;
- Revised conservation practice standards to reflect new rules, new technology, and new populations of users;
- Worked with landowners to improve habitat for wildlife. This is a working lands for wildlife effort to assist Federally-listed, Federal candidate, and species of concern. The landowner assistance objective is to preclude further Federal actions, helping to delist endangered species and to keep unlisted endangered species off of the list;
- Provided training to NRCS State technical staff to improve accuracy and consistency of wetland determinations;
- Completed eight in a series of ten webinar broadcasts on various topics of Environmental Evaluation with a total of 5,600 viewing sessions;
- Science and Technology partnered with Soil Survey and Resource Assessment to develop a literature review database of more than 180 peer-reviewed articles for soil health physical and chemical properties, including citations, access to the full papers, and brief summaries, presented in interactive SharePoint format;
- The National Soil Health Team partnered with ARS on the Soil Health Nutrient Tool project to expand awareness of this testing method, developing a SharePoint tracking system for participant registration, and crop and pasture management recordkeeping. There are over 1,250 fields entered in the project;
- Forty-one live webinars were presented from the Science and Technology Training Library in 2014. Live and on-demand webinar training (212 webinars in total) were provided on soil health, environmental compliance, domestic livestock, energy, and various other topics to participants, with more than 9,200 receiving CEUs and training certificates. These webinars involved more than 8,400 different participants, 417 of whom were international;
- The top ten webinars since January 2013 provided green savings and fuel savings of \$1.6 million and CO<sub>2</sub>-carbon dioxide emissions savings of 2,261,208 pounds;
- Science and Technology initiated an Adobe Connect web conferencing pilot to resolve agency and customer complaints with the existing AT&T Connect system and to substantially reduce production costs. At an average AT&T cost of \$3,000 per webinar, the annual license for Adobe Connect is paid for with just seven of the 41 live webinars presented in 2014. The estimated savings is \$100,700, and the host and customer complaints have been resolved;
- A Soil Biology Primer photo gallery was created at the Soil Health website to educate site visitors about this critical soil health component. Visitors view and learn more about these creatures as a result;
- Completed delivery of Soil Health 101 to 11 States/territories with 1,240 employees, 155 partners, and 10 trained farmers. These were one-day workshops to create an awareness of the purpose and principles of soil health. The target audience was the NRCS technical staff from the field areas and State offices. Partners, such as conservation districts, agricultural extensions, and farmers were also invited;
- Assisted with production on 11 Science of Soil Health videos, which were viewed an average of 100 times per day for a total of 20,000 views to date. These videos can be seen on YouTube;
- Science and Technology provided updates to 22 national material and construction specifications to keep the latest technology available to the field areas. Three new construction specifications were developed that incorporated new technologies relevant to dam rehabilitation.

The Conservation Engineering Division collaborated with the National Geospatial Center of Excellence to develop GeoObserver for Dams – a web-based geospatial application. GeoObserver for Dams provides a means for States to maintain the NRCS national inventory of agency-assisted dams called the NRCS Inventory of Dams (NRCSID). The application allows NRCS personnel to review, verify, or correct dam locations. Users can update inventory of dam's attributes, add new dams, create reports, and export data. NRCS develops and supports several key applications to assist with Natural Resource Technology Transfer. ProTracts, Web Soil Survey, Customer Service Toolkit, and Client Gateway are NRCS applications that assist the field in providing technical and financial assistance to landowners.

ProTracts is a Web-based application that helps NRCS efficiently manage applications, contracts, obligations, payments, and performance reporting. This is the primary electronic tool used by NRCS and partners to develop and manage contracts associated with NRCS's financial assistance programs.

ProTracts 2014 activities included:

- Processed over \$1.9 billion in obligations on 115,506 contracts, and over \$1.7 billion in payments on 124,066 contracts;



- Continued improvements and successfully implemented the migration of ProTracts and Fund Manager Interfaces to the Financial Management Modernization Initiative;
- Provided direct support to the CDSI integration efforts for ProTracts and Fund Manager Applications; and
- Provided periodic data extracts to National Headquarters and assisted in the data analysis and reporting.

Web Soil Survey (WSS) provides free public access online to geospatial and tabular soil data produced by the National Cooperative Soil Survey. Launched in 2005 by NRCS, WSS provides electronic access to relevant soil and related information needed to make land-use and management decisions. The WSS application provides an alternative to traditional hard-copy publications; quicker delivery of information; electronic access to full soil survey report content; and access to the most current data. WSS allows customers to get just the information they want when they want it. Activities in 2014 included improved performance of AOI-Area of Interest definition for large Soil Survey Areas and Custom Soil Resource reports and improved quality of map images throughout WSS.

Use of WSS in 2014 increased significantly over 2013 and included:

- Area of Interests created within WSS – 2,449,589;
- Printable Versions Requested from WSS – 839,555;
- Custom Soil Resource Reports Requested – 493,826;
- Total WSS Visits – 2,677,252 (average per day = 7,335); and
- Unique Visitors – 1,828,110

Customer Service Toolkit (CST) is an agency mission-essential conservation planning application used by over 8,000 NRCS field staff in nearly 2,800 field offices and service centers across the Nation, the conservation districts, and TSPs. It is used for conservation planning and application of approved conservation practices.

Key accomplishments in 2014:

- Created over 136,000 conservation plans that included nearly 1.8 million conservation practices on over 68 million acres of land, for 1.4 million clients, including 58,000 new clients;
- Successfully implemented the first phase of Foundational Modernization Initiative (FMI), an interim solution that updated the Planning and Geospatial functionality to a Land-unit-centric model from a Client-centric model with requirement for digitizing practices, integration with National Planning and Agreements Database (NPAD) and removal of manual progress reporting;
- Successfully migrated millions of conservation plan records from the National Conservation Planning (NCP) database to National Planning and Agreements Database (NPAD) and paved the pathway for future Conservation Delivery Streamlining Initiative (CDSI) efforts such as Conservation Desktop, Client Gateway and Mobile Planning Tool.

Client Gateway (CG) is a new USDA public web application for agricultural producers, ranchers, and land owners. CG provides USDA clients the flexibility to request conservation technical and financial assistance and track payments from the comfort of their homes. It offers them secure online access to their conservation programs, financial assistance applications, contracts, and conservation plans.

**Highly Erodible Land and Conservation Compliance (HEL).** Highly Erodible Land is made up of soils that have a high vulnerability to increased erosion due to wind and water. This vulnerability is higher when the land is cropped than when the land is in permanent vegetative cover.

Participants in USDA programs are required to protect their HEL cropland from excessive soil erosion, and comply with the HEL regulations and provisions of 16 U.S.C. §§ 3801; 3811-3814 Chapter 58, Subchapter II – Highly Erodible Land Conservation. USDA program participants must implement a conservation system on HEL cropped land that provides for a substantial reduction in soil erosion. In addition, when breaking out native vegetation, a program participant must implement a system that results in no substantial increase in soil erosion. NRCS classifies as HEL about 101.1 million acres of America’s cropland, or approximately 27 percent of the Nation’s cropland.

**Wetlands Conservation Compliance (WC).** NRCS's responsibilities for wetlands conservation compliance are detailed in Title XII of the Food Security Act of 1985 (16 U.S.C. §§ 3801; 3821-3824). NRCS's responsibilities include: making wetland determinations; processing and resolving determination appeals; developing mitigation and restoration plans; determining minimal effect exemptions; and implementing scope and effect evaluations for the installation of new drainage systems and maintenance of existing systems.

A compliance status review is an inspection of a cropland tract to determine whether the USDA participant is in compliance with the HEL/WC provisions of the Food Security Act of 1985. Compliance status reviews are conducted annually in every State. Compliance status reviews are conducted on farm and ranch lands that have received USDA benefits and which are subject to the HEL or WC provisions, or both. The NRCS compliance status review process requires employees to make an on-site determination when a violation of the HEL/WC provisions is suspected, and ensures that only qualified NRCS employees report violations. The Food Security Act of 1985, as amended, also requires that NRCS conduct reviews of approximately one percent of HEL and/or WC cropland on farms that have received some government payment in the prior year. In addition, NRCS must review five percent of all farm loan recipients from the prior year, and review HEL or WC tracts of cropland owned by any government employee every three years.

Penalties for non-compliance range from a Good Faith Exemption issued by the Farm Service Agency (FSA), which allows the producer one year to correct the violation, to a determination by FSA that the producer is ineligible for any government payment and must pay back any current and/or prior year funding. The compliance review year runs from January 1 to December 1. Therefore, 2014 final review data will be available in February 2015. The results of 2013 reviews, which are displayed in the table below, show that a high percentage of program participants are following NRCS-approved conservation plans and are in compliance with HEL requirements. In 2013, compliance reviews were conducted on 23,627 tracts, which include approximately 3.6 million acres of cropland. A total of 680 tracts, or 2.9 percent of the total reviewed, were found to not be in compliance: 21 tracts had both HEL and WC violations, and 216 tracts had only WC violations. Of the 23,163 tracts that were in compliance, approximately 5.8 percent (1,354 tracts) were deemed to be in compliance because they had been issued variances or exemptions as provided by statute. This indicates a relatively low rate of non-compliance, with exemptions provided due to extenuating circumstances. Data from the past four years suggest that conservation measures prescribed by NRCS are being effectively implemented on our most vulnerable land.

<b>Four Year Summary of Tract Reviews and Tracts Out of Compliance</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Total Tracts Reviewed	18,704	22,210	24,309	23,627
Tracts Out of Compliance	344	530	744	680
Percent out of Compliance	1.8	2.4	3.1	2.9
Number of States Recording Non-Compliance	28	32	30	34

CTA Program Funds Customer Assistance. NRCS provided technical assistance to over 600,000 customers, and comprehensive planning assistance to 85,000 customers in 2014. Primary customers are land owners and managers who make the day-to-day decisions about natural resources use and management on private lands. The agency provides conservation technical assistance to four main customer groups:

- Farmers and ranchers who own, operate, or live on farms and ranches;
- Other members of the private sector who support agriculture production and conservation;
- Governments, including Tribes, with responsibility for natural resource use and management; and
- Non-profit organizations whose mission aligns with NRCS regarding natural resource management.

The CTA Program is the backbone of the agency's conservation delivery system. Many customers begin their relationship with NRCS through requests for assistance that later evolve into a conservation plan that may include cost-share assistance through Farm Bill programs.

In 2014, the CTA program resulted in:

- 29.1 million acres of conservation plans written;
- 18.2 million acres of conservation applied to improve water quality;
- 13.1 million acres of grazing and forest land conservation;
- 6.2 million acres of wildlife habitat improvement; and
- 6.2 million acres of conservation applied on the ground to improve soil quality.

CTA Program Leverages Technical Assistance. NRCS field staff work with over 8,100 State agencies and local partners to deliver conservation technical and financial assistance. During 2014, these non-Federal partners contributed an estimated \$82 million of in-kind goods and services and over \$133 million in financial assistance toward addressing local resource concerns that coincide with the Strategic Goal to “Get Conservation on the Ground.” These leverage agreements have allowed NRCS to enhance existing funds by finding other partners, on a project-specific basis, in order to accomplish a task that could not be accomplished solely by NRCS.

NRCS understands the need for conservation to be a results-driven decision and therefore seeks opportunities to leverage funds with conservation partners whenever possible in order to drive natural resource solutions. NRCS continues to support innovation and non-traditional approaches to forge sustainable partnerships between private landowners, corporations, foundations, local natural resource agencies, and conservation organizations. With collaborative conservation, NRCS helps conservation partners identify and implement solutions through partnership agreements that deliver mutual benefit.

Technical Service Providers (TSP). TSPs expand and accelerate NRCS’s ability to plan and apply conservation practices that enhance, restore, or conserve the Nation’s soil, water, and related natural resources on non-Federal land. TSPs assist landowners and agricultural producers in applying conservation practices on the land. They may be individuals or entities such as private businesses, nonprofit organizations, Indian Tribes, State and local governments, or Federal agencies outside USDA. TSPs provide participants in USDA conservation programs with convenient access to technical services, quality work, and professional one-on-one technical assistance. TSPs develop conservation plans; perform selected compliance studies; plan, design, and implement conservation practices; and evaluate completed conservation practices.

The TSP program provides eligible participants with consistent, science-based, site-specific practices designed to achieve conservation objectives on land active in agricultural, forestry, or related uses. The program is national in scope and is offered throughout the United States and territories.

To become a certified TSP, individuals or entities must enter into a certification agreement with NRCS. TSPs must meet education, experience, and credential requirements that are established for each conservation practice. This ensures that technical assistance is provided in accordance with the NRCS statement of work associated with each conservation practice. All conservation practices and criteria are reviewed and updated annually. A specially designed Web site maintains certification criteria and a registry of TSPs. NRCS has a TSP Web site, <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/tsp>, which contains other information for TSPs and customers.

In 2014, NRCS worked with 11 professional recommending organizations that provide TSP certification. NRCS signed agreements or contracts with individuals and other organizations resulting in nearly \$49 million in obligations for service. Forty-nine percent of funds were distributed through the Environmental Quality Incentives Program (EQIP). The remaining 51 percent of TSP obligations were distributed through other conservation programs such as the Agricultural Conservation Easement Program, Conservation Reserve Program and Watershed Programs. Nearly 2,200 certified TSPs are available to help program participants apply conservation.

In 2014, TSPs played a key role in the implementation of Conservation Activity Plans (CAP). NRCS offered 17 approved CAPs. To adopt a CAP, a producer was required to work with a certified TSP. For EQIP, a total of 4,423 CAPs were written in 2014 covering 13 resource areas: nutrient management; forest management; grazing management; comprehensive nutrient management plan; agricultural energy management plan- landscape; agricultural energy management plan- headquarters; integrated pest management; irrigation water management; transition to organic; fish and wildlife habitat; pollinator habitat enhancement; integrated pest management herbicide resistance weed conservation plan; and drainage water management.

International Assistance. NRCS's international assistance program provides short and long-term technical assistance for the development of natural resource conservation programs and projects abroad. The program ensures that NRCS employees continue to broaden their knowledge of relevant international conservation issues, and participate in the mutual exchange of conservation technology with countries that face soil and water conservation issues similar to those in the United States. This program furthers an enhanced understanding of various international resource conservation issues, improved international relations, and access to technology developed in other countries.

NRCS cooperates with other Federal agencies in providing technical assistance in natural resource conservation to countries affected by disasters, conflicts, or mismanagement of natural resources. The agency assists other Federal agencies by arranging meetings between agency specialists and foreign visitors who are interested in how NRCS provides technical and financial assistance to private landowners. NRCS also works with other countries on scientific and exchange projects that benefit both countries. In 2014, NRCS led a soil and water conservation study tour for the USDA Cochran Fellowship program. USDA established the Cochran Fellowship Program in the Foreign Agriculture Service (FAS) to train agricultural government officials and private individuals from middle-income countries, emerging markets, and emerging democracies to enhance agricultural development. This effort focused on the country of Tajikistan, and seven Cochran delegates from Tajikistan attended the study tour. In addition, over a dozen NRCS employees interacted with the delegation during the study tour and gained an appreciation for the conservation issues faced in that part of the world. The study tour provided the Tajik delegation with an opportunity to view several watershed treatments (conservation systems and practices) and irrigation technologies that are in use in the United States. The tour focused on areas in the United States with topographical and climatic conditions similar to the identified areas in Tajikistan. They have utilized these techniques in their own country through direct technical service and in leadership roles.

NRCS also helped provide training in the Republic of Georgia in partnership with the US Forest Service (USFS). This training was done in support of the project on Climate Change Adaptation and Disaster Mitigation that is funded by United States Agency for International Development and being implemented by the Caucasus Environmental Non-Governmental Organization Network. There were 25 participants in the workshop, which provided student participants with a variety of basic soil and water conservation techniques for the protection and rehabilitation of degraded watersheds. These conservation techniques can be used to provide resiliency to a watershed which will reduce effects of weather-caused disasters. The participants also gained an understanding in the techniques and approaches useful in engaging communities to implement these watershed protection and rehabilitation techniques. The USDA team was able to greatly increase their knowledge and understanding of the issues, challenges, and opportunities in the Caucasus region in general and the Republic of Georgia specifically.

NRCS completed the Haiti Pilot Soil Survey project on time and within the projected budget. Over 100 Haitians were trained in the use of soil survey; two were trained to lead and manage soil survey program and operation; 30 agronomists were trained to survey and describe soils; six were trained in databases and GIS; and six were trained in laboratory analysis. Most of the training was delivered by four NRCS soil scientists, with additional training by six other NRCS employees. Our collaborative effort built capacity among the ministry and its partners to lead soil survey activities in Haiti. Partnerships were developed among Haitian ministries, Universities, and non-governmental organizations. Deliverables include: thematic maps; a printed report; Web Soil Survey; Soil Data Viewer (linked to the National Soil Information System database); and SoilWeb (a smart phone application that can be used to access soil information within the pilot area). Haitian scientists were also introduced to other practical applications of soil information systems such as the soil erosion prediction tool, Revised Universal Soil Loss Equation 2, and various soil interpretations using Haiti-specific data.

Agency specialists provided technical assistance to the USDA-Pakistan Water Dialogue Project (an overall \$1M project), and provided technical assessment and consultation on watershed & irrigation demonstration activities in Pakistan. Over 100 agriculture professionals were directly assisted, including representatives of International Water Management Institute in Pakistan, International Center for Agricultural Research in the Dry Areas, US Embassy-Pakistan, Water Resources Research Institute, and Pakistan Agriculture Research Council. Expertise applied led to: 1) successful plan being developed for unique Water Dialogue project in Pakistan; 2) enabled watershed and irrigation project leaders and engineer on project to refine activities; and 3) assessment provided enabled FAS to proceed

confidently with project activities. NRCS expertise was appreciated and recognized by relevant officials at US Embassy-Pakistan.

NRCS Scholarship Programs. In 2014, NRCS participated in the USDA/1890 National Scholars Program, a partnership between USDA and 1890 Land-Grant Universities. This program is intended to increase the number of students enrolling in agriculture, food, natural resource sciences, and other related programs in pursuit of a bachelor's degree at any of the Nation's 1890 Land Grant Universities, all of which are Historically Black Colleges and Universities (HBCUs). In 2014, NRCS obligated approximately \$340,000 for scholarships and career training for students enrolled in this program, referred to as "Scholars". Applicants include inbound freshmen and college students entering their sophomore and junior years. Students must maintain a minimum GPA of 3.0 and are required to work during the summers as conservation interns. Once a Scholar graduates, they are hired noncompetitively as provided by their scholarship agreement, and they are required to work one year for each year of their scholarship. This commitment from the Scholars, along with increasing the diversity of NRCS, is the agency's return on the investment. Currently there are 27 Scholars in NRCS, of whom eight were selected in 2014. In May 2014, six scholars graduated, of whom four have been converted to full-time positions while two were not due to budget restrictions and other extenuating circumstances.

The USDA/1994 Tribal Scholars Program is a partnership between USDA and 1994 Tribal Colleges and Universities. The program awards scholarships to students who are attending one of the 1994 Tribal Colleges and Universities. In addition, because many of the Tribal Colleges only have a two-year program, students may transfer from the Tribal College to any Land Grant College or University to complete their education. The program is intended to strengthen the partnership of the USDA with 1994 Tribal Colleges. In 2014, the sole Tribal Scholar graduated and was converted to a full-time soil conservationist in North Dakota. NRCS did not recruit for any new Tribal Scholars.

NRCS Outreach Partnerships. NRCS has partnered with North Carolina A&T University and Florida A&M University to support their Biological Agricultural and System Engineering (BASE) academic programs to prepare minority students for careers in the science field. Ultimately, the goal is for NRCS to partner with these institutions to help achieve a more diverse workforce. NRCS has provided \$100,000 to support the BASE programs between the two institutions.

NRCS has partnered with the National Association for Equal Opportunity in Higher Education (NAFEO) to enhance the visibility of NRCS career opportunities to attract, recruit, and train highly-skilled graduates in Agricultural Programs to address the needs and retention efforts of NRCS. NAFEO is conducting five seminars for students in the identified academia areas relevant to NRCS's work (soil science/conservation, biology, engineering, and agriculture). NAFEO is also conducting four webinars on how to apply for Federal jobs.

NRCS renewed a partnership with the U.S. Endowment for Forestry and Communities and helped identify two multicounty pilots in North Carolina and South Carolina to preserve working forests. These pilots are designed to stabilize African American land ownership and enhance family wealth by increasing income and land asset value through sustainable forestry practices. NRCS invested an additional \$250,000 in this partnership venture. NRCS has also targeted Environmental Quality Incentives Program (EQIP) funding for these pilots.

NRCS is partnering with 12 community-based organizations through cooperative partnership agreements to assist new immigrant farmers, specialty crop farmers, and limited resource and socially-disadvantaged farmers and ranchers with technical assistance, on-site demonstrations, program awareness, inner-city urban agriculture, land loss prevention, and training opportunities. These efforts will increase the adoption of natural resource management on their operations, and assist and inform underserved farmers and landowners on how to access NRCS conservation assistance. In 2015, NRCS plans to invest \$2.25 million to support outreach efforts on the ground by working with these community-based organizations to set up workshops designed to increase participation in all NRCS conservation programs.

Small, Limited Resource, and Beginning Farmers and Ranchers. NRCS assists small, limited resource, beginning, and socially-disadvantaged farmers and ranchers by creating opportunities for transparent dialogue, promoting open partnerships, coordinating economic viability through innovative conservation programs, increasing program access and services in persistent poverty communities, and expanding program participation avenues by improving internal guidelines.

The USDA StrikeForce Initiative is now active in 20 States: Arkansas, Georgia, Mississippi, Tennessee, Colorado, New Mexico, Nevada, Alabama, Alaska, North Carolina, South Carolina, North Dakota, South Dakota, Kentucky, Louisiana, West Virginia and Virginia and with concurrent regional activities in the tribal communities in Arizona, Texas, and Utah. The additional targeted outreach to these States has resulted in increased interest in participation in NRCS conservation programs. Since the inception of the Initiative, it has provided financial assistance to 35,336 participants entering into contracts totaling \$911,784,892 in the StrikeForce States.

In 2014, NRCS programs, including the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP), and Agricultural Management Assistance Program provided assistance to Historically Underserved customers, which include beginning, limited resource, and/or socially-disadvantaged producers. Following are contracts and financial assistance provided to those customers:

- \$99 million in financial assistance on 3,764 contracts with socially disadvantaged farmers and ranchers to treat about 2.3 million acres.
- \$204 million in financial assistance on 8,860 contracts with beginning farmers and ranchers to treat about 1.9 million acres.
- \$20 million in financial assistance on 1,046 contracts with limited resource farmers and ranchers to treat about 281,740 acres.

Assistance to American Indians and Alaskan Natives. In 2014, NRCS continued to increase tribal participation in NRCS' financial assistance programs among the 566 Federally-recognized tribal governments to strengthen conservation activities on tribal lands. The agency's objectives are to: operate within a government-to-government relationship with Federally-recognized Indian Tribes; consult to the greatest extent practicable with Indian Tribal Governments before taking actions that affect Federally-recognized Indian Tribes; assess the impact of agency activities on tribal trust resources and assure that interests are considered before the activities are undertaken; and remove procedural impediments to working directly with tribal governments on conservation activities that affect trust property or government rights of the Tribes.

The Federally-recognized Tribes can work with NRCS to receive financial assistance and technical assistance. NRCS offers tribal governments assistance with conservation planning, partnerships, grants, financial assistance programs, and training through the agency outreach efforts. Within NRCS, employees are trained in tribal culture and protocol. NRCS has 50 offices, including 42 full-time and eight part-time offices, located on or near tribal lands. There are approximately 195 NRCS tribal liaisons assisting the 566 Federally-recognized Tribes.

USDA programs and services are available to American Indian and Alaska Native farmers and ranchers. NRCS programs strive to meet tribal demands for improved agriculture and environmental quality, such as conservation of crop, pasture, and rangelands; rural landscape services; wildlife habitat; wetlands; improved water and air quality; and food, fiber and timber production.

- Program Activities/Participation. In 2014, NRCS awarded the following to American Indian and Alaska Natives:
  - 679 Environmental Quality Incentives Program contracts totaling \$28.5 million;
  - 1 Wildlife Habitat Incentive Program contract totaling \$4 thousand;
  - 236 Conservation Stewardship Program contracts totaling \$5 million; and
  - 1 Agriculture Management Assistance Program contract totaling \$675 thousand.
- Regional Tribal Conservation Advisory Councils. To strengthen working relationships with Tribes, NRCS established three advisory councils in 2012. The agency will use these councils to assist in establishing regular and meaningful consultation and collaboration with tribal representatives and officials in the development of Federal policy that has tribal implications. The councils will assist NRCS's Chief, Regional Conservationists, and State Conservationists in strengthening government-to-government relationships and clarifying lines of communication and consultation with American Indian Tribes. All three councils held two meetings in 2014.
- Tribal Technical Service Providers (TSP) Pilot. NRCS and the College of the Menominee Nation entered into a cooperative agreement to certify Tribal Technical Service Providers (TSPs) who can provide assistance in implementing Farm Bill programs to tribal producers. This pilot project established a process that can be adapted by other Tribes throughout the Nation. The intent of this project is to build capacity of Tribal colleges in

professional and continuing education training, certification, and strengthening the capacity of Tribes in conservation and resource management.

- National Outreach Share Point. NRCS designed a website to increase communication and collaboration within the agency. The site has a separate section for tribal outreach and offers important linkages to key policies and training tools to better understand how to work more effectively with Tribes and their members.
- USDA Action Plan. NRCS continues to implement the USDA Office of Tribal Relations Action Plan on tribal consultation. The plan requires all Federal agencies to provide effective Tribal consultation and collaboration in carrying out their roles and responsibilities.
- Tribal Conservation Districts (TCD). There are 44 TCDs established under tribal laws, and they are essential to delivering conservation planning and conservation programs assistance in Indian Country. These TCDs are recognized by the Secretary of Agriculture. Presently, there is one TCD pending approval by the Secretary.

In 2014, NRCS conducted five regional webinars providing a framework for collaborating with the 566 Federally-recognized Tribes that have an interest in the NRCS conservation provisions of the 2014 Farm Bill to ensure full access to NRCS conservation programs in Indian Country.

Accountability and Management Improvements. Maximizing agency success requires adaptive management strategies – systematically and accurately assessing work and processes and making improvements. Adaptive management requires a feedback system to improve conservation solutions and monitor success in order to achieve efficient investments in conservation. The feedback system NRCS uses includes performance measures and program evaluation methods and connecting scientific evidence to conservation outcomes such as the CEAP efforts. Program evaluations help the agency learn about the successes, share information with key audiences, and make rapid adjustments to improve services under changing conditions. The key components of the adaptive management strategy for measuring and evaluating programs include:

- Developing a variety of performance measures and performance metrics that align with the purpose and success factors of the program;
- Monitoring evidence of efficient program design and results (outputs and outcomes) on a regular basis;
- Developing, maintaining, and auditing internal controls for program compliance; and
- Making evidence-based and targeted program improvements on an on-going basis.

The agency has continued to work on transparency and accountability by taking the following steps in 2014:

- Further developed a comprehensive agency data system that will connect a variety of data sources for program measurement and analysis. The system will improve access for internal and external customers to agency official data on NRCS programs, planning, and application of conservation and field activities at any spatial scale;
- Designated the Associate Chief of Operations as the Chief Compliance Officer to ensure that compliance oversight activities are effective throughout the agency;
- Conducted three functional reviews, two national reviews, nine program delivery reviews, and ten civil rights reviews to ensure compliance is monitored throughout the agency on a consistent basis;
- Completed review year 2013 Highly Erodible Land and Wetlands Conservation Compliance reviews on 23,627 tracts of cropland;
- Closed 16 of the 43 open audits from the active audit list in 2014. Of those 16 audits closed, 11 had no recommendations for NRCS follow-up. At the beginning of 2014, there were 60 open audit recommendations, an additional 17 were added during the course of the year (giving a total of 77 open recommendations); 26 were closed; leaving a total of 51 recommendations remaining open; and
- Started implementing a comprehensive Compliance Strategic Plan (2014 - 2017) that presents an integrated framework to manage compliance and control activities. The Plan will serve as a blueprint to guide the achievement of NRCS mission critical goals and objectives to meet the agency's mission.

## SOIL SURVEY

### Current Activities.

**Program Objectives.** Understanding and managing soil as a strategic natural resource helps sustain the health and economy of the Nation. Soil survey is an essential tool for regional and local conservation planning that allows

people to manage natural resources. Scientists and policy makers use soil survey information in studying climate change and evaluating the sustainability and environmental impacts of land use and management practices. Soil surveys provide input data that computer simulation models use to predict the dynamics of carbon, nutrients, and water in soils. Soil surveys are used by planners, engineers, farmers, ranchers, developers, and home owners to evaluate soil suitability and make management decisions for farms, home sites, subdivisions, commercial and industrial sites, and wildlife and recreational areas.

National Cooperative Soil Survey. NRCS is the lead Federal agency for the National Cooperative Soil Survey (NCSS), a partnership of Federal land management agencies, State agricultural experiment stations, private consultants, and State and local governments. The NCSS promotes the use of soil information, and develops policies and procedures for conducting soil surveys and producing soil information. NRCS provides the scientific expertise to enable the NCSS to develop and maintain a uniform system for mapping and assessing soil resources that allows soil information from different locations to be shared regardless of which agency collects it. NRCS provides most of the training in soil surveys to Federal agencies and assists with their soil inventories on a reimbursable basis.

Standards and Mechanisms for Soil Information. NRCS is responsible for developing the standards and mechanisms for soil information on national tabular and spatial data infrastructure required by Executive Order 12906. NRCS is continually enhancing the National Soil Survey Information System, and producing publications that are accessible to the public through the Internet at <http://soils.usda.gov>. The Soil Data Warehouse houses archived soil survey data. Web Soil Survey distributes published soil surveys, making it easier to keep soil information current for daily public access. NRCS refreshes the official national soil survey data annually to better meet the needs of modelers and researchers in addition to meeting Agency and Departmental compliance program requirements. The SoilWeb mobile application is becoming a popular tool for individuals to derive soil information at Global Positioning System (GPS) located points. Web-based delivery mechanisms that simplify the interpretation and delivery of soils data are evolving at a rapid pace. The first generation of smartphone applications were native applications limited to the iPhone and Android-based smartphones. A revised version of SoilWeb was developed to work across all types of devices (desktops, smartphones, and tablets), making it accessible to users anywhere an internet connection is available.

**Program Operations.** The primary focus of the Soil Survey Program is to provide current and consistent map interpretations and data sets of the soil resources of the United States. This includes providing useful information to the public in a variety of formats (e.g., electronic and web-based). The program will continue to focus on maintaining quality soil information and helping people understand and use the soil resource in a sustainable manner.

Key program elements include:

- Mapping. Mapping procedures are managed based on physiographic rather than administrative boundaries. Soil surveys based on natural landscape boundaries rather than political boundaries are more efficient to produce, and provide consistent, quality data for assessing and planning the use and protection of landscape units (watersheds or ecosystems). Physiographic surveys provide consistent data that can be used easily by landowners with holdings in multiple jurisdictions, or by community, State, or regional planners. A primary challenge is to complete the initial soil survey for the entire country. This challenge also includes completing surveys on American Indian land holdings as well as public lands controlled by the United States Military, Fish and Wildlife Service, BLM, and the National Park Service. Public lands are important to include with private lands when planning land use and conservation for watersheds, landscapes, or ecological sites. NRCS is working cooperatively within the NCSS to accomplish these goals.
- Ecological Site Information System (ESIS). Ecological site descriptions (ESDs) used as assessment tools in conservation planning and modeling projects such as the Conservation Effects Assessment Project (CEAP) have potential to radically change conservation on working lands. NRCS's ESIS is linked with the National Cooperative Soil Survey data to provide the capability to produce automated ecological site descriptions from the data stored in the ESIS database. NRCS led the National Resource Inventory of the Bureau of Land Management (BLM) non-forested lands with ESIS data in order to provide a statistically based sample design that is common to both agencies. BLM is providing \$12.5 million to NRCS over five years for the service and data collection through 2015. This inventory is critical for the agencies because the Federal lands are intertwined with non-Federal rangelands and land management units typically span both ownership types. Joint policy between BLM, NRCS, and the USFS efficiently pools the agencies' technical resources for the development and use of ESDs to describe site characteristics, plant communities, and use interpretations for grazing land and forestland. ESD



development training is ongoing and all three agencies provide staff support and participation. This technology improves land management planning capabilities for agencies and the public by providing consistency among the agencies' classification, technology development, planning and accomplishment reporting.

- Rapid Assessment of Soil Carbon for Conservation Planning (RaCA). Visible and near-infrared spectra for prediction of organic and inorganic carbon contents and bulk density data were collected in 2013 for 145,000 soil samples from 6,500 locations statistically selected to represent specific soil properties and land covers. Data summary and analysis was initiated and will continue in 2015. Soil sampling for carbon analysis was implemented for soils in Alaska, the Pacific Islands Area, and Puerto Rico in 2012, with completion of sample and data analysis expected in 2015. The goal of this project is to provide data on carbon stocks for the United States by soil groupings, land use, and management for conservation planning and model calibration.
- Kellogg Soil Survey Laboratory (KSSL). The KSSL produced precise data for more than 4,800 samples in 2014. In addition to characterization samples analyzed to yield quantitative data for the National Cooperative Soil Survey, the KSSL made quantitative carbon measures on 1,500 RaCA samples. The KSSL also analyzed samples submitted by other agencies and scientific organizations, including the Environmental Protection Agency National Wetland Condition Assessment; Plant Materials Centers Soil Quality Study; Soil Monitoring Network; and initial component of samples from the National Ecological Observatory Network.
- Research and Technical Analysis. KSSL provides analytical support, which includes research and methods development and testing, and sample analyses for on-going soil survey activities around the Nation. During 2014, KSSL completed 215,000 analyses on chemical, physical, mineralogical, and biological properties of soils; about 23 percent less than in 2013 (280,000). KSSL refined ongoing visible, near-infrared and mid-infrared spectroscopy methods and implemented infrared spectra measurement on incoming laboratory samples. Infrared techniques provide a distinct analytical approach for selected soil properties including organic carbon. The KSSL data provides quantitative input for Climate Change Models, baseline data to assess Soil Health, and measured input values to determine effectiveness of NRCS conservation practices and programs (e.g., CEAP, Environmental Policy Integrated Climate model, Revised Universal Soil Loss Equation 2, etc.).
- The National Soil Survey Center (NSSC) awarded four competitive research grants to National Cooperative Soil Survey (NCSS) cooperators to investigate problems pertinent to soil survey update and enhancement. Information Management. The National Soil Survey Information System, a part of the NCSS information system, is where soil scientists develop, manage, and deliver soil information for the public. Digital soil surveys enable customers to use electronic soil data in geographic information systems for generating maps tailored to their needs and performing complex resource analyses. The Soil Science Division established an annual refresh date for the official soil survey database. The entire official soil survey database is refreshed on September 30 each year to ensure that updated official data is available on October 1 of that year. NRCS delivers these data via the Internet.
- Technical Soil Services (TSS). TSS provides five basic types of service: technical policy and program services; planning services; site-specific soil investigations, testing, interpretation, and evaluation; expert services for judicial requests; and information services. These services are primarily provided through the USDA Service Centers. TSS also supports new and innovative models of conservation delivery like Conservation Streamlining Initiative (CDSI).
- Web Soil Survey. The Web Soil Survey website, <http://websoilsurvey.nrcs.usda.gov/app/>, provides soil data and information produced by NCSS to the public. Operated by NRCS, the website provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for 95.4 percent of the Nation's counties. The site is updated and maintained as the single authoritative source of soil survey information. The Web Soil Survey will be used directly for conservation planning under the CDSI protocols.
- Digital Soil Surveys. The NCSS develops and maintains two scales of soil surveys:
  - Soil Survey Geographic Data Base (SSURGO) is used primarily by landowners, townships, counties or parishes, and watershed hydrologic units for planning and resource management. SSURGO contains the most detailed level of soil information; or
  - United States General Soil Map is used primarily for multi-county, State, river basin planning and resource management and monitoring.

#### **2014 Activities**

- Acres Mapped. Soil surveys have been prepared on over 2.1 billion acres. During 2014, NRCS soil scientists mapped or updated 39.7 million acres, and another 75,000 acres were mapped or updated by other Federal, State, and local agencies in cooperation with NRCS. Soil mapping priorities are directed toward completion of all

previously unmapped private lands and updating mapping and interpretations to meet current user needs and requirements. Ecological Site Descriptions (ESDs) were developed and linked to 22.4 million acres of soil survey information.

- **Soil Surveys used interactively online.** In 2014, the Web Soil Survey website logged over 2.6 million user visits (a 10 percent increase over 2013) and over 152,000 visitors per month. Over 493,000 customized soil reports for individual small portions of the country were developed through Web Soil Survey in 2014 (a 14 percent increase over 2013). At the end of 2014, the total number of visits to the website since its initial release in 2005 topped 15 million. Working in conjunction with Google Maps, the revised application now displays soil map unit delineations overlain on Google's imagery. Users can view summaries of soil types for any geographic location where NRCS soil data exists. Detailed information on the named soils is now seamlessly linked and formatted within the application. SoilWeb was developed in collaboration between the University of California Davis Soil Resource Lab and NRCS. The website is available at <http://casoilresource.lawr.ucdavis.edu/soilweb>. The SoilWeb Smartphone application is currently averaging between 500 and 1,000 viewers per day by people searching for soils information using smartphones GPS coordinates throughout the country. The new SoilWeb Google Earth application is currently averaging about 55,000 viewers per day, a significant increase from 2014.
- **Research in Soil Geography.** The National Soil Survey Center and the National Geospatial Research Unit have collaborated since 2005 to support research and development into the science of hydrogeology and digital soil mapping as defined by the International Union of Soil Science. This research is generally conducted collaboratively with NSSC, university partners, and related institutions.
- **Soil Health.** National Soil Survey Center staff is playing an important role in the creation and roll out of the Soil Health Management System effort by providing scientific underpinnings for conservation practices recommended, collection of dynamic soil property data and lab analyses for demonstration projects.

#### **Get Conservation on the Ground.**

**Ecological Site Team.** The National Ecological Site Team was created in late 2013 and during the first year of existence achieved several important milestones. Certainly, the most important was the completion and release of the National Ecological Site Handbook (NESH) in April 2014. Following the release of the NESH, a Chief's Video Teleconference (VTC) with State Conservationists in May and a VTC featuring National Leadership discussion with several hundred staff from State and Local Offices provided an overview of the importance of the work and changes in protocol. Because of the magnitude of the changes and the importance of the information to NRCS operations, these activities represent a major step forward.

**Boundary Waters Canoe Area Wilderness Soil Survey.** In August 2012, the U.S. Forest Service (USFS) and NRCS began a collaborative digital soil survey project of the approximately 595,000 remote acres of unmapped land in the Boundary Waters Canoe Area Wilderness (BWCAW). This survey will be derived from a combination of digital soil mapping techniques using spectral and terrain data and will be supplemented by local expertise with the goal of a raster end product. Sufficient ground-truth will be collected so that the resultant survey has reliability and future products can be developed. USFS and NRCS professionals were divided into teams for data acquisition, data processing, modeling, field logistics, field data collection, ecological site development, quality assurance, standards, and proof of concept, project management, and peer review. These teams are supporting this collaborative project with a scheduled completion goal at the end of 2014. This is a unique project in many aspects, but a key distinction is the extreme remoteness of the area to be surveyed, which presented certain challenges. The BWCAW is a wilderness area managed by the USFS with no access by roads. While some lakes do allow motorized boats, in most cases, transportation is strictly via foot and canoe or kayak. There are portages throughout the area and primitive campsites, but no cell phone service. The delivered product will be similar to the raster soil survey of Essex County, Vermont, with measures of accuracy, uncertainty, and confidence. This project will also initiate the development of a "Standard Methods and Procedures for Digital Soil Mapping" document.

**The Two Chief's Landscape Scale Restoration Initiative 2014. West Virginia Restoration Venture.** Over the last year, the NRCS-NSSC Geospatial Research Unit (GRU) at West Virginia University (WVU) has developed a strong partnership with a variety of local and regional interest groups for helping guide forest restoration efforts in West Virginia. An excellent working relationship with the MLRA 127 Soil Survey Office has resulted in the collection of over 500 new soil descriptions on both private and Federal lands, which have helped in creating new Ecological Site Descriptions (ESDs) as well as Soil Data Join Recorrelation efforts. Analysis of these new data by the GRU, along with collection of new forest plot data, has helped to garner new support for restoration efforts of montane red spruce

forests in the Central Appalachians. This has culminated in a new set of funding from the two Chief's Landscape Scale Restoration Initiative 2014 in a project called the West Virginia Restoration Venture, co-led by the USFS, Monongahela National Forest in cooperation with the West Virginia NRCS. The two agencies have reached out to their partners, The Nature Conservancy and the Central Appalachian Spruce Restoration Initiative, to build a strong collaborative effort around this landscape scale restoration initiative.

Completion of Haiti Pilot Soil Survey for Capacity Building in support of President Obama's Feed the Future initiative. After the 2010 earthquake in Haiti, President Obama directed U.S. Government agencies to examine ways to contribute toward the recovery effort and a sustainable future for the people of Haiti under Feed the Future Initiative. Funded by the United States Agency for International Development, NRCS Soil Survey Program, and World Soil Resources in cooperation with the Haitian Ministry of Agriculture, local agencies and non-government organizations completed a detailed soil survey for a 3,000 hectare (approximately 7,500 acres) Pilot Area in Cul de Sac. The main goal of the pilot project was to build capacity for Haiti to conduct a soil survey and demonstrate the practical applications of soil survey information to guide conservation planning for sustainable use of natural resources for current and future generations. NRCS soil scientist trained more than 13 leaders from the Haitian government and 30 new soil scientists who received training on conducting soil survey, developing and utilizing soil interpretations for disseminating the information to the farmers and policy makers. The project deliverables were presented at the joint conference between U.S. and Haitian government agencies in Port au Prince during September 10-11, 2014. The results were presented to the farmer association's leaders in the project area via hard copies and Web Soil Survey and Soil Web tools. At the conclusion of the conference the Haitian government announced plans for the expansion of the soil survey to an additional 17,000 hectares (approximately 42,500 acres) in Cul de Sac and Priority Development Corridors, and requested direct technical assistance from the NRCS Soil Survey Program.

Gridded Soil Survey Map Layer Increases Use of USDA Soils Data by the GIS Simulation Modeling Community. The 2014 Gridded Soil Survey Geographic (GSSURGO) Database was released in May 2014. These data are derived from a January 2014 snapshot of the NRCS Soil Data Mart database (2014 SSURGO source). These new data are available in both State-wide tiles and the contiguous United States (CONUS) at a resolution of 10 meters in a file geodatabase format suitable for desktop GIS analyses. Additional resolutions of 30 meters and 90 meters are available for the CONUS GSSURGO database. The national GSSURGO Value Added Look Up Table Database includes: ready-to-map themes (summarized to the map unit level) such as available water storage and soil organic carbon in 11 standard depth layers and zones; National Commodity Crop Productivity Index for corn/soybeans, wheat, cotton, and overall best of these three crops; crop root zone depths; available water storage in the crop root zone; drought vulnerable soil landscapes; and potential wetland soil landscapes. A revised GSSURGO User Guide is also included. These data are available for download or portable media order from the USDA Geospatial Data Gateway. A new release is planned for each Federal fiscal year. Since the May 2014 release, 13.3 terabytes of GSSURGO data was distributed through 13,013 orders online orders and 47 bulk orders (portable hard drives shipped via mail). Primary customers included private sector (46 percent), educational institutions (32 percent), Federal agencies other than USDA (7 percent), USDA (6 percent), non-profit organizations (3 percent), and State agencies, military, and other countries (6 percent). An important example of GSSURGO application is the Drought Monitor (authored by National Oceanic and Atmospheric Administration, USDA, University of Nebraska-Lincoln, and partner agencies), which uses the GSSURGO root zone available water storage data to monitor and map drought in the United States. Some of the International GSSURGO clients include International Center for Tropical Agriculture, whose scientists are studying crop species adaptation across North America.

Soil Taxonomy. The NRCS Agricultural Handbook 436, *Soil Taxonomy, A Basic System of Soil Classification for Making and Interpreting Soil Surveys*, was endorsed by the International Union of Soil Sciences (IUSS) as an approved system of soil classification for the international soil science community at the 20<sup>th</sup> World Congress of Soil Science in Jeju, Korea in June, 2014. The endorsement came after two years of ongoing efforts by the IUSS Universal Soil Classification Working Group (Division 1, Commission 1.4) supported by NRCS Soil Science Division and National Soil Survey Center. According to the USDA soil science community, this endorsement provides a significant step forward for our ability to apply and improve Soil Taxonomy to more places around the world to further promote and understand this critical resource. To support this effort, the Soil Science Division has developed the International Committee on Taxonomy, which will include soil classification experts from around the world who will provide input and feedback for the continued enhancement, improvement and development of Soil Taxonomy.

## SNOW SURVEY AND WATER SUPPLY FORECASTING

### **Current Activities.**

**Program Objectives.** The Snow Survey and Water Supply Forecasting (SSWSF) Program collects high elevation snow data in the Western United States and provides managers and users with snowpack information, other climatic data, and water supply forecasts. NRCS field staff and cooperators collect and analyze data on snow depth, snow water equivalent, and other climate parameters at over 2,000 remote, high elevation data collection sites. These data are used to provide estimates of annual water availability, spring snowmelt runoff, and summer streamflows. Climate change researchers are increasingly accessing the data to evaluate trends in the Western U.S. climate. The water supply forecasts are used by individual farmers and ranchers; water resource managers; Federal, State, and local government agencies; municipal and industrial water providers; hydroelectric power generation utilities; irrigation districts; fish and wildlife management agencies; reservoir project managers; recreationists; Tribal Nations; and the countries of Canada and Mexico.

**Program Operations.** The SSWSF Program provides water and climate information, and technology support for natural resource management in 13 States (Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington, and Wyoming). The National Water and Climate Center (NWCC), located in Portland, Oregon, provide leadership and technology support to the States, and directly provide water supply forecasts.

Snowmelt provides a majority of the water supply in the West so the information provided by the SSWSF Program is critical for water managers. The demographic, physical, and political landscape of the Western United States is changing rapidly, and there is increasing competition over water for irrigation, municipal and industrial customers, and in-stream uses, such as river-based recreation, esthetic enjoyment, fish and wildlife habitat, and hydroelectric power generation. Increasing water demands will require more precise management of this valuable resource.

Climate change projections and climate variability increase the uncertainty of the yearly water supply. A study by the Rocky Mountain Climate Change Organization<sup>1</sup> finds that “no other effect of climate disruption is as significant as how it affects snowpacks and water supply.” As exhibited by the extremes of temperature and precipitation over the last few years in the West, the potential effects of climate variability can be significant. Extremes in the snowpack could result in less reservoir storage in warm, dry years (as in 2012), complicate reservoir regulation in cold, wet years (as in 2011), and cause extensive local and regional flooding (as in 2011 and 2013). Earlier snowmelt, caused by warming conditions, increases the length of time between peak flows and summer water user needs, while a delayed snowmelt, caused by cool weather, shortens the melting season and produces potentially disastrous flooding.

The SSWSF Program has been operated by the agency continuously since 1935. The program is designated as a cooperative effort because it operates with the assistance from, and in cooperation with, both public and private entities that rely on consistent and accurate water supply and hydrograph timing forecasts. Although most funding and field efforts are through NRCS, the partners and cooperators provide a share of the financial burden and contribute to data-collection activities. During the 2014 water year (October 1, 2013 to September 30, 2014), partners and cooperators contributed a significant amount of money and in-kind services towards the collection of snow and related climate data. The SSWSF Program consists of a network of 1,121 manually measured snow courses and aerial markers, 835 automated Snow Telemetry SNOTEL sites, 29 automated SnoLite sites, 10 hydromet station, and 19 manually measured (non-telemetry) data collection stations. In addition, the NWCC operates 211 Soil Climate Analysis Network (SCAN) stations across the United States. The economic and societal value of the program is provided in the NRCS released report “A Measure of Snow,” which is available on the NWCC webpage at: <http://www.wcc.nrcs.usda.gov/ftpref/downloads/factpub/MeasureofSnowFullReport.pdf> for the full report, or <http://www.wcc.nrcs.usda.gov/ftpref/downloads/factpub/MeasureofSnowSummary.pdf> for the summary report. The report provides numerous examples of the applications and economic benefits of the SSWSF Program to users throughout the Western United States.

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<sup>1</sup> Saunders, Stephen, and Maxwell, Maureen, 2005, Less Snow, Less Water: Climate Disruption in the West: The Rocky Mountain Climate Organization, September 2005, 30 p.

### **2014 Activities.**

**Site Upgrades and Installations in Snow Survey.** During the past year, 17 sites were upgraded to full SNOTELs from previous snow course, SnoLite, aerial marker, or SCAN sites. SNOTELs are automated sites that collect a suite of hydro meteorological data at high-elevation settings, and report these data hourly, in real-time, using a telemetry communication process. Measurements typically include snow water equivalent, snow depth, precipitation, and air temperature. These valuable data play a key role in flood forecasting, water supply determination and, more recently, in climate change evaluation. Snow courses are locations where the snow is manually measured. Automating these sites provides up-to-date information while reducing costs and safety concerns resulting from humans obtaining measurements at these remote locales. SnoLite sites, as the name implies, only measure snow water equivalent or snow depth, and air temperature, but they are telemetered, and replace the non-automated aerial markers that were formerly measured during fixed wing flights. SCAN stations focus on gathering soil information and are crossing over into the SNOTEL network at some locations, with the addition of automated snow pillows.

In addition to the upgrades, two new SNOTEL sites were launched, and two SNOTEL sites were re-installed after they were burned in last year's fires in Idaho and Wyoming. Finally, four new SCAN sites were established, and selected existing SNOTEL sites received enhancements with sensors measuring soil moisture, soil temperature, relative humidity, and wind.

**SNOTEL Sites Affected by Disasters.** Fortuitously, no damage occurred to sites from fire this year, a welcome change from last year when several sites were destroyed. However, although the sites remained protected, the surrounding areas around two SNOTEL sites, Pope Ridge in Washington and Signal Peak in New Mexico, were burned this summer. Fire alters the landscape, affecting snow accumulation, melt and the resulting streamflow runoff. The historical relationship between snow and streamflow is the foundation for water supply forecasts. Regrettably, the equilibrium, as the vegetation takes hold and grows, can take years to be re-established. The only significant destruction to a site this past year was not due to a natural disaster, but from heavy vandalism.

**Electronics Maintenance Facility (EMF) Activities.** An independent contractor, Maiden Rock Communications (MRC), has been designing and implementing the next generation components for NWCC master stations. Working with the NWCC Electronics Maintenance Facility (EMF) staff, MRC has progressed through a series of factory and field tests, culminating in the deployment of the components at the Boise master station in 2013. In 2014, new components were installed in all four remaining master stations. With the replacement of the previous 20+ year old components with the new ones, the overall operation of the entire meteor burst network has greatly improved. Field testing at the Boise master station has begun on a new prototype power amplifier and exciter that will further improve the performance of the master station and eliminate the old power amplifiers that have been the source for about 80 percent of the station failures in the past five years.

Cellular phone technology has been researched for the compatibility of the SNOTEL network. Equipment has been procured to begin deployment of cellular modems to replace meteorburst telemetry in the eastern States, where cellular coverage is enough to serve about 90 percent of the SCAN data collection station in those States. Using cellular technology will eliminate the need for three master station facilities in Mississippi, Missouri and Ohio, reducing the expense for land leases, and maintenance of the facilities. Cellular technology may serve as a great alternative to meteorburst at SNOTEL and SnoLite stations where meteorburst does not work or is not appropriate for the data needs.

The EMF is responsible for testing and qualifying all pressure transducers used for snow pillows and storage precipitation gages and SNOTEL sites. The EMF technicians use an environmental chamber to test and qualify every pressure transducer before it is deployed out to the field for SNOTEL site installation. Use of the environmental chamber has reduced the field failure rate of the transducers from almost 23 percent to about 1 percent. In 2011, the existing environmental chamber began to fail, and failed completely in 2012. Without a way of qualifying the transducers, the EMF was faced with a large backlog of units needing to be tested. With funding approval, NWCC was recently able to procure and install two new environmental chambers at the EMF shop. This will allow the EMF team to calibrate 600 field units each year to keep the SNOTEL network running.

Water Supply Forecasts. Water supply forecasts, which predict the volume of snowmelt runoff available for the spring and summer, are issued from mid-December through June in collaboration with the National Weather Service and other Federal and State agencies. During the 2014 season, forecasts were delivered for 641 streamflow locations. The SSWSF program also distributed peakflow, recession, and threshold forecasts, along with surface water availability index values. In total, the program published 11,815 water supply forecasts in 2014. In addition, automated models, that ingest current SNOTEL climate data, track daily forecast trends of 331 points, providing up-to-date guidance to water resource managers and augmenting the official volume forecasts. Water supply forecasts are used by:

- Irrigators to make effective use of limited water supplies for agricultural production needs;
- Federal Government in administering international water treaties with Canada and Mexico;
- State Governments in managing intrastate streams and interstate water compacts;
- Municipalities in managing anticipated water supplies and drought mitigation;
- Reservoir operators to satisfy multiple use demands;
- Federal and State Governments to mitigate flood damages in levied areas and downstream from reservoirs; and
- Federal and State Governments to support fish and wildlife management activities associated with species protection legislation.

Interactive Map. In 2014, the NWCC developed an interactive mapping tool which presents the locations of SNOTEL, SCAN, and other hydrometeorological stations stored in the Air and Water Database (AWDB). Users can further filter the stations presented on the map by such criteria as location, data collection networks, and elements measured e.g. snow, precipitation, streamflow. Custom views and filters can be shared with others through the webpage URL link. Display of station metadata and connections to data reports are readily available by clicking on a station. The new map is easily accessible from the NWCC homepage: <http://www.wcc.nrcs.usda.gov/>.

Snowpack and Drought Report. The CONUS Snowpack and Drought Update Report, produced weekly by the NWCC, had a significant increase in readership this year. The report monitors climate and drought conditions throughout the contiguous U.S. As of the first of October last year, there were slightly more than 3,250 subscribers, but by September of this year more than 12,500 people had signed up and now receive the report. The narratives are available here: <http://www.wcc.nrcs.usda.gov/cgi-bin/water/drought/wdr.pl>.

Science and Technology Development. The NWCC just began several new contracts that offer exciting opportunities for the Snow Survey program. With a new CESU agreement with Colorado State University, the Center is advancing the infrastructure to support simulation modeling using the Precipitation Runoff Modeling System. This contract will expand research and development of operational hydrologic, ESP based, forecasting. Another new CESU agreement with Portland State University will be focused on producing an internet-accessible centralized GIS system and repository for the PRISM climate dataset. The outcome will allow users to examine climate information by coalescing gridded data to assess conditions for selected time periods, historical years, and regions of the country. Finally, the NWCC started a cooperative agreement with the Agricultural Research Service in Boise, Idaho to develop an application of a physically-based distributed snowmelt and streamflow simulation model that will support water supply forecasting at the Center.

Information Systems. The database and forecast system maintained by the NWCC, Water and Climate Information System (WCIS), supports a wide variety of software used for water supply forecasting, water and climate data analyses, and other products used in water resource management and related natural resource conservation activities at NRCS. NWCC websites containing snow survey data, water supply forecasts, soil moisture data, and other products recorded over 2 million visits per month to its web site. The views and downloads of the information from State NRCS websites are similar to the information from other sites, such as the National Weather Service website, that use SSWSF data. The NWCC is implementing a failover plan, which includes migration to USDA hosting, for all data collection and product production activities. Due to budget constraints in 2014, WCIS applications were not deployed in USDA hosting. Half of our applications are scheduled to be deployed in USDA hosting in 2015. NWCC is currently developing the Product Data Portal, which will provide Climate, Water Supply and Data interpretations information through data retrieval and data interpretations. Delivery will be to the general public and Service Centers through the respective web pages, Field Office Technical Guide (FOTG), and CDSI interfaces.

## PLANT MATERIALS CENTERS

### **Current Activities.**

**Program Objectives.** NRCS's Plant Materials Centers develop vegetative solutions to "core" natural resource concerns such as soil stabilization, soil health and productivity, and water quality. PMCs also focus on emerging national priorities such as enhancement of pollinator habitat to support agricultural production, habitat for at-risk species such as sage grouse, and development of information and alternate procedures to assist organic producers. PMCs directly support the NRCS mission by providing scientifically-sound plant information and tools used by NRCS conservation planners and partners.

PMCs: 1) develop technology and information for the effective use, establishment, and maintenance of plants for a wide variety of natural resource conservation uses; 2) provide appropriate training and education to NRCS staff, partners, and the public; 3) study and characterize plant attributes to provide data and information important in the operation of predictive models and effective management of climate impacted plant resources; and 4) assemble, test, select, and release seed and plants to provide for the commercial production of plant materials that protect and conserve our natural resources.

**Program Operations.** NRCS Field Office Technical Guides (FOTGs) deliver Plant Materials Program information directly to NRCS field staff and partners in conservation planning efforts. PMC staff tailor vegetative information in the FOTGs to the unique conditions found in their service areas, and provide extensive training to field staff and partners on the selection and establishment of vegetation to address specific resource concerns. Program information is available to the public through the Web at <http://www.plant-materials.nrcs.usda.gov>. Plant Materials Program information improves the condition of natural resources on private and public lands. On private lands, program information supports the successful implementation of Farm Bill programs such as the Environmental Quality Incentives Program, Conservation Stewardship Program, Conservation Reserve Program, and the Biomass Crop Assistance Program, which is administered by the Farm Service Agency.

The Plant Materials Program uses a multi-disciplinary approach to solving natural resource problems, drawing on staff expertise in biology, agronomy, forestry, soils, and horticulture. Plant Materials Program activities are coordinated with NRCS technical specialists, other governmental agencies, nongovernment organizations, and industry. The program often cooperates with the USDA Agricultural Research Service, the U.S. Forest Service, the U.S. Department of the Interior's Bureau of Land Management, and State and local agencies, such as departments of transportation, wildlife, and conservation. Nongovernmental organizations include universities, native plant societies, wildlife organizations, and industry partners such as commercial seed and plant growers. These partnerships enhance the development of plant materials information, accomplishing work that would not be possible for PMCs or their partners acting alone. These partnerships also provide a conduit for sharing technical information developed by PMCs.

NRCS's network of PMCs is the only national organization that develops and tests vegetation to address our Nation's natural resource challenges. NRCS operates 25 PMCs, and provides limited funding to groups in Alaska and Colorado for the development of plant materials products needed by NRCS. PMC service areas are defined by ecological boundaries. Each PMC addresses the high-priority conservation concerns within their service areas. When needed, PMCs coordinate across service areas to evaluate vegetative technology and solutions that impact large regions of the United States.

### **2014 Activities.**

In 2014, NRCS continued its efforts to improve the operations and missions of PMCs. The following are highlights of PMC activities.

**PMC 360: Improving Program Efficiency and Effectiveness.** In March 2014, NRCS initiated a multi-faceted improvement effort termed "PMC 360". A data call throughout the agency identified over 800 plant materials needs. The assessment, the first of its kind for the program, is refining existing activities and directing new ones to ensure that PMCs are closely aligned with the needs of NRCS programs and staff. In August 2014, NRCS launched a streamlined PMC advisory process including the creating of Regional Plant Materials Advisory Boards. The six advisory boards have between three to five PMCs that serve between four to fourteen States, and reduce the number of

required PMC advisory meetings from 50 per year to 12. The regionally-based advisory boards identify and prioritize plant materials needs throughout the region, and PMCs in each region coordinate expertise, resources, and activities to address the needs. The PMC 360 effort will continue into 2015 with additional activities to streamline some aspects of PMC workload, increase connections between PMCs and field staff, and improve accountability throughout the program.

Technology Development and Transfer. PMCs ensure that NRCS staff, conservation partners, and the public have information available to successfully get natural resource conservation on the ground. Plant Materials studies resulted in the addition of over 200 new technical documents to the Plant Materials Website. In 2014 the 2,700 documents available on the Web site were downloaded more than 1.5 million times. Plant Materials staff conducted 129 technical training sessions for over 2,000 NRCS field staff and conservation partners. Training topics included: seed and plant identification; selection and establishment of conservation plants; planning a conservation planting; using cover crops and improving soil health; enhancing pollinator habitat; improving the productivity of range and pasture land; developing habitat for sage grouse; windbreak establishment including agricultural odor mitigation; and restoring riparian areas.

New Conservation Plants. PMCs released one new native conservation plant to the public and commercial growers. Amethyst Germplasm hoary tansyaster was released by the Aberdeen, Idaho PMC. It is recommended for pollinator plantings, wildlife areas, and rangeland rehabilitation seedings in arid to semi-arid plant communities where native forb diversity is desirable. Amethyst Germplasm blooms the first season of planting, is attractive to many native pollinators, and supports sage-grouse habitat.

Pollinators. Biodiversity (having a wide range of species in an area) is an important indicator of ecosystem health. NRCS conservation activities promote plant species that improve biodiversity and support a range of pollinators, including managed honey bees, native bees, and other pollinators. Improved habitat for pollinators affects cultivated crops and support larger wildlife. In 2014, PMCs continued current activities or initiated new efforts to play an important role supporting NRCS conservation delivery for pollinators.

- The Plant Materials Program supported honey bee health through several activities, including refining species recommendations for the Honey Bee Effort in five northern States; testing cover crops in almond orchards at the Lockeford, California PMC to promote soil health and support honey bees; and providing training by several PMCs around the country on selecting and establishing honey bee habitat.
- PMCs in Los Lunas, New Mexico; Brooksville, Florida; and Fallon, Nevada continued working with The Xerces Society on a milkweed seed increase project. The Manhattan, Kansas PMC is working with Monarch Watch on a seed increase project with Mead's milkweed. Both projects aim to increase commercial availability of locality-appropriate milkweeds to support Monarch butterfly health.
- PMCs in Bridger, Montana, Corvallis, Oregon, Nacogdoches, Texas, and Pullman, Washington, began evaluation of NRCS-recommended and commercially-available wildflower mixes to look at persistence over time and visitation by pollinators.

Soil Stabilization in Drought-Stricken Areas. Extreme drought can lead to decreased production and in the worst cases significant soil erosion. PMCs are addressing this potential soil erosion in a number of ways.

- The Los Lunas, New Mexico PMC is demonstrating the use of 'Windbreaker' big sacaton (*Sporobolus wrightii*) throughout New Mexico and Arizona as a windbreak at the edge of crop fields. Windbreaker, released to the public in 2011, is widely adapted, requires minimal supplemental water, and most importantly reduces the amount of damage and economic loss caused by soil movement during high wind events. Additional adaptation trials for this very useful plant are underway in Colorado and California.
- The Colorado plant materials specialist is conducting demonstrations in southeast Colorado to test the effectiveness of new seed mixes, vegetative barriers, and soil stabilization techniques to hold reduce wind erosion. The Kingsville, Texas PMC is evaluating strains of native grasses with potentially improved drought tolerance. Future evaluations and field-testing will confirm current laboratory and greenhouse studies.

### **Getting Conservation on the Ground.**

Improving Cropland Soil Health and Productivity. Cover crops provide ecological services such as improving soil health, reducing soil erosion, retaining nutrients on-site, and suppressing weeds. They are an important part of



NRCS's Soil Health Campaign. PMCs have actively worked with cover crops for several decades, and that work continues to increase in 2014.

- PMCs located in California, Florida, Maryland, Missouri, North Dakota, Oregon, and Washington continued a multi-year national effort to study the effects of different cover crop mixes on dynamic soil properties. This effort is coordinated with NRCS agronomists and soils staff. The results of this study will support future NRCS recommendations on cover crop mixes and may help the producers save money by reducing cover crop seeding rates while maintaining the soil health benefits.
- All PMCs are now involved in some aspect of cover crop work to support the NRCS soil health effort. Studies in cover crop species and variety adaptation, timing of seeding and termination, integrating into cropping systems, usefulness for pollinator habitat, and effects on soil quality all support NRCS conservation delivery efforts and adoption of cover crops by producers.
- PMCs provided 18 training sessions for 320 participants to discuss cover crop selection, establishment, and management, and to highlight the results of PMC studies on cover crops.
- Many PMCs are establishing cover crop demonstration plantings both at the center and on the producer's land. NRCS staff will use these plantings for training sessions, workshops, and field days, and will assist in spreading information about the usefulness of cover crops.

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NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED AND FLOOD PREVENTION OPERATIONS

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets]):

Watershed and Flood Prevention Operations

For necessary expenses to carry out preventive measures, including but not limited to research, engineering operations, methods of cultivation, the growing of vegetation, rehabilitation of existing works and changes in use of land, in accordance with the Watershed Protection and Flood Prevention Act (16 U.S.C. 1001–1005 and 1007–1009), the provisions of the Act of April 27, 1935 (16 U.S.C. 590a-f), and in accordance with the provisions of laws relating to the activities of the Department, \$200,000,000, to remain available until expended.

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED AND FLOOD PREVENTION OPERATONS

Lead-Off tabular Statement

Budget Estimate, 2016.....	\$200,000,000
2015 Enacted.....	<u>78,581,000</u>
Change in Appropriation.....	<u>+121,419,000</u>

WATERSHED AND FLOOD PREVENTION OPERATONS

Summary of Increases and Decreases  
(Dollars in thousands)

Program	2013 Actual	2014 Change	2015 Change	2016 Change	2016 Estimate
Discretionary Appropriations:					
Watershed and Flood Prevention Operations:					
Small Watersheds P.L. 78-566.....	-	-	-	+\$200,000	\$200,000
Emergency Watershed Protection Programs.....	\$234,682	-\$234,682	+\$78,581	-78,581	-
Total Discretionary Appropriations.....	<u>234,682</u>	<u>-234,682</u>	<u>+78,581</u>	<u>+121,419</u>	<u>200,000</u>

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED AND FLOOD PREVENTION OPERATIONS

Project Statement

Adjusted Appropriations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	2013 Actual		2014 Actual		2015 Enacted		Inc. or Dec.		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Appropriations:										
Watershed and Flood Prevention - Regular Appropriation:										
Watershed Operations										
Authorized by P.L. 78-534:										
(a) Technical Assistance.....	-	-	-	-	-	2	-	-2	-	-
(b) Financial Assistance.....	-	-	-	-	-	-	-	-	-	-
Subtotal, P.L. 78-534.....	-	-	-	-	-	2	-	-2	-	-
Small Watersheds										
Authorized by P.L. 83-566:										
(a) Technical Assistance.....	-	5	-	4	-	5	+\$50,000	+72	\$50,000	77
(b) Financial Assistance.....	-	-	-	-	-	-	+150,000	-	150,000	-
Subtotal, P.L. 83-566.....	-	5	-	4	-	5	+200,000	+72 (1)	200,000	77
Total Appropriation.....	-	5	-	4	-	7	+200,000	+70	+200,000	77
Rescission.....	-	-	-	-	-	-	-	-	-20,100	-
Bal. Available, SOY 1/.....	\$92,255	-	\$242,004	-	\$87,296	-	-22,196	-	65,100	-
Recoveries, Other (Net).....	157,065	-	-149,758	-	-1,466	-	-43,534	-	-45,000	-
Total Available.....	249,320	5	92,246	4	85,830	7	+134,270	+70	200,000	77
Bal. Available, EOY 1/.....	-242,004	-	-87,296	-	-65,100	-	+65,100	-	-	-
Total Obligations.....	7,316	5	4,950	4	20,730	7	+199,370	+70	200,000	77

<sup>1/</sup> Includes Reimbursable carryover.

EMERGENCY WATERSHED PROTECTION PROGRAM

Project Statement

Adjusted Appropriations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	2013 Actual		2014 Actual		2015 Enacted		Inc. or Dec.		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Appropriations:										
Watershed and Flood Prevention - Supplemental Appropriations:										
Emergency Watershed										
Protection Program:										
(a) Technical Assistance.....	\$49,621	76	-	63	\$19,645	63	-\$19,645	-63	-	-
(b) Financial Assistance.....	185,061	-	-	-	58,936	-	-58,936	-	-	-
Total Adjusted Approp.....	234,682	76	-	63	78,581	63	-78,581	-63	-	-
Rescissions, transfers,										
and Seq. (Net).....	10,772	-	-	-	-	-	-	-	-	-
Total Appropriation.....	245,454	76	-	63	78,581	63	-78,581	-63 (2)	-	-
Rescission.....	-1,772	-	-	-	-	-	-	-	-	-
Sequestration.....	-9,000	-	-	-	-	-	-	-	-	-
Bal. Available, SOY 1/.....	73,795	-	\$124,458	-	224,540	-	-224,540	-	-	-
Recoveries, Other (Net).....	-83,795	-	178,551	-	-7,260	-	+7,260	-	-	-
Total Available.....	224,682	76	303,009	63	295,861	63	-295,861	-63	-	-
Bal. Available, EOY 1/.....	-124,458	-	-224,540	-	-	-	-	-	-	-
Total Obligations.....	100,224	76	78,469	63	295,861	63	-295,861	-63	-	-

<sup>1/</sup> Includes Reimbursable carryover.

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED AND FLOOD PREVENTION OPERATIONS

Project Statement  
Obligations Details and Staff Years (SYs)  
(Dollars in thousands)

Program	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>Inc. or Dec.</u>		<u>2016 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Watershed & Flood Prevention - Regular Appropriation:										
1. Watershed Operations										
Authorized by P.L. 78-534:										
(a) Technical Assistance.....	\$1	-	\$318	-	\$1,064	2	-\$1,064	-2	-	-
(b) Financial Assistance.....	1,502	-	-	-	11,345	-	-11,345	-	-	-
Subtotal, P.L. 78-534.....	1,503	-	318	-	12,409	2	-12,409	-2	-	-
2. Small Watersheds										
Authorized by P.L. 83-566:										
(a) Technical Assistance.....	708	5	723	4	2,613	5	+47,387	+72	\$50,000	77
(b) Financial Assistance.....	5,105	-	3,909	-	5,708	-	+144,292	-	150,000	-
Subtotal, P.L. 83-566.....	5,813	5	4,632	4	8,321	5	+191,679	+72	200,000	77
Total Obligations.....	7,316	5	4,950	4	20,730	7	+179,270	+70	200,000	77
Rescission.....	-	-	-	-	-	-	+20,100	-	20,100	-
Bal. Available, EOY 1/.....	242,004	-	87,296	-	65,100	-	-65,100	-	-	-
Total Available.....	249,320	5	92,246	4	85,830	7	+134,270	+70	220,100	77
Bal. Available, SOY 1/.....	-92,255	-	-242,004	-	-87,296	-	+22,196	-	-65,100	-
Recoveries, Other (Net).....	-157,065	-	149,758	-	1,466	-	+43,534	-	45,000	-
Total Appropriation.....	-	5	-	4	-	7	+200,000	+70	200,000	77

<sup>1/</sup> Includes Reimbursable carryover.

EMERGENCY WATERSHED PROTECTION PROGRAM

Project Statement  
Obligations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>Inc. or Dec.</u>		<u>2016 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Watershed & Flood Prevention - Supplemental Appropriations:										
1. Emergency Watershed										
Protection Operations:										
(a) Technical Assistance.....	\$8,195	76	\$14,237	63	\$80,427	63	-\$80,427	-63	-	-
(b) Financial Assistance.....	92,029	-	64,232	-	215,434	-	-215,434	-	-	-
Total Obligations.....	100,224	76	78,469	63	295,861	63	-295,861	-63	-	-
Bal. Available, EOY 1/.....	124,458	-	224,540	-	-	-	-	-	-	-
Total Available.....	224,682	76	303,009	63	295,861	63	-295,861	-63	-	-
Rescission.....	1,772	-	-	-	-	-	-	-	-	-
Sequestration.....	9,000	-	-	-	-	-	-	-	-	-
Bal. Available, SOY 1/.....	-73,795	-	-124,458	-	-224,540	-	+224,540	-	-	-
Recoveries, Other (Net).....	83,795	-	-178,551	-	7,260	-	-7,260	-	-	-
Total Appropriation.....	245,454	76	-	63	78,581	63	-78,581	-63	-	-

<sup>1/</sup> Includes Reimbursable carryover.

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED AND FLOOD PREVENTION OPERATIONS

Justification of Increases and Decreases

- (1) An increase of \$200,000,000 and 72 staff years for Small Watersheds P.L. 83-566 for Climate Resilience (Carryover funding and 5 staff years available in 2015):

Watershed and Flood Prevention Operations (WFPO) provides broad authorities to assist individuals and communities adapting to changing natural resource conditions, either from climate change or other pressures, and minimize the impacts of natural disasters. The foundation for projects is the approved watershed plan that evaluates the need and determines the appropriate mix of tools (e.g., land treatment, structural measures, floodplain easements) to achieve the objective.

WFPO planning assistance fosters broad community buy-in, leverages funding from multiple sources, evaluates multiple options for solving a problem, and addresses multiple needs, such as sustainable water supply and use, recreation, economic uses of waterways, and increased resilience to changing weather and precipitation patterns. NRCS will use these existing authorities, with a focus on watershed protection and flood prevention through nonstructural measures, to emphasize watershed-scale planning and land treatment efforts that will help communities plan and implement mitigation and adaptation activities for extreme weather events and wildfires, including mitigating the risks associated with coastal flooding.

NRCS will develop and implement a WFPO strategy focused on assisting communities in preparing for and mitigating extreme weather events, with an initial focus on projects that benefit coastal areas. This will be a comprehensive approach that will bring important actions to achieve mitigation and prevention objectives, such as restoring natural hydrology, creating wetlands, and other land treatment measures to build landscape resilience.

- (2) A decrease of \$78,581,000 and 63 staff years for Emergency Watershed Protection Program for major disasters under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (no funding and 63 staff years available in 2015):

Emergency activities vary from year-to-year depending on the number of natural disasters that occur, making emergency funding needs difficult to predict. Emergency assistance will be evaluated and addressed as disasters arise. Emergency operations provide assistance to reduce hazards to life and property in watersheds damaged by severe natural events. Emergency Watershed Protection applies to small scale localized disasters, as well as disasters of natural magnitude. NRCS provides technical and financial assistance for floodplain easements, disaster cleanup and recovery activities.

In Consolidated and Further Continuing Appropriations Act, 2015 (P.L. 113-235), General Provision Sec. 743, the Emergency Watershed Protection Program was funded at \$79 million for major disasters under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, designated for disaster relief under section 251(b)(2)(D) of the Balanced Budget and Emergency Deficit Control Act of 1985.

No funding is requested in the 2016 Budget. Funding for the Emergency Watershed Protection Program is typically provided through Emergency Supplemental Appropriations in response to needs following actual disasters.

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED AND FLOOD PREVENTION OPERATIONS

Geographic Breakdown of Obligations and Staff Years (SYs)

(Dollars in thousands)

State/Territory	2013 Actual		2014 Actual		2015 Enacted		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Alabama.....	\$188	1	\$709	1	\$823	1	\$2,000	-
Alaska.....	-3	-	438	2	5,714	2	6,500	-
Arizona.....	555	1	3,358	1	2,969	1	-	-
Arkansas.....	-	-	649	1	640	1	6,000	-
California.....	700	2	2,734	-	7,957	-	20,000	-
Colorado.....	2	-	18,078	13	3,423	13	3,000	-
Connecticut.....	196	-	741	1	12,530	1	2,500	-
Delaware.....	-6	-	-	-	-	-	-	-
Florida.....	342	-	1,643	1	136	1	-	-
Georgia.....	142	-	65	-	164	-	-	-
Hawaii.....	1,169	-	3,835	-	320	-	7,000	-
Idaho.....	35	-	-	-	66	-	3,500	-
Illinois.....	21	-	-	-	474	-	4,000	-
Indiana.....	250	-	251	-	173	-	-	-
Iowa.....	70	-	-3	-	213	-	6,000	-
Kansas.....	279	-	-	-	8	-	4,000	-
Kentucky.....	2,417	5	2,088	3	40	3	2,000	-
Louisiana.....	541	1	8,652	-	2,662	-	4,000	-
Maine.....	146	1	-2	-	13	-	-	-
Maryland.....	5	-	-	-	42	-	-	-
Massachusetts.....	673	-	-	-	-	-	2,000	-
Michigan.....	-42	-	-10	-	4	-	-	-
Minnesota.....	354	1	609	-	615	-	-	-
Mississippi.....	12	-	3,448	6	6,055	6	5,000	-
Missouri.....	20,501	5	674	6	303	6	45,000	19
Montana.....	9	-	-	-	27	-	-	-
Nebraska.....	963	1	24	-	-	-	4,500	-
Nevada.....	1,492	2	3	-	87	-	-	-
New Hampshire.....	112	1	815	1	26	1	-	-
New Jersey.....	133	2	3,308	2	6,905	2	-	-
New Mexico.....	178	1	8	-	110	-	2,000	-
New York.....	268	1	28,783	9	108,051	9	3,000	-
North Carolina.....	-	-	-	-	5	-	1,000	-
North Dakota.....	1,674	-	629	1	80	1	3,000	-
Ohio.....	1,209	1	346	-	197	-	-	-
Oklahoma.....	4,616	1	458	-	2,380	-	12,000	-
Oregon.....	365	2	2	-	-	-	1,000	-



NATURAL RESOURCES CONSERVATION SERVICE

State/Territory	2013 Actual		2014 Actual		2015 Enacted		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Pennsylvania.....	1,057	3	37	-	43	-	6,000	-
Puerto Rico.....	18,044	2	1	-	-	-	-	-
Rhode Island.....	7,425	1	516	-	2,390	-	-	-
South Carolina.....	91	-	38	-	51	-	1,000	-
South Dakota.....	874	-	-	-	7	-	2,000	-
Tennessee.....	9,002	10	1,688	2	2,760	2	2,000	-
Texas.....	6,551	7	-39	-	6,038	-	11,000	-
Utah.....	15,628	23	5,566	10	963	10	8,000	-
Vermont.....	1,562	-	127	-	18	-	-	-
Virginia.....	137	-	-	-	-	-	9,000	-
Washington.....	6	-	7	1	898	1	8,000	-
West Virginia.....	-	-	643	2	402	3	-	39
Wisconsin.....	-117	-	69	-	219	-	-	-
Wyoming.....	-	-	26	-	35	-	4,000	-
National Hdqtr.....	7,385	6	338	4	-	6	-	19
Undistributed.....	329	-	-	-	139,555	-	-	-
Obligations.....	107,540	81	91,350	67	316,591	70	200,000	77
Bal. Available, EOY.....	366,462	-	311,836	-	65,100	-	-	-
Total, Available.....	474,002	81	403,186	67	381,691	70	200,000	77

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED AND FLOOD PREVENTION OPERATIONS

Classification by Objects  
(Dollars in thousands)

	2013	2014	2015	2016
	Actual	Actual	Enacted	Estimate
Personnel Compensation:				
Washington, D.C.....	\$439	\$508	\$500	\$600
Field.....	6,217	5,509	6,000	6,700
11 Total personnel compensation.....	6,656	6,017	6,500	7,300
12 Personal benefits.....	1,961	1,709	2,000	2,100
Total, personnel comp. and benefits.....	8,617	7,726	8,500	9,400
Other Objects:				
21.0 Travel and transportation of persons.....	345	718	1,000	100
22.0 Transportation of things.....	2	3	5	-
23.2 Rental payments to others.....	130	1	-	-
23.3 Communications, utilities, and misc. charges.....	22	13	5	-
24 Printing and reproduction.....	2	-	-	-
25.1 Advisory and assistance services.....	39,378	31,529	74,000	-
25.2 Other services from non-Federal sources.....	6,609	5,988	145,981	40,500
25.3 Other contractual services.....	413	-	-	-
25.5 Research and development contracts.....	-	1,063	-	-
26.0 Supplies and materials.....	15	92	100	-
31.0 Equipment.....	250	156	200	-
32.0 Land and structures.....	213	1,542	800	-
41.0 Grants.....	51,543	34,588	86,000	150,000
43.0 Interest and dividends.....	1	-	-	-
Total, Other Objects.....	98,923	75,693	308,091	190,600
99.9 Total, new obligations.....	107,540	83,419	316,591	200,000

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED AND FLOOD PREVENTION OPERATIONS

STATUS OF PROGRAMS

**Current Activities.**

**Background.** Watershed and Flood Prevention Operations (Watershed Operations) includes the Flood Prevention Operations Program authorized by the Flood Control Act of 1944 (P.L. 78-534) and the Watershed Protection and Flood Prevention Program authorized by (P.L. 83-566; 16 U.S.C 1001-1008). Through Watershed Operations, the Secretary of Agriculture is authorized to provide technical and financial assistance to entities of State and local governments and Tribes (project sponsors) for planning and installing watershed projects.

**Program Objectives.** The Flood Control Act authorizes the Secretary of Agriculture to install watershed improvement measures in eleven watersheds to reduce flood, sedimentation, and erosion damage; improve the conservation, development, utilization, and disposal of water; and advance the conservation and proper utilization of land. Working in cooperation with soil conservation districts and other local sponsoring organizations, the agency prepares detailed sub-watershed plans that outline soil and water management problems and proposals to alleviate the problems. Proposals can include estimated benefits and costs, cost-sharing arrangements, and operation and maintenance arrangements.

The Watershed Protection and Flood Prevention Act provides for cooperation between the Federal Government and the States and their political subdivisions in a program to prevent erosion, floodwater, and sediment damage; to further the conservation, development, utilization, and disposal of water; and to further the conservation and proper utilization of land in authorized watersheds.

**2014 Activities.**

In 2014, new funding was not appropriated for Watershed Protection (P.L. 83-566) or Flood Prevention (P.L. 78-534) programs, but unobligated funding from prior years was available to support program operations. Carryover funding was used to complete construction on existing projects and to continue planning and design work. Congressionally-designated project funding accounts for a significant portion of this continuing work.

Flood prevention and other activities of the Flood Control Act and the Watershed Protection and Flood Prevention Act provided the following estimated cumulative benefits in 2014. Benefits reported below are from projects currently entered into the Programs Operations Information Tracking System.

**Monetary Benefits.**

- Agricultural flood prevention benefits: \$352 million. This value includes all crop and pasture damage reduction benefits as well as all other agricultural damage reduction benefits;
- Non-agricultural flood prevention benefits: \$462 million. Non-agricultural flood damage prevention measures protected roads, bridges, homes, and other structures that exist in the floodplain;
- Agricultural benefits not related to flood prevention: \$441 million. Benefits are associated with erosion control, animal waste management, water conservation, water quality improvement, irrigation efficiency, and changes in land use; and
- Non-agricultural benefits not related to flood prevention: \$957 million. Benefits are associated with recreation, fish and wildlife, rural water supply, water quality, municipal and industrial water supply, and incidental recreation uses.

**Environmental Benefits.**

- Acres with nutrient management applied: 674,283
- Tons of animal waste properly disposed: 4,801,640
- Tons of soil saved from erosion: 90,198,341
- Miles of streams and corridors enhanced or protected: 47,513
- Acres of lakes and reservoirs enhanced or protected: 2,518,613
- Acre-feet of water conserved: 1,846,147

- Acres of wetlands created, enhanced, or restored: 279,375
- Acres of upland wildlife habitat created, enhanced, or restored: 9,150,271

Social and Community Benefits.

- Number of people affected: 48,319,180
- Number of farms and ranches: 181,551
- Number of bridges: 61,702
- Number of public facilities: 3,663
- Number of businesses: 46,586
- Number of homes: 611,093
- Number of domestic water supplies: 27,874

**Status of Flood Prevention Projects Authorized by the Flood Control Act.** The eleven authorized flood prevention projects include relatively large areas, so work plans were developed on a sub-watershed basis as shown below. As of September 30, 2014, the total planning is about 99 percent completed, with work in 439 plans covering approximately 30 million acres. The following table summarizes the status of sub-watershed planning by authorized project:

Flood Prevention Project	Total Authorized Area	Potential Sub-watersheds		Project Plans Completed through September 30, 2014	
	Acres	No. of Plans	Acres	No. of Plans	Acres
Buffalo Creek, NY <sup>a/</sup>	279,680	3	279,680	3	279,680
Middle Colorado, TX	4,613,120	17	3,703,520	17	3,703,520
Coosa, GA,TN <sup>a/</sup>	1,339,400	16	1,174,650	16	1,174,650
Little Sioux, IA	1,740,800	124	1,050,093	122	1,033,578
Little Tallahatchie, MS	963,977	18	625,274 <sup>b/</sup>	18	625,274
Los Angeles, CA <sup>a/</sup>	536,960	10	127,627 <sup>c/</sup>	10	127,627
Potomac, MD,PA,VA,WV	4,205,400	31	4,205,400	30	3,094,543
Santa Ynez, CA	576,000	5	50,743 <sup>d/</sup>	5	50,743
Trinity, TX	10,769,266	36	10,769,266	36	10,769,266
Washita, OK, TX	5,184,362	57	5,184,362	57	5,184,362
Yazoo, MS	7,661,278	125	3,955,124	125	4,061,424
Total	37,870,243	442	31,125,739	439	30,104,667

<sup>a/</sup> The Buffalo Creek Watershed was completed and closed in 1964 and reopened in 1992 for repairs. The Coosa Watershed was completed and closed in 1981. The Los Angeles Watershed is completed.

<sup>b/</sup> Does not include 96,501 acres of Sardis Reservoir area or 304,000 acres in minor watersheds needing only land treatment measures.

<sup>c/</sup> Includes National forest and other lands for which the Forest Service has been assigned program responsibility.

<sup>d/</sup> Does not include 195,818 acres of reservoir area.

The estimated Federal cost for each watershed and total Federal obligations through 2014 are listed in the table below:

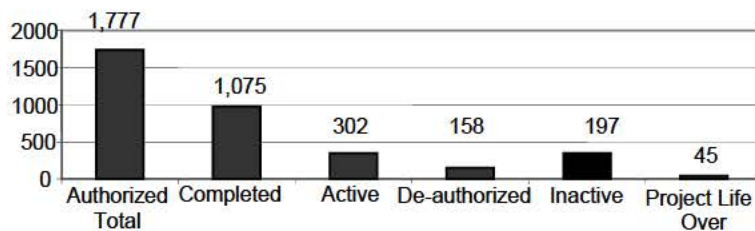
<b>Flood Prevention Project</b>	<b>Estimated Total Federal Cost</b>	<b>Obligations (cumulative \$)</b>
Buffalo Creek Watershed, NY (Complete) <sup>a/</sup>	\$ 7,827,746	\$ 6,287,347
Middle Colorado River Watershed, TX	71,111,062	63,062,722
Coosa River Watershed, GA and TN (Complete) <sup>a/</sup>	18,999,247	18,264,485
Little Sioux River Watershed, IA	98,581,921	94,500,075
Little Tallahatchie River Watershed, MS	69,501,448	76,321,851
Los Angeles River Watershed, CA(Complete) <sup>a/</sup>	60,597,017	60,297,017
Potomac River Watershed, MD, PA, VA, and WV	201,227,958	149,525,524
Santa Ynez River Watershed, CA	41,386,536	40,786,536
Trinity River Watershed, TX	331,241,632	211,172,331
Washita River Watershed, OK and TX	202,491,055	194,288,752
Yazoo River Watershed, MS	252,957,352	251,468,563
<b>Total</b>	<b>1,355,922,974</b>	<b>1,165,975,203</b>

<sup>a/</sup> The Buffalo Creek Watershed was completed and closed in 1964 and reopened in 1992 for repairs. The Coosa Watershed was completed and closed in 1981. The Los Angeles Watershed is completed.

**Status of Watershed Projects Authorized by the Watershed Protection and Flood Prevention Act.** Watershed project plans are prepared by local sponsoring organizations with assistance from NRCS and submitted to NRCS with requests for Federal funding authorization. Watershed projects involving an estimated Federal contribution in excess of \$5 million for construction, or construction of any single structure having a capacity in excess of 2,500 acre-feet of water storage, require authorization by Congressional committee. The Chief of NRCS authorizes the use of Watershed Operations funds for all other projects. Watershed projects are limited to 250,000 acres and cannot include any single structure that provides more than 12,500 acre-feet of floodwater detention capacity, or more than 25,000 acre-feet of total capacity.

After authorization, technical and financial assistance may be provided to local sponsoring organizations for installation of work specified in the plans. At the end of 2014, of the 1,777 projects authorized by the Watershed Protection and Flood Prevention Act, 1,075 have been completed, 302 remain active, with the others de-authorized or inactive, as shown in the table below.

**2014 P.L. 83-566 Watersheds Project Status**



**Watershed Projects Authorized for Funding.** No new projects were authorized in 2014 for funding under the Watershed Protection and Flood Prevention Act within available funds, as no funds were appropriated for this program.

**Unfunded Authorized Projects.** Several projects are authorized but unfunded; \$921 million is needed to install the remaining measures in the 302 active watershed projects. When installed, these floodwater dams, reservoirs, and other conservation practices will reduce potential flood damages in 300 communities, provide agricultural water supply in 78 communities, improve water quality in 148 stream segments, install water conservation measures in 22 projects, and enhance, restore or create wildlife habitat in 65 projects.

**Unfunded Authorized Watershed Projects as of September 30, 2014**

<b>State</b>	<b>P.L. 83-566 Watershed Protection And Flood Prevention Act</b>	<b>P.L. 78-534 Flood Control Act</b>	<b>Total</b>
Alabama	\$ 3,620,000	-	\$ 3,620,000
Alaska	15,000,000	-	15,000,000
Arkansas	49,356,129	-	49,356,129
California	21,373,000	-	21,373,000
Colorado	6,170,000	-	6,170,000
Hawaii	33,325,000	-	33,325,000
Indiana	4,500,000	-	4,500,000
Iowa	36,515,000	\$7,300,000	43,815,000
Kansas	36,732,700	-	36,732,700
Louisiana	3,750,000	-	3,750,000
Massachusetts	23,960,000	-	23,960,000
Minnesota	1,327,400	-	1,327,400
Mississippi	7,000,000	38,094,100	45,094,100
Missouri	111,230,000	-	111,230,000
Montana	3,664,500	-	3,664,500
Nebraska	2,000,000	-	2,000,000
New Mexico	7,189,500	-	7,189,500
New York	10,537,557	-	10,537,557
North Carolina	22,303,280	-	22,303,280
North Dakota	7,870,000	-	7,870,000
Ohio	13,555,000	-	13,555,000
Oklahoma	122,910,000	3,357,100	126,267,100
Oregon	430,000	-	430,000
Pennsylvania	8,135,000	-	8,135,000
Tennessee	19,152,326	-	19,152,326
Texas	105,854,000	139,200,000	245,054,000
Virginia	9,552,146	-	9,552,146
West Virginia	17,025,000	26,089,541	43,114,541
Wyoming	850,800	-	850,800
Pacific Basin	2,150,000	-	2,150,000
Total	707,038,338	214,040,741	921,079,079

**Loan Programs under the Flood Control Act and the Watershed Protection and Flood Prevention Act.** Both programs provide for loans and loan services to finance the local share of the costs of installing, repairing, or enhancing works of improvement and water storage facilities; purchasing sites or rights-of-way; and other costs in approved watershed and flood prevention projects.

As of the end of 2014, 29 borrowers held loans with an unpaid principal amount of \$6.0 million. Over the life of the program, 495 loans have been made at a value of almost \$176 million.

**Get Conservation on the Ground.**

West Virginia: Dunloup Creek Watershed. Dunloup Creek in Fayette and Raleigh counties of West Virginia (Congressional District 3) has experienced several major flood events in recent history, including floods in May and

July 2004 that devastated the communities. The area is within the 100-year floodplain, and repeated flooding had severely damaged vulnerable properties, reducing the quality of life, and affecting minorities and disadvantaged residents along Dunloup Creek.

This project was authorized in 2009. During the project planning process, measures such as dams, channels, floodwalls, dikes, and dredging were considered, but determined to be ineffective. Instead a voluntary buyout was determined to be the most cost-effective and feasible solution to the ongoing flooding problem. Residents of Glen Jean, Harvey, Kilsyth, Mt. Hope and Red Star in Fayette County who live along Dunloup Creek can now voluntarily relocate from homes that repeatedly flood to safe housing out of the floodplain. The project is also paying for removal of the homes, thereby reducing sewage concerns, and restoration of the land along the stream to natural conditions. The project is also improving water quality in the New River, a National Recreation Area and whitewater rafting destination. The estimated average annual benefits of this nearly \$14 million project are about \$1 million. Local sponsors include the Fayette County Commission, the City of Mount Hope, the West Virginia Conservation Committee, and the Southern Conservation District. The Dunloup Creek Watershed Association is highly involved and provides an important communication link between the residents and project sponsors.

Missouri: Little Otter Creek Watershed. NRCS completed the Little Otter Creek Watershed Plan – Environmental Impact Statement in 2003. The preferred alternative is a 362-acre reservoir that will supply Caldwell County's projected demand for the next 50 years, provide recreational opportunities, and reduce annual flood damages downstream. The reservoir is designed to supply 1.24 million gallons per day of raw water to the 9,424 citizens of Caldwell County. Subsurface investigation and final design plans and specifications for the dam have been completed by NRCS. Caldwell County voters approved a 0.5 percent sales tax in August 2002 to help fund their share of project installation costs. This sales tax raises approximately \$200,000 per year. In 2007, Caldwell County passed a \$2.5 million bond issue for the project. To date, Caldwell County has purchased 858 acres of the 929 acres required for the project, at a cost of \$2.1 million. The current estimated total installation cost for this project is \$21.4 million. An additional \$5.5 million in Federal funding is needed to complete this project.

## EMERGENCY WATERSHED PROTECTION PROGRAM

### STATUS OF PROGRAMS

#### Current Activities.

**Background.** The Emergency Watershed Protection Program (EWPP) is authorized by Section 216 of the Flood EWPP Control Act of 1950 P.L. 81-516 (33 U.S.C. 701b-1) and Sections 403-405 of the Agricultural Credit Act of 1978 P.L. 95-334 (16 U.S.C. 2203-2205). The Federal Agriculture Improvement and Reform Act of 1996 amended Section 403 by including the purchase of floodplain easements as an emergency measure authorized under this program.

**Program Objectives.** EWPP was established to respond to emergencies created by natural disasters, including floods, fires, windstorms, and other natural occurrences. The program work includes removing debris from stream channels, road culverts, and bridges; reshaping and protecting eroded banks; correcting damaged drainage facilities; repairing levees and structures; reseeding damaged areas; and purchasing floodplain easements.

**Program Operations.** EWPP projects (except for the purchase of floodplain easements) must be sponsored by a legal subdivision of the State, including any city, county, general improvement district, or conservation district, or by a Native American Tribe or Tribal organization, as defined in Section 4 of the Indian Self-Determination and Education Assistance Act. Public and private landowners are eligible for assistance, but must be represented by a project sponsor. Sponsors are responsible for securing land rights to do repair work, the necessary permits, and the local share of the funding, and for getting the work installed. NRCS may provide up to 75 percent of the construction cost of emergency measures (or up to 90 percent within limited resource areas as identified by Department of Commerce Census data). The remaining funding must come from local sources as cash or in-kind services. Work can be done through either Federal or local contracts. EWPP work is not limited to a particular set of prescribed measures, but is determined on a case-by-case basis. It is not necessary for a national emergency to be declared for an area to be eligible for assistance.

**EWPP Floodplain Easements.** NRCS may purchase EWPP Floodplain Easements (EWPP-FPE) on any floodplain lands that have been impaired within the last 12 months, have a history of repeated flooding (i.e., flooded at least twice during the past ten years), or have been damaged by a specific natural disaster for which Congress allocated funding. Under the floodplain easement option, a landowner voluntarily sells a permanent conservation easement to NRCS that provides full authority to restore and enhance the floodplain's natural functions and values. Since the program's inception, a majority of easements purchased involved undeveloped agricultural lands, but a small portion of easements purchased involved rural land with residences or other structures present. However, recently, the number of easement transactions involving urban and suburban lands with homes present has dramatically increased. This trend can be attributed to the agency's use of EWPP-FPE as part of the agency's response to Hurricane Sandy. Because this storm's damage mostly affected densely-populated areas of Connecticut, New Jersey, and New York, easement transactions involving properties in residential areas with homes present greatly increased. In such areas, floodplain easements are only available as part of a larger strategy intended to minimize future flood damage by removing valuable infrastructure from flood prone areas while prohibiting their future development. This type of easement purchase requires a local sponsor that will acquire the land, in fee title, after the easement closes.

NRCS may pay up to 100 percent of the costs associated with the restoration of EWPP-FPE easements. The goal of EWPP-FPE easement restoration is to return the floodplain to its natural condition. Restoration measures used to reach this goal include the removal of buildings or other structures from the floodplain and the reestablishment of the floodplain's functions and values through the installation of structural and non-structural conservation practices. To the extent practicable, NRCS restores the natural features and characteristics of the floodplain by recreating topographic diversity and reestablishing native vegetation. The easement owners have the opportunity to assist with implementation of the easement restoration.

Landowners retain several rights to the property, including quiet enjoyment, the right to control public access, and the right to undeveloped recreational use such as hunting and fishing. A landowner may obtain authorization from NRCS to engage in other activities, through the Compatible Use Authorization Process, provided the agency determines the activities will further the protection and enhancement of the floodplain easements.

<b>Cumulative Program Activity (Through End of 2014)</b>	
<b>Enrolled Easements (Permanent)</b>	<b>Cumulative</b>
Number of Easements	1,555
Number of Acres	184,313
<b>Closed Easements (Permanent)</b>	<b>Cumulative</b>
Number of Easements	1,552
Number of Acres	184,310

**2014 Activities.**

In 2014, the EWPP did not receive new funding for recovery efforts but had unobligated balances available from prior years. The allocated funds from existing account balances for recovery efforts in response to natural disasters, and 44 projects were funded. The table below reports the number of projects funded, unfunded and completed. The economic benefit (National Emergency Watershed Protection Program Manual, Section 513.1 Final Report, Part A) identify completed projects at \$295.7 million providing a benefit to cost ratio of 3.23/1.0.



<b>EWPP Costs and Benefits (Through September 30, 2014)</b>	
<b>General</b>	
No. of disaster projects funded	44
No. of disaster projects unfunded	102
No. of projects completed	151
<b>Costs</b>	
Technical assistance	\$9,630,175
Financial assistance	59,550,431
Local contribution	22,466,644
Total costs	91,647,251
<b>Benefits</b>	
Public buildings protected (no.)	133
Private buildings protected (no.)	21,578
Roads protected (miles)	178.18
Utilities protected (no.)	220
Value of property protected	\$540,228,114
Debris removed (feet)	272,853
Streambank stabilized (feet)	123,637
Land protected (acres)	157,650.5
No. of 8(a) contracts	15
Value of 8(a) contracts	\$2,856,423
Total economic benefit	295,791,959
<b>Costs / Benefit Ratio</b>	
	3.23/1.0
<b>No. of Persons Benefited</b>	
Minority	8,502,635
Other	4,179,129
Total	12,681,764

**Get Conservation on the Ground.**

Arizona. The projects resulting from the 2010 Schultz Fire are approximately 80 percent complete. Due to the successful in-place recovery measures on the corridors, the South Paintbrush project now has community support, recent efforts and other public meetings have facilitated the resolution of the community's concerns enabling the project to move forward. The South Paintbrush corridor design is moving ahead with an anticipated design completion in October 2014, and construction is scheduled to begin in April 2015.

California. The 2014 drought in the western part of the United States, which was especially severe in California, triggered excessively dry conditions leading to wildfires throughout the State. In 2014, EWPP was used to protect homes and property adjacent to burned areas in San Diego, Los Angeles, and Monterey Counties from erosion and sedimentations. Work associated with these emergencies include hydro-mulching, concrete barrier installation, and sandbag barrier installation. Nine-thousand acres of fallow cropland were seeded with a cover crop to prevent wind erosion and dust storms, which affect visibility and air quality. The cropland would normally be irrigated and producing a crop, but this year water was not available for irrigation so the land is fallowed. This work was coordinated by the local NRCS field office and administered by the Resource Conservation District acting as the sponsor.

Connecticut. Projects resulting from Hurricane Sandy were completed on May 16, 2014. Four counties had EWP-eligible sites which resulted in three contractual projects with a total Federal expenditure of \$80,080. Tidal exchange was restored, beach debris was removed, and training walls and a rock channel was removed along the Long Island Sound, protecting 79 homes and 22 acres of marsh land. Beneficial effects included the restoration of a

normal tidal exchange and stream channel flow. Utilities protected included the Silver Sands Boardwalk Bridge and the Melba Street Bridge.

New York. Hurricane Sandy caused significant damage to coastal dikes in Suffolk and Richmond Counties. NRCS coordinated with other Federal agencies and clearly defined the areas of responsibility between Federal Emergency Management Agency, United States Forest Service, and United States Army Corps Engineers. Additional flooding in June 2013 caused extensive erosion and blockage on the upper tributaries of the Stony Brook in Schoharie County causing significant damage in the Town of Schoharie. The agency is repairing five coastal dikes in Southold to protect prime agricultural land from erosion and saltwater encroachment. As of September 30, 2014, the Southold dikes were completed and vegetative planting is scheduled for early October 2014. The estimated completion date is October 31, 2014.

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED REHABILITATION PROGRAM

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Watershed Rehabilitation Program

[Under the authorities of section 14 of the Watershed Protection and Flood Prevention Act, \$12,000,000 is provided.]

The change in the 2016 Budget includes no funding for this program.

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED REHABILITATION

Lead-Off Tabular Statement

Budget Estimate, 2016.....	0
2015 Enacted.....	<u>\$12,000,000</u>
Change in Appropriation.....	<u><u>-12,000,000</u></u>

WATERSHED REHABILITATION

Summary of Increases and Decreases

(Dollars in thousands)

Program	2013 Actual	2014 Change	2015 Change	2016 Change	2016 Estimate
Discretionary Appropriations:					
Watershed Rehabilitation:					
1. Technical Assistance.....	\$4,504	+\$293	+\$3	-\$4,800	-
2. Financial Assistance.....	9,079	-1,876	-3	-7,200	-
Subtotal.....	13,583	-1,583	-	-12,000	-
Mandatory Appropriations:					
Small Watershed Rehabilitation:					
1. Technical Assistance.....	-	+23,000	-9,941	-13,059	-
2. Financial Assistance.....	-	+227,000	-98,117	-128,883	-
Subtotal.....	-	+250,000	-108,058	-141,942	-
Total .....	13,583	+248,417	-108,058	-153,942	-

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED REHABILITATION

Project Statement

Adjusted Appropriations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>Inc. or Dec.</u>		<u>2016 Estimate</u> <sup>2/</sup>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Appropriations:										
Watershed Rehabilitation Appropriations:										
Technical Assistance.....	\$4,504	29	\$4,797	29	\$4,800	27	-\$4,800	-27	-	-
Financial Assistance.....	9,079	-	7,203	-	7,200	-	-7,200	-	-	-
Subtotal.....	13,583	29	12,000	29	12,000	27	-12,000 (1)	-27	-	-
Mandatory Appropriations:										
Small Watershed Rehabilitation Appropriations:										
Technical Assistance.....	-	-	23,000	11	13,059	7	-13,059	-7	-	-
Financial Assistance.....	-	-	227,000	-	128,883	-	-128,883	-	-	-
Subtotal.....	-	-	250,000	11	141,942	7	-141,942	-7	-	-
Total Adjusted Approp.....	13,583	29	262,000	40	153,942	34	-153,942	-34	-	-
Rescissions, transfers, and Seq. (Net).....										
	1,117	-	11,880	-	11,178	-	-11,178	-	-	-
Total, Appropriation.....	14,700	29	273,880	40	165,120	34	-165,120	-34	-	-
Rescission.....	-398	-	-	-	-	-	-	-	-	-
Sequestration.....	-719	-	-11,880	-	-11,178	-	+11,178	-	-	-
Bal. Available, SOY 1/.....	6,231	-	5,944	-	12,022	-	+61,240	-	\$73,262	-
Bal. Permanently reduced.....	-	-	-	-	-	-	-68,942	-	-68,942	-
Recoveries, Other (Net).....	2,205	-	4,012	-	-	-	-	-	-	-
Total Available.....	22,019	29	271,956	40	165,964	34	-161,644	-34	4,320	-
Lapsing Balance.....	-146	-	-144	-	-	-	-	-	-	-
Bal. Available, EOY 1/.....	-5,944	-	-12,022	-	-73,262	-	-	-	-	-
Total Obligations.....	15,929	29	259,790	40	92,702	34	-88,382	-34	4,320	-

<sup>1/</sup> Includes Reimbursable carryover.

<sup>2/</sup> The Consolidated and Further Continuing Appropriations Act, 2015 (P.L. 113-235), General Provisions Sec 716, limits 2015 obligations in the Small Watershed Rehabilitation Program to \$73M.

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED REHABILITATION

Project Statement  
Obligations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>Inc. or Dec.</u>		<u>2016 Estimate</u> <sup>2/</sup>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Watershed Rehabilitation Obligations:										
Technical Assistance.....	\$11,005	29	\$6,831	29	\$5,945	27	-\$5,945	-27	-	-
Financial Assistance.....	4,924	-	7,278	-	13,757	-	-13,757	-	-	-
Subtotal.....	15,929	29	14,109	29	19,702	27	-19,702	-27	-	-
Mandatory Obligations:										
Small Watershed Rehabilitation Obligations:										
Technical Assistance.....	-	-	19,269	11	12,775	7	(-12,775)	-7	-	-
Financial Assistance.....	-	-	226,412	-	60,225	-	-55,905	-	\$4,320	-
Subtotal.....	-	-	245,681	11	73,000	7	-68,680	-7	4,320	-
Total Obligations.....	15,929	29	259,790	40	92,702	34	-88,382	-34	4,320	-
Lapsing Balance .....	146	-	144	-	-	-	-	-	-	-
Bal. Available, EOY 1/.....	5,944	-	12,022	-	73,262	-	-73,262	-	-	-
Total Available.....	22,019	29	271,956	40	165,964	34	-161,644	-34	4,320	-
Rescission	398	-	-	-	-	-	-	-	-	-
Sequestration.....	719	-	11,880	-	11,178	-	-11,178	-	-	-
Bal. Available, SOY 1/.....	-6,231	-	-5,944	-	-12,022	-	-61,240	-	-73,262	-
Bal. Permanently reduced.....	-	-	-	-	-	-	+68,942	-	68,942	-
Recoveries, Other (Net).....	-2,205	-	-4,012	-	-	-	-	-	-	-
Total, Appropriation.....	14,700	29	273,880	40	165,120	34	-165,120	-34	-	-

<sup>1/</sup> Includes Reimbursable carryover.

<sup>2/</sup> The Consolidated and Further Continuing Appropriations Act, 2015 (P.L. 113-235), General Provisions Sec 716, limits 2015 obligations in the Small Watershed Rehabilitation Program to \$73M.

Justification of Increases and Decreases

- (1) A decrease of \$12,000,000 and 29 staff years for Watershed Rehabilitation (\$12,000,000 and 29 staff years available in 2015):

Since 1948, local communities have constructed more than 11,788 watershed dams with assistance from NRCS. These dams provide flood control protection for America's communities and natural resources, but many also serve as primary sources of drinking water, recreation areas, and wildlife habitat. These projects have become an integral part of the communities they were designed to protect. Like highways, utilities, and other public infrastructure, these dams need to be maintained to protect public health and safety and to meet changing resource needs. No funding is requested in the 2016 Budget. Maintenance, repair and operation of these dams will be the responsibility of local project sponsors.

NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED REHABILITATION

Geographic Breakdown of Obligations and Staff Years (SYs)

(Dollars in thousands)

State/Territory	2013 Actual		2014 Actual		2015 Enacted		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Alabama.....	\$9	-	\$335	-	\$119	-	\$6	-
Alaska.....	-	-	20	-	7	-	-	-
Arizona.....	7,415	3	98,103	2	34,999	2	1,631	-
Arkansas.....	30	-	1,262	-	450	-	21	-
California.....	5	-	74	-	26	-	1	-
Colorado.....	5	-	2,975	-	1,061	-	49	-
Connecticut.....	42	-	939	-	335	-	16	-
Delaware.....	-	-	9	-	3	-	-	-
Florida.....	-	-	70	-	25	-	1	-
Georgia.....	4	-	1,489	-	531	-	25	-
Hawaii.....	6	-	24	-	9	-	-	-
Idaho.....	5	-	60	-	21	-	1	-
Illinois.....	5	-	74	-	27	-	1	-
Indiana.....	10	-	395	-	141	-	7	-
Iowa.....	15	-	86	-	31	-	1	-
Kansas.....	477	2	1,849	-	660	-	31	-
Kentucky.....	498	-	1,039	1	371	1	17	-
Louisiana.....	1	-	173	-	62	-	3	-
Maine.....	2	-	84	-	30	-	1	-
Maryland.....	5	-	119	-	43	-	2	-
Massachusetts.....	508	1	9,133	-	3,258	-	152	-
Michigan.....	2	-	55	-	20	-	1	-
Minnesota.....	-	-	340	-	121	-	6	-
Mississippi.....	23	-	6,158	2	2,197	2	102	-
Missouri.....	15	-	65	-	23	-	1	-
Montana.....	5	-	59	-	21	-	1	-
Nebraska.....	225	2	8,820	4	3,147	3	147	-
Nevada.....	5	-	296	1	105	1	5	-
New Hampshire.....	5	-	383	-	137	-	6	-
New Jersey.....	5	-	77	-	28	-	1	-
New Mexico.....	20	-	631	-	225	-	10	-
New York.....	220	2	651	1	232	1	11	-
North Carolina.....	9	-	39	-	14	-	1	-
North Dakota.....	14	1	575	1	205	1	10	-
Ohio.....	14	-	133	-	47	-	2	-
Oklahoma.....	748	6	34,393	9	12,270	7	572	-
Oregon.....	-	-	1,945	-	694	-	32	-
Puerto Rico.....	-	-	15	-	5	-	-	-

NATURAL RESOURCES CONSERVATION SERVICE

State/Territory	2013 Actual		2014 Actual		2015 Enacted		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Pennsylvania.....	558	1	10,954	1	3,908	1	182	-
Rhode Island.....	-	-	15	-	5	-	-	-
South Carolina.....	7	-	65	-	23	-	1	-
South Dakota.....	4	-	57	-	20	-	1	-
Tennessee.....	432	-	3,788	-	1,351	-	63	-
Texas.....	13	1	30,248	8	10,791	6	503	-
Utah.....	1,129	-	12,791	1	4,563	1	213	-
Vermont.....	5	-	102	-	36	-	2	-
Virginia.....	2,636	5	7,335	4	2,617	3	122	-
Washington.....	-	-	54	-	19	-	1	-
West Virginia.....	375	1	14,743	2	5,260	2	245	-
Wisconsin.....	5	-	42	-	15	-	1	-
Wyoming.....	8	-	565	-	202	-	9	-
National Hdqtr.....	407	4	5,179	2	1,869	2	87	-
Undistributed.....	-	-	905	1	323	1	16	-
Obligations.....	15,929	29	259,790	40	92,702	34	4,320	-
Bal. Available, EOY.....	5,944	-	12,022	-	73,262	-	-	-
Lapsing Balance.....	146	-	144	-	-	-	-	-
Total, Available.....	22,019	29	271,956	40	165,964	34	4,320	-



NATURAL RESOURCES CONSERVATION SERVICE

WATERSHED REHABILITATION PROGRAM

Classification by Objects

(Dollars in thousands)

	2013	2014	2015	2016
	Actual	Actual	Enacted	Estimate
<b>Personnel Compensation:</b>				
Washington D.C.....	\$320	\$1,265	\$1,078	-
Field.....	1,998	4,205	3,610	-
11 Total personnel compensation.....	2,318	5,470	4,688	-
12 Personal benefits.....	671	1,684	1,444	-
13.0 Benefits for former personnel.....	-	2	2	-
Total, personnel comp. and benefits.....	2,989	7,156	6,134	-
<b>Other Objects:</b>				
21.0 Travel and transportation of persons.....	45	397	344	-
22.0 Transportation of things.....	-	5	4	-
23.2 Rental payments to others.....	21	928	805	-
23.3 Communications, utilities, and misc. charges.....	-3	58	50	-
24.0 Printing and reproduction.....	-	4	3	-
25.1 Advisory and assistance services.....	134	65,141	21,020	-
25.2 Other services from non-Federal sources.....	1,436	11,380	10,943	-
25.4 Operation and maintenance of facilities.....	-	5,673	-	-
25.5 Research and development contracts.....	-	1,256	-	-
25.3 Other contractual services.....	6,365	-	-	-
26.0 Supplies and materials.....	99	139	121	-
31.0 Equipment.....	53	364	316	-
32.0 Land and structures.....	-	-4	-	-
41.0 Grants.....	4,790	167,293	52,962	\$4,320
Total, Other Objects.....	12,940	252,634	86,568	4,320
99.9 Total, new obligations.....	15,929	259,790	92,702	4,320

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NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED REHABILITATION PROGRAM

STATUS OF PROGRAMS

**Current Activities.**

**Background.** In November 2000, the Watershed Protection and Flood Prevention Act (P.L. 83-566) was amended by the Watershed Rehabilitation Amendments of 2000 (Section 313 of P.L. 106-472), which authorized NRCS to assist communities to address public health and safety concerns and environmental impacts of aging dams. The amendment allowed the agency to provide technical and financial assistance for the planning, design, and implementation of rehabilitation projects that may include upgrading or removing dams past their useful life.

**Program Objectives.** The purpose of the Watershed Rehabilitation Program is to extend the service life of dams and bring them into compliance with applicable safety and performance standards, or to decommission the dams so they no longer pose a threat to life and property.

Since 1948, local communities have constructed more than 11,900 watershed dams with assistance from NRCS. Local sponsors provided leadership in the program and secured land rights and easements needed for construction. NRCS provided technical assistance and cost sharing for construction. Local sponsors assumed responsibility for the operation and maintenance of the structures once they were completed. These dams protect America's communities and natural resources with flood control, and many provide the primary source of drinking water in the area or offer recreation and wildlife benefits.

Some communities that have been protected by these watershed dams are now vulnerable to devastation caused by flooding because the dams have reached or will soon reach the end of their 50-year design life. By December 2014, a total of 3,724 watershed dams will have reached the end of their designed life-span, and another 1,025 dams will be added to that total by December 2016, for a total of 4,749. Time has taken its toll on many dams: spillway pipes have deteriorated and reservoirs have filled with sediment. More significantly, the area around many dams has changed over time as homes and businesses have been built on what was once agricultural land. Thus, a dam failure could pose a serious threat to the health and safety of those living downstream and to the communities that depend on the reservoir for drinking water, and could have serious adverse environmental effects.

**Program Operations.** The Watershed Rehabilitation Program's highest priority is to rehabilitate dams that pose the greatest risk to public safety. These dams are classified as high hazard in the national dam safety classification system. Dams classified in the three-tier system as low or significant hazard to public safety will not be planned for rehabilitation until all high-hazard dam project requests from public sponsors have been rehabilitated.

Dams installed through the following programs, administered by NRCS, are eligible for rehabilitation assistance: the Watershed Protection and Flood Prevention Act (the Watershed Operations Program (specifically Public Law 83-566), Pilot Watershed Projects authorized by the Agriculture Appropriation Act of 1953, and the Resource Conservation and Development Program.

NRCS may provide up to 65 percent of the total cost of dam rehabilitation projects, which includes the acquisition of land, easements, rights-of-way, project administration, non-Federal technical assistance, and construction. NRCS provides technical assistance to conduct technical studies; develop rehabilitation plans; develop environmental impact statements or environmental assessments; prepare the engineering designs; and provide construction management services; including construction inspection. Local sponsors are required to provide 35 percent of the total project cost.

The implementation strategy for the Watershed Rehabilitation Program has three phases, all of which requires a request from a local public sponsor: 1) conduct a dam assessment to evaluate the condition of the dam, including safety hazards, and provide preliminary alternatives for rehabilitation; 2) prepare project plans and designs for implementation; and 3) implement dam rehabilitation plan.

Partnerships among local communities, State governments, and NRCS leverage services and funds to allow many projects to move quickly through the planning and implementation stages.

- Technical capacity. NRCS does not have technical staff capacity to respond to all requests for watershed rehabilitation assistance from project sponsors. In 2014, NRCS renewed and will continue its national contract with Architectural and Engineering (A&E) Service consulting companies to perform dam assessments, rehabilitation planning, engineering designs, and construction inspection services under NRCS guidance. Also, some sponsors have used either their own professional staff or acquired technical services as part of their “in-kind” contribution to meet their 35 percent cost-share requirement; and
- Financial assistance. Sponsors have used many innovative means to obtain the funds necessary to address the rehabilitation of the aging dams that were threatening their local communities. They have used the sale of bonds dedicated to dam safety and rehabilitation, levied taxes on beneficiaries, obtained grants, used State appropriations, sought voluntary land rights from private landowners, and provided in-kind services using existing staff.

Annually, NRCS ranks all dam rehabilitation funding applications for planning, design, and construction, based on a numerical Risk Index and Failure Index that relates to the overall condition of a dam and the population at risk downstream of the dam.

### **2014 Activities.**

The 2014 Farm Bill provided \$250 million to the Watershed Rehabilitation program and was in addition to the \$12 million received in discretionary funding. This increased the typical annual investment in watershed rehabilitation by almost 21 fold, which recognizes the critical role of these watershed structures in flood management, water supply, erosion control, agricultural productivity, recreation and wildlife habitat. This funding helps to repair aging infrastructure, create jobs and commerce, and protects homes and families.

Since 1948, NRCS has helped local communities to construct more than 11,900 dams in 47 States. These watershed management projects provide an estimated \$2.2 billion in annual benefits in reduced flooding and erosion damages, and improved recreation, water supplies and wildlife habitat for an estimated 47 million Americans.

In 2014, project sponsors from 35 States submitted funding requests for 790 dams totaling more than \$868.8 million. This level of funding request demonstrates the need for dam rehabilitation assistance throughout the country. The funding requests far exceeded available funding.

With the 2014 Farm Bill funding 126 dams will be rehabilitated in 26 States. Funds will be used for planning, design and construction. In addition, \$10.3 million dollars were utilized to complete assessments of 491 dams. The dams were identified based on recent rehabilitation investments and the potential risks to life and property if a dam failure occurred.

NRCS contracted with US Engineering Solutions Corporation (USES) for improved modifications to the web-based software tool called *DamWatch*, for use in monitoring potential dam safety concerns nationwide. This tool monitors, in real-time, the status of dams negatively affected by storms and other events.

In 2014, NRCS continued to provide funding and promoted assessments of high-hazard dams, monitored costs, and examined the rehabilitation program to ensure equitable delivery in economically-disadvantaged areas. Currently, NRCS has 33 Memoranda of Understanding (MOUs) with State dam safety agencies, which helps State and National agencies ensure uniformity of standards for high hazard dams.

**Summary of Watershed Rehabilitation Projects and Allocations  
as of September 30, 2014**

<b>State</b>	<b>Total Number of Funded Dam Rehabilitation Projects 2000 – 2014</b>	<b>Number of Dams Rehabilitated</b>	<b>2014 Federal Allocations <sup>a/</sup> Mandatory Funds</b>	<b>2014 Federal Allocations <sup>b/</sup> Discretionary Funds</b>
Alabama	1	1	-	-
Arizona	12	2	\$95,580,150	\$ 2,535,000
Arkansas	7	1	426,000	-
California	1	-	-	-
Colorado	6	-	2,955,300	-
Connecticut	3	-	450,000	3,251
Georgia	27	7	225,000	-
Hawaii	0	-	4,901	-
Indiana	1	1	-	-
Iowa	4	4	-	-
Kansas	15	2	1,731,000	20,000
Kentucky	8	1	1,000,000	273,000
Maine	0	-	-	21
Massachusetts	7	1	8,971,500	632
Mississippi	25	17	5,675,000	-
Missouri	5	2	-	-
Montana	2	-	-	-
Nebraska	15	9	7,515,236	80,640
Nevada	1	-	-	280,000
New Hampshire	1	-	50,000	-
New Jersey	2	-	-	-
New Mexico	12	3	600,000	-
New York	8	-	367,000	81,022
North Carolina	0	-	-	-
North Dakota	3	-	-	294,000
Ohio	10	8	40,000	-
Oklahoma	53	32	32,450,659	1,081,860
Oregon	2	-	1,864,000	-
Pennsylvania	15	1	10,570,500	360,113
Tennessee	7	2	2,755,000	60,000
Texas	33	14	23,115,258	6,906,000
Utah	31	-	12,390,000	265,000
Vermont	0	-	-	-
Virginia	19	9	6,810,000	475,000
Washington	0	-	-	-
West Virginia	6	1	13,800,099	300,000
Wisconsin	15	11	-	-
Wyoming	1	-	504,796	38,307

State	Total Number of Funded Dam Rehabilitation Projects 2000 – 2014	Number of Dams Rehabilitated	2014 Federal Allocations <sup>a/</sup> Mandatory Funds	2014 Federal Allocations <sup>b/</sup> Discretionary Funds
Dam Assessments <sup>c/</sup>	-	-	9,570,314	781,307
DamWatch Initiative	-	-	-	80,100
NHQ	-	-	10,578,287	
Total	358	129	250,000,000	13,915,253

<sup>a/</sup> Allocations include project planning, design, and implementation.

<sup>b/</sup> Discretionary Funds include carryover funds, prior year recoveries, and annual funds for project planning, design, and implementation. The dams funded in 2014, as shown in the table above, represent a partial list of the 358 projects that have been previously funded.

<sup>c/</sup> NRCS funded 491 assessments of high hazard dams that provided communities with technical information about the condition of their dams and alternatives for rehabilitation of dams that do not currently meet Federal dam safety standards.

**Project Status and Benefits.** From 2000 through 2014, rehabilitation of 268 dams in 30 States was authorized, and rehabilitation of 127 dams was completed. The remaining 141 rehabilitation projects are being implemented, subject to funding priorities. The following table summarizes the benefits for both agricultural and non-agricultural lands provided by the completed projects:

Average annual floodwater damage reduction benefits :	\$7,114,513
Average annual non-floodwater damage reduction benefits :	\$7,257,862
Number of people with reduced risk downstream from the dams :	13,801
Number of people who benefit from project action:	293,710
Number of homes and businesses benefiting from project action:	10,252
Number of farms and ranches benefiting from project action:	898.16
Number of bridges benefiting from project action:	352.26

#### Getting Conservation on the Ground.

**Nebraska: Wilson Creek 8-H.** Located in Otoe County, Nebraska, just upstream of Nebraska Highway 2 near the town of Dunbar, this dam was originally constructed in 1969 as a Low hazard structure, one of 22 floodwater-retarding structures built after the authorization of the Wilson Creek Watershed Protection Program in 1959. Sponsors of the original project were the Cass and Otoe Soil and Water Conservation Districts along with the Wilson Creek Watershed Conservancy District. The structure was reclassified as a high hazard dam after the relocation of Highway 2, approximately 500 feet downstream of this structure. NRCS engineers determined that a breach of the dam during the 100-year, 24-hour storm event would result in flooding up to 2 feet deep over the highway, which is a major four lane divided highway. Rehabilitation included raising the top of the dam, widening the auxiliary spillway, constructing a new drainage system, and replacing the principal spillway and plunge pool. The rehabilitated dam is now up to current NRCS and state dam safety criteria and extended its life and benefits. The sponsor for the rehabilitation project was the Nemaha Natural Resources District. Construction began in June 2013 and was completed in December 2013. This site provides \$469,800 in average annual benefits.

**Oklahoma: Barnitz 1.** Rehabilitation of Barnitz Creek Site 1 in Oklahoma is completed. Rehabilitation included upgrading the dam to meet current NRCS safety criteria and performance standards for a high hazard dam, extending the service life of the dam to 100 years, and maintaining flood protection. This site was originally constructed in 1955 as a low hazard class (a) dam, a hazard classification given to dams that do not pose a threat to loss of life, but could cause damage to agricultural lands, fences, livestock, farm equipment, and county roads and bridges. As a result of changes in dam safety criteria and development downstream of the dam, Site 1 was rehabilitated to high hazard standards, a hazard classification given to dams that do pose a threat to loss of life. The

breach inundation area of Site 1 includes one house, a state highway and six county roads. This site provides \$102,900 in average annual benefits.

Oklahoma: Fort Cobb Laterals 10. Rehabilitation of Fort Cobb Laterals Site 10 in Oklahoma is also completed. Rehabilitation included upgrading the dam to meet current NRCS safety criteria and performance standards for a high hazard dam, extending the service life of the dam to 100 years, and maintaining flood protection. This site was originally constructed in 1976 as a low hazard class (a) dam, a hazard classification given to dams that do not pose a threat to loss of life, but could cause damage to agricultural lands, fences, livestock, farm equipment, and county roads and bridges. As a result of changes in dam safety criteria and development downstream of the dam, Site 10 was rehabilitated to high hazard standards, a hazard classification given to dams that do pose a threat to loss of life. The breach inundation area of site 10 includes five houses, and one county road. This site provides \$43,700 in average annual benefits.

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NATURAL RESOURCES CONSERVATION SERVICE

RESOURCE CONSERVATION AND DEVELOPMENT

Project Statement  
Obligations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>Inc. or Dec.</u>		<u>2016 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Resource Conservation and Development										
Technical Assistance.....	-	-	-	-	-	-	-	-	-	-
Financial Assistance.....	-	-	-	-	-	-	-	-	-	-
Total Obligations .....	-	-	-	-	-	-	-	-	-	-
Lapsing Balances.....	-	-	-	-	-	-	-	-	-	-
Bal. Available, EOY.....	\$2,040	-	-	-	-	-	-	-	-	-
Total Available.....	2,040	-	-	-	-	-	-	-	-	-
Rescission.....	-	-	\$1,968	-	-	-	-	-	-	-
Bal. Available, SOY.....	-1,927	-	-2,040	-	-	-	-	-	-	-
Recoveries, Other (Net).....	-113	-	72	-	-	-	-	-	-	-
Total, Appropriation.....	-	-	-	-	-	-	-	-	-	-

RESOURCE CONSERVATION AND DEVELOPMENT

Geographic Breakdown of Obligations and Staff Years (SYs)  
(Dollars in thousands)

State/Territory	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>2016 Estimate</u>	
	Amount	SY	Amount	SYs	Amount	SYs	Amount	SYs
Bal. Available, EOY.....	\$2,040	-	-	-	-	-	-	-
Total, Available.....	2,040	-	-	-	-	-	-	-

NATURAL RESOURCES CONSERVATION SERVICE

HEALTHY FORESTS RESERVE PROGRAM

Project Statement

Obligations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>Inc. or Dec.</u>		<u>2016 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Healthy Forests Reserve Program:										
Technical Assistance.....	\$2	-	-	-	\$5	-	-\$5	-	-	-
Financial Assistance.....	-	-	-	-	48	-	-48	-	-	-
Total Obligations .....	2	-	-	-	53	-	-53	-	-	-
Bal. Available, EOY .....	51	-	\$53	-	-	-	-	-	-	-
Total Available.....	53	-	53	-	53	-	-53	-	-	-
Bal. Available, SOY .....	-47	-	-51	-	-53	-	+53	-	-	-
Recoveries, Other (Net).....	-6	-	-2	-	-	-	-	-	-	-
Total, Appropriation.....	-	-	-	-	-	-	-	-	-	-

HEALTHY FORESTS RESERVE PROGRAM

Geographic Breakdown of Obligations and Staff Years (SYs)

(On basis of obligations)  
(Dollars in thousands)

State/Territory	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>2016 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Michigan.....	-\$4	-	-	-	-	-	-	-
Oregon.....	3	-	-	-	-	-	-	-
Pennsylvania.....	3	-	-	-	-	-	-	-
Undistributed.....	-	-	-	-	\$53	-	-	-
Obligations.....	2	-	-	-	53	-	-	-
Bal. Available, EOY.....	51	-	\$53	-	-	-	-	-
Total, Available.....	53	-	53	-	53	-	-	-

HEALTHY FORESTS RESERVE PROGRAM

Classification by Objects

(Dollars in thousands)

	2013 <u>Actual</u>	2014 <u>Actual</u>	2015 <u>Estimate</u>	2016 <u>Estimate</u>
Other Objects:				
25.0 Other Contractual Services.....	\$2	-	\$53	-
Total, Other Objects.....	2	-	53	-
99.9 Total, new obligations.....	2	-	53	-

NATURAL RESOURCES CONSERVATION SERVICE

WATER BANK

Lead-Off Tabular Statement

Budget Estimate, 2016.....	0
2015 Enacted.....	<u>\$4,000,000</u>
Change in Appropriation.....	<u><u>-4,000,000</u></u>

Note: 2015 funds were provided through General Provision 737 of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2015.

WATER BANK PROGRAM

Summary of Increases and Decreases

(Dollars in thousands)

Program	2013 Actual	2014 Change	2015 Change	2016 Change	2016 Estimate
Discretionary Appropriations:					
Water Bank					
1. Technical Assistance.....	-	+\$400	-	-\$400	-
2. Financial Assistance.....	-	+3,600	-	-3,600	-
Total Discretionary Appropriations.....	-	+4,000	-	-4,000	-

NATURAL RESOURCES CONSERVATION SERVICE

WATER BANK PROGRAM

Project Statement  
 Appropriations Detail and Staff Years (SYs)  
 (Dollars in thousands)

Program	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>Inc. or Dec.</u>		<u>2016 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Appropriations:										
Water Bank Program:										
Technical Assistance.....	-	-	\$400	1	\$400	1	-\$400	-1	-	-
Financial Assistance.....	-	-	3,600	-	3,600	-	-3,600	-	-	-
Total, Available or Est.....	-	-	4,000	1	4,000	1	-4,000	-1	-	-
Total, Appropriation.....	-	-	4,000	1	4,000	1	-4,000	-1 (1)	-	-
Bal. Available, SOY .....	\$51	-	222	-	545	-	-545	-	-	-
Recoveries, Other (Net).....	174	-	653	-	-	-	-	-	-	-
Total Available.....	225	-	4,875	1	4,545	1	-4,545	-1	-	-
Bal. Available, EOY.....	-222	-	-545	-	-	-	-	-	-	-
Total, Obligations .....	3	-	4,330	1	4,545	1	-4,545	-1	-	-

Project Statement  
 Obligations Detail and Staff Years (SYs)  
 (Dollars in thousands)

Program	<u>2013 Actual</u>		<u>2014 Actual</u>		<u>2015 Enacted</u>		<u>Inc. or Dec.</u>		<u>2016 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Water Bank Program:										
Technical Assistance.....	\$3	-	\$164	1	\$685	1	-\$685	-1	-	-
Financial Assistance.....	-	-	4,166	-	3,860	-	-3,860	-	-	-
Total Obligations .....	3	-	4,330	1	4,545	1	-4,545	-1	-	-
Bal. Available, EOY .....	222	-	545	-	-	-	-	-	-	-
Total Available.....	225	-	4,875	1	4,545	1	-4,545	-1	-	-
Bal. Available, SOY .....	-51	-	-222	-	-545	-	+545	-	-	-
Recoveries, Other (Net).....	-174	-	-653	-	-	-	-	-	-	-
Total, Appropriation.....	-	-	4,000	1	4,000	1	-4,000	-1	-	-

Justification of Increases and Decreases

(1) A decrease of \$4,000,000 and 1 staff year for the Water Bank Program (\$4,000,000 and 1 staff year available in 2015):

Due to budget priorities, the FY 2016 Budget proposes to terminate funding for this program.

NATURAL RESOURCES CONSERVATION SERVICE

WATER BANK PROGRAM

Geographic Breakdown of Obligations and Staff Years (SYs)

(Dollars in thousands)

State/Territory	2013 Actual		2014 Actual		2015 Enacted		2016 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
North Dakota.....	-	-	\$3,253	1	\$3,415	1	-	-
South Dakota.....	\$3	-	1,077	-	1,130	-	-	-
Obligations.....	3	-	4,330	1	4,545	1	-	-
Lapsing Balances.....	-	-	-	-	-	-	-	-
Bal. Available, EOY.....	222	-	545	-	-	-	-	-
Total, Available.....	225	-	4,875	1	4,545	1	-	-

NATURAL RESOURCES CONSERVATION SERVICE

WATER BANK PROGRAM

Classification by Objects

(Dollars in thousands)

		2013	2014	2015	2016
		Actual	Actual	Enacted	Estimate
Personnel Compensation:					
	Washington, D.C.....	-	-	-	-
	Field.....	\$2	\$38	\$38	-
11	Total personnel compensation.....	2	38	38	-
12	Personal benefits.....	-	15	15	-
	Total, personnel comp. and benefits.....	2	53	53	-
Other Objects:					
25.2	Other services from non-Federal sources.....	-	-	519	-
26.2	Supplies and materials.....	1	-	-	-
31.0	Equipment.....	-	111	113	-
41.0	Grants.....	-	4,166	3,860	-
	Total, Other Objects.....	1	4,277	4,492	-
99.9	Total, new obligations.....	3	4,330	4,545	-

NATURAL RESOURCES CONSERVATION SERVICE  
WATER BANK PROGRAM

STATUS OF PROGRAMS

**Current Activities.**

**Background.** Section 748 of the Water Bank Act (16 U.S.C. 1301-1311) authorized the Water Bank Program (WBP). In 2014, NRCS was appropriated \$4.0 million to fund WBP. NRCS opened enrollment into the program in Minnesota, North Dakota and South Dakota.

**Program Objectives.** The purposes of the Water Bank Program include: 1) preserving and improving major wetlands as habitat for migratory waterfowl and other wildlife; 2) conserving surface waters; 3) reducing soil and wind erosion; 4) contributing to flood control; 5) improving water quality; 6) improving subsurface moisture; and 7) enhancing the natural beauty of the landscape. The intent of the program is to keep water for the benefit of migratory wildlife.

**Program Operations.** WBP contracts are non-renewable, 10-year rental agreements to compensate landowners for maintaining lands as wetlands in lieu of draining the lands for agricultural production. Rental payments are made annually. WBP agreements for each participating farm or ranch become effective on January 1 of the calendar year in which the agreement is approved. Financial assistance is not available for conservation practices through WBP; participants who wish to establish or maintain conservation practices may apply for financial assistance through other NRCS or State financial assistance programs where available. NRCS will assist participants with developing a Conservation Plan of Operations (CPO) for the enrolled land and associated adjacent land when applicable. WBP participants are not subject to the Farm Bill payment eligibility requirements including the highly erodible land and wetland conservation provisions or the adjusted gross income limitations. The rental rates for the 2014 program were as follows:

- \$50 per acre per year for cropland;
- \$35 per acre per year for pasture and rangeland (grazing lands); and
- \$20 per acre per year for forestland.

**Eligibility.** NRCS determines whether land is eligible for enrollment and whether, once found eligible, the lands may be included in the program based on the likelihood of successful protection of wetland functions and values when considering the cost of the agreement and protection costs. Land placed under an agreement shall be specifically identified and designated for the period of the agreement. A person must:

- Be the landowner of eligible land for which enrollment is sought for at least two years preceding the date of the agreement unless new ownership was acquired by will or succession as a result of death of the previous owner; or
- Have possession of the land by written lease over all designated acreage in the agreement for at least two years preceding the date of the agreement unless new ownership was acquired by will or succession as a result of death of the previous owner and will have possession over all the designated acreage for the agreement period.

**Program Participation Requirements.** An agreement shall be executed for each participating farm. The agreement shall be signed by the owner or operator of the designated acreage and any other person who, as landlord, tenant, or share cropper, will share in the payment or has an interest in the designated acreage. There may be more than one agreement for a farm.

The designated acreage in the agreement must:

- Be maintained for the agreement period in a manner which will preserve, restore, or improve the wetland character of the land;
- Not be drained, burned, filled, or otherwise used in a manner which would destroy the wetland character of the acreage;
- Not be used as a dumping area for draining other wetlands, except where the State Conservationist determines that such use is consistent with the sound management of wetlands and is specified in the conservation plan;
- Not be used for agricultural purposes including cropping, haying, or grazing for the life of the agreement;
- Not be hayed except if authorized under limited circumstances, such as severe drought; and
- Not be grazed unless necessary to enhance the wetland functions and values of the land under agreement.

NRCS will perform an annual status review to note the progress in maintaining designated wetland acreage and the need for technical assistance. The failure to maintain the designated wetland acreage may result in noncompliance or a reduction in rental payments.

**2014 Activities.**

NRCS allocated \$4.0 million for financial and technical assistance for approval of new WBP 10-year rental agreements. Approximately \$3.6 million was obligated to 43 agreements covering 8,628 acres. The first year rental agreement payments were issued in August 2014.

The WBP has a backlog of 492 applications with an estimated value of \$23.1 million covering 61,545 acres in North Dakota and South Dakota.



NATURAL RESOURCES CONSERVATION SERVICE

FARM SECURITY AND RURAL INVESTMENT PROGRAMS

Budget Estimate, 2016.....	\$3,124,152,000
2015 Enacted.....	<u>3,076,898,000</u>
Change in Appropriation.....	<u>+47,254,000</u>

Conservation programs included in this account are listed in the project statement below. Program funding authorized by the Agricultural Act of 2014 (P.L. 113-79) will continue from the Commodity Credit Corporation.

NATURAL RESOURCES CONSERVATION SERVICE

FARM SECURITY AND RURAL INVESTMENT PROGRAMS

Project Statement - Current Law  
Budget Authority and Staff Years (SYs)  
(Dollars in thousands)

Program	2013 Actual <sup>d/</sup>		2014 Actual <sup>d/</sup>		2015 Enacted <sup>d/</sup>		Inc. or Dec.		FA	2016 Estimate <sup>e/</sup>		
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs		TA	Total	SYs
Environmental Quality Incentives Program a/.....	\$1,373,859	2,958	\$1,350,000	2,500	\$1,347,000	2,831	+\$3,000	+672	\$970,872	\$379,128	\$1,350,000	3,503
Conservation Stewardship Program f/.....	945,905	595	1,078,942	622	1,164,151	729	1	248	1,034,467	129,685	1,164,152	977
Agricultural Conservation Easement Program.....	-	-	366,304	259	393,975	303	56,025	5	307,404	142,596	450,000	308
Regional Conservation Partnership Program.....	-	-	95,680	2	92,700	100	7,300	-46	78,700	21,300	100,000	54
Conservation Reserve Program.....	67,752	611	67,925	554	46,350	649	3,650	17	-	50,000	50,000	666
Voluntary Public Access and Habitat Incentive Program.....	-	-	40,000	-	--	-	-	-	-	-	-	-
Wetlands Mitigation Banking Program.....	-	-	10,000	-	--	-	-	-	-	-	-	-
Conservation Security Program.....	156,220	105	124,780	48	28,087	56	-23,087	-38	4,644	356	5,000	18
Agricultural Management Assistance b/.....	2,373	5	6,960	5	4,635	6	365	-	3,966	1,034	5,000	6
Wildlife Habitat Incentives Program g/.....	70,450	112	2,735	54	--	-	-	-	-	-	--	-
Grasslands Reserve Program g/.....	63,333	36	823	5	--	-	-	-	-	-	--	-
Chesapeake Bay Watershed Program.....	47,450	56	--	-	--	-	-	-	-	-	--	-
Healthy Forests Reserve Program.....	9,253	8	--	-	--	-	-	-	-	-	--	-
Farm and Ranch Lands Protection Program g/.....	192,350	43	1,778	14	--	-	-	-	-	-	--	-
Agricultural Water Enhancement Program g/.....	56,940	69	1,565	38	--	-	-	-	-	-	--	-
Wetlands Reserve Program g/.....	511,901	421	19,635	122	--	-	-	-	-	-	--	-
Subtotal, Farm Security and Rural Investment Programs.....	3,497,786	5,019	3,167,127	4,223	3,076,898	4,674	+47,254	+858	2,400,053	724,099	3,124,152	5,532
Reimbursable.....	17,495	40	17,015	38	19,500	39	-500	-	-	19,000	19,000	39
Technical Assistance Transfer to PLCO Account c/.....	-	-	-	-	-	-	-	-	-	-724,099	-724,099	-5,532
Total, Farm Security and Rural Investment Programs.....	3,515,282	5,059	3,184,142	4,261	3,096,398	4,713	+46,754	+858	2,400,053	19,000	2,419,053	39

<sup>a/</sup> Authorized level for EQIP is \$1.6 billion in 2015 and \$1.65 billion in 2016. Obligational caps limit new program authority to amounts shown.

<sup>b/</sup> The Agricultural Management Assistance Program is authorized by Section 524(b) of the Federal Crop Insurance Act (7 U.S.C. 1524(b)), as amended. It authorizes \$10 million annually for the program (\$15 million annually for 2008 through 2012), of which NRCS is to receive one-half. This program is implemented by NRCS, the Agricultural Marketing Service, and the Risk Management Agency. The Budget proposes providing the overall AMA program \$10 million in 2016, of which NRCS is to receive \$5 million.

<sup>c/</sup> Transfer mandatory authority from the Farm Security and Rural Investment Programs (Farm Bill) account to the Conservation Operations account to consolidate technical assistance funding in the Private Lands Conservation Operations (PLCO) account. The transfer does not change the authorities or the period of availability of the mandatory funding.

<sup>d/</sup> Amounts shown in 2013, 2014, and 2015 columns are net of sequester reductions.

<sup>e/</sup> In the 2016 column the authorized funding is shown separately for financial assistance (FA), for technical assistance (TA), and for the total. All amounts do not include sequester.

<sup>f/</sup> For 2015, CStP new acreage is capped at 7,741,000 acres; for 2016, CStP new acreage is proposed to be capped at 7,000,000 acres.

<sup>g/</sup> These programs were repealed by the Agricultural Act of 2014. Amounts shown for 2014 are actual obligations through date of repeal.

NATURAL RESOURCES CONSERVATION SERVICE

Project Statement - Current Law  
Obligations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	2013 Actual <sup>d/</sup>		2014 Actual <sup>d/</sup>		2015 Enacted <sup>d/ f/</sup>		Inc. or Dec.		2016 Estimate <sup>c/ f/</sup>			
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	FA	TA	Total	SYs
Environmental Quality Incentives Program a/ g/.....	\$1,373,859	2,958	\$1,297,068	2,500	\$1,398,685	2,831	+\$14,315	+672	\$1,016,179	\$396,821	\$1,413,000	3,503
Conservation Stewardship Program h/.....	882,552	595	1,030,871	622	1,210,167	729	246,054	248	1,294,000	162,221	1,456,221	977
Agricultural Conservation Easement Program.....	-	-	316,875	259	443,166	303	6,834	5	307,404	142,596	450,000	308
Regional Conservation Partnership Program.....	-	-	1,907	2	186,473	100	-86,473	-46	78,700	21,300	100,000	54
Conservation Reserve Program.....	64,920	611	65,510	554	48,689	649	1,311	17	-	50,000	50,000	666
Voluntary Public Access and Habitat Incentive Program.....	-	-	18,058	-	21,942	-	-21,942	-	-	-	-	-
Wetlands Mitigation Banking Program.....	-	-	-	-	10,000	-	-10,000	-	-	-	-	-
Conservation Security Program.....	158,856	105	120,411	48	28,299	56	-19,299	-38	8,360	640	9,000	18
Agricultural Management Assistance b/.....	2,450	5	6,570	5	4,635	6	365	-	3,966	1,034	5,000	6
Wildlife Habitat Incentives Program.....	63,513	112	9,612	54	24,016	63	-4,016	-63	20,000	-	20,000	-
Grasslands Reserve Program.....	62,857	36	1,452	5	24,976	6	-2,976	-6	22,000	-	22,000	-
Chesapeake Bay Watershed Program.....	49,399	56	6,927	43	6,773	50	-1,773	-50	5,000	-	5,000	-
Healthy Forests Reserve Program.....	6,441	8	577	3	4,154	4	-1,154	-4	3,000	-	3,000	-
Farm and Ranch Lands Protection Program.....	118,129	43	2,877	14	93,840	16	-24,840	-16	69,000	-	69,000	-
Agricultural Water Enhancement Program.....	55,258	69	5,384	38	14,846	45	-2,846	-45	12,000	-	12,000	-
Wetlands Reserve Program.....	400,192	421	61,833	122	226,639	143	-26,639	-143	200,000	-	200,000	-
Subtotal, Farm Security and Rural Investment Programs.....	3,238,427	5,019	2,945,932	4,269	3,747,300	5,001	+66,921	+531	3,039,609	774,612	3,814,221	5,532
Reimbursable.....	17,495	40	17,015	38	19,500	39	-500	-	-	19,000	19,000	39
Technical Assistance Transfer to PLCO Account c/.....	-	-	-	-	-	-	-	-	-	-774,612	-774,612	-5,532
Total, Farm Security and Rural Investment Programs.....	3,255,923	5,059	2,962,947	4,307	3,766,800	5,040	+66,421	+531	3,039,609	19,000	3,058,609	39

<sup>a/</sup> Of the total EQIP funding, at least \$4 million will be used to support an initiative to increase the availability and access to nutritious forage for pollinators in a targeted multi-state area (North Dakota, South Dakota, Minnesota, Wisconsin, and Michigan) that is home to nearly 75 percent of the Nation's managed honeybee population during the prime summer forage months.

<sup>b/</sup> The Agricultural Management Assistance Program is authorized by Section 524(b) of the Federal Crop Insurance Act (7 U.S.C. 1524(b)), as amended. It authorizes \$10 million annually for the program (\$15 million annually for 2008 through 2012), of which NRCS is to receive one-half. This program is implemented by NRCS, the Agricultural Marketing Service, and the Risk Management Agency. The Budget proposes providing the overall AMA program \$10 million in 2016, of which NRCS is to receive \$5 million.

<sup>c/</sup> Transfer mandatory authority from the Farm Security and Rural Investment Programs (Farm Bill) account to the Conservation Operations account to consolidate technical assistance funding in the Private Lands Conservation Operations (PLCO) account. The transfer does not change the authorities or the period of availability of the mandatory funding.

<sup>d/</sup> Amounts shown in 2013, 2014, and 2015 columns are net of sequester reductions.

<sup>e/</sup> In the 2016 column the authorized funding is shown separately for financial assistance (FA), for technical assistance (TA), and for the total. All amounts do not include sequester.

<sup>f/</sup> In the 2015 and 2016 columns, the amount shown includes carryover from the previous year.

<sup>g/</sup> For 2015, EQIP obligations for new authority are capped at \$1.347 billion; the amount shown includes carryover from 2014. For 2016, EQIP obligations for new authority are proposed to be capped at \$1.35 billion; the amount shown includes carryover from 2015.

<sup>h/</sup> For 2015, CStP new acreage is capped at 7,741,000 acres; for 2016, CStP new acreage is proposed to be capped at 7,000,000 acres.

NATURAL RESOURCES CONSERVATION SERVICE

FARM SECURITY AND RURAL INVESTMENT PROGRAMS

Statement of Program

Output Metrics	Performance Targets			
	2013 Actual	2014 Actual	2015 <sup>a/</sup> Target	2016 <sup>a/</sup> Target
<b>Environmental Quality Incentives Program</b>				
Cropland with conservation applied to improve soil quality, acres (millions)	N/A	3.1	3.4	3.4
Non-Federal land with conservation applied to improve fish and wildlife habitat quality, acres (thousand)	N/A	1.4	1.4	1.4
<b>Agricultural Conservation Easements Program</b>				
Agricultural land protected in conservation easements, acres (thousand)	N/A	N/A	206.0	206.0
<b>Wetlands Reserve Program</b>				
Wetlands created, restored or enhanced, acres (thousand)	164.0	54.2	N/A	N/A
<b>Wildlife Habitat Incentives Program</b>				
Non-Federal land with conservation applied to improve fish and wildlife habitat quality, acres (thousand)	0.4	0.5	N/A	N/A
<b>Farm and Ranch Lands Protection Program</b>				
Farmland protected from conversion to non-agricultural uses by conservation easements, acres (thousand) <sup>b/</sup>	63.6	76.9	N/A	N/A

a/ Wildlife Habitat Incentives Program (WHIP), Wetlands Reserve Program (WRP), and Farm and Ranch Lands Protection Program (FRPP) were repealed in the 2014 Farm Bill. WHIP performance will be captured under the Environmental Quality Incentives Program (EQIP), and FRPP and WRP will be captured under Agricultural Conservation Easements Program (ACEP)

b/ Definition was changed to include all farmland protected to better represent the program

NATURAL RESOURCES CONSERVATION SERVICE

FARM SECURITY AND RURAL INVESTMENT PROGRAMS  
 Geographic Breakdown of Obligations  
 2014 Actual  
 (Dollars in thousands)

	<u>WRP</u>	<u>CRP a/</u>	<u>EQIP</u>	<u>Con. Sec. Program</u>	<u>WHIP</u>	<u>FRPP</u>	<u>CSP</u>	<u>AWEP</u>	<u>GRP</u>	<u>CBWP</u>	<u>HFRP</u>	<u>AMA a/</u>	<u>ACEP</u>	<u>RCPP</u>	<u>VPAP</u>
ALABAMA	\$1,007	\$533	\$20,516	\$1,014	\$2,141	\$7	\$7,204	\$55	\$1	-	-	\$1	\$1,323	\$14	\$4
ALASKA	11	31	10,305	19	138	-	2,085	-	1	-	-	-	943	7	1
ARIZONA	25	36	12,082	149	14	9	7,667	1	2	-	-	1	263	12	3
ARKANSAS	2,696	456	55,113	2,524	71	1	72,949	101	1	-	-	1	20,226	15	4
CALIFORNIA	1,742	74	114,702	2,192	567	103	9,069	2,118	21	-	-	1	19,511	31	5
COLORADO	131	720	37,167	2,077	95	139	27,921	8	184	-	-	1	4,946	17	5
CONNECTICUT	16	14	6,887	15	253	131	301	-	7	-	-	218	4,182	6	1
DELAWARE	114	24	7,680	238	7	88	1,323	-	-	\$314	-	20	3,775	5	1
FLORIDA	8,288	125	18,674	5	195	12	3,573	7	4	-	-	1	31,155	15	5
GEORGIA	987	240	29,493	1,097	576	1	38,954	60	-	-	-	1	5,755	13	3
HAWAII	48	22	9,087	124	14	15	325	-	8	-	-	317	275	12	2
IDAHO	322	618	16,035	8,844	148	26	8,057	899	225	-	-	1	3,682	18	3
ILLINOIS	592	6,308	15,329	2,302	18	7	31,479	5	7	-	-	1	2,117	20	5
INDIANA	1,009	3,777	19,900	3,322	118	1	9,557	356	4	-	\$30	1	4,004	18	4
IOWA	522	9,369	31,120	13,712	14	1	48,412	2	1	-	-	-	13,760	21	6
KANSAS	211	2,272	24,991	4,731	97	61	53,311	104	22	-	-	1	4,365	19	6
KENTUCKY	423	1,490	16,773	84	139	73	3,829	1	1	-	224	1	10,641	18	3
LOUISIANA	5,317	387	21,788	115	74	1	29,570	1	1	-	-	1	17,390	20	6
MAINE	18	29	13,375	91	510	12	932	-	-	-	40	1,408	493	8	2
MARYLAND	898	581	13,581	1,156	24	17	1,309	-	-	1,737	-	156	1,422	7	1
MASSACHUSETTS	43	22	4,328	5	82	70	253	-	3	-	-	118	4,614	9	2
MICHIGAN	643	712	19,075	2,851	37	27	9,265	210	2	-	-3	1	3,486	14	4
MINNESOTA	2,833	4,905	25,301	3,653	34	38	81,575	48	29	-	-	1	3,596	14	5
MISSISSIPPI	638	2,446	35,969	168	266	1	28,643	172	5	-	-22	1	6,858	17	4
MISSOURI	2,107	1,670	29,992	17,754	62	1	34,181	1	3	-	-	1	6,085	23	5
MONTANA	346	287	20,206	6,590	33	35	41,872	41	82	-	-	1	6,189	19	4
NEBRASKA	2,095	2,253	33,677	5,032	22	8	61,972	138	-	-	-	1	4,118	24	5
NEVADA	66	14	11,332	146	128	7	1,115	-	133	-	-	945	4,383	6	1
NEW HAMPSHIRE	1,109	11	6,506	1	93	65	287	-	-	-	-	17	3,442	6	1
NEW JERSEY	101	72	7,030	83	108	66	404	73	-	-	-	219	5,569	7	1
NEW MEXICO	44	282	26,508	597	170	21	27,135	32	11	-	-	-	218	10	2
NEW YORK	916	217	18,753	72	316	83	6,503	26	-	527	-	516	3,146	12	3
N CAROLINA	551	613	22,161	570	11	51	3,732	1	-	-	-	1	2,647	14	3
N DAKOTA	1,582	1,555	25,084	4,328	4	1	71,382	82	-	-	-	1	5,899	14	5
OHIO	1,273	5,437	20,648	6,759	14	287	6,942	1	-	-	-6	1	8,816	11	4
OKLAHOMA	401	571	26,863	1,278	30	44	57,850	96	13	-	140	1	1,743	19	5
OREGON	1,221	521	23,891	14,388	68	29	20,512	256	18	-	91	1	1,716	18	3
PENNSYLVANIA	1,029	2,396	29,450	207	81	75	7,528	1	3	1,706	59	1,344	5,430	13	3
PUERTO RICO	9	12	6,282	4	-	-	109	-	-	-	-	-	88	6	1
RHODE ISLAND	15	13	3,352	7	33	35	189	-	1	-	-	143	544	6	1
S CAROLINA	445	680	16,613	926	138	8	6,111	-	53	-	-	-	2,281	8	2
S DAKOTA	1,498	3,940	21,870	587	117	1	66,134	3	90	-	-	1	7,886	15	4
TENNESSEE	1,893	412	25,468	212	350	12	6,441	1	59	-	-	1	4,436	14	4
TEXAS	1,234	2,815	105,895	911	1,362	25	37,269	214	158	-	-	2	11,228	28	10
UTAH	94	70	26,515	1,982	10	16	5,595	1	59	-	-	333	5,491	16	2
VERMONT	213	39	11,679	12	205	114	189	-	-	-	-	78	4,144	8	2
VIRGINIA	155	386	24,732	188	73	58	7,086	1	38	1,630	-	1	1,344	14	4
WASHINGTON	658	369	17,254	3,970	51	55	19,897	136	1	-	-	1	1,814	20	4
WEST VIRGINIA	51	103	14,650	163	315	129	2,996	1	25	1,037	-	289	2,351	8	3

NATURAL RESOURCES CONSERVATION SERVICE

	<u>WRP</u>	<u>CRP a/</u>	<u>EQIP</u>	<u>Con. Sec. Program</u>	<u>WHIP</u>	<u>FRPP</u>	<u>CSP</u>	<u>AWEP</u>	<u>GRP</u>	<u>CBWP</u>	<u>HFRP</u>	<u>AMA a/</u>	<u>ACEP</u>	<u>RCPP</u>	<u>VPAP</u>
WISCONSIN	898	1,321	26,678	1,467	7	42	20,797	1	14	-	-	1	3,725	9	3
WYOMING	169	204	13,578	1,314	24	357	9,645	38	21	-	-	346	1,808	10	2
NATIONAL HDQTR	12,856	3,759	93,438	343	147	404	26,717	85	138	-15	24	64	38,984	1,101	17,853
CENTERS	270	297	7,692	32	8	7	2,718	7	3	-9	-	7	2,568	98	33
FY 2014 Total															
Obligations	61,833	65,510	1,297,068	120,411	9,612	2,877	1,030,871	5,384	1,452	6,927	577	6,570	316,875	1,907	18,058

a/ Amounts shown for CRP and AMA only include obligations made by NRCS

COMMODITY CREDIT CORPORATION  
FOOD, CONSERVATION, AND ENERGY ACT OF 2008  
AND AGRICULTURAL ACT OF 2014

STATUS OF PROGRAMS

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

**Current Activities.**

**Background.** Section 2201 of the Agricultural Act of 2014 (P.L. 113–79) re-authorized and revised the Environmental Quality Incentives Program (EQIP) (16 U.S.C. 3839aa). EQIP was first authorized by the Food Security Act of 1985, as amended by the Federal Agriculture Improvement and Reform Act of 1996 (P. L. 104-127), the Farm Security and Rural Investment Act of 2002 (P.L. 107-171) and the Food, Conservation, and Energy Act of 2008 (the 2008 Act, P.L. 110-246). The Commodity Credit Corporation (CCC) funds EQIP.

**Agricultural Act of 2014 Program Updates**

While much of the program remained intact, the 2014 Farm Bill made several notable changes, including:

- Eliminating the requirement that contract must remain in place for a minimum of one year after last practice implemented, but keeps the requirement that the contract term is not to exceed 10 years;
- Consolidating elements of the Wildlife Habitat Incentives Program (WHIP) into EQIP, repealing WHIP authority, and establishing for FY 2014 to 2018 that at least five percent of available EQIP funds will be targeted for wildlife-related conservation practices;
- Replacing the rolling six-year payment limitation with a payment limitation for FY2014 to 2018;
- Requiring Conservation Innovation Grants (CIG) reporting no later than December 31, 2014, and every two years thereafter;
- Establishing the payment limitation at \$450,000 and eliminating the payment limitation waiver authority;
- Modifying the special rule for foregone income payments for certain associated management practices and resource concern priorities;
- Increasing the advance payments available to eligible historically-underserved participants to purchase material or contract services from 30 percent to up to 50 percent;
- Providing flexibility for repayment of advance payment if not expended within 90 days;
- Authorizing funding for EQIP at:
  - \$1,350,000,000 for 2014;
  - \$1,600,000,000 for 2015;
  - \$1,650,000,000 for 2016;
  - \$1,650,000,000 for 2017; and
  - \$1,750,000,000 for 2018;
- Providing that EQIP funding remains available until expended; and
- Providing a preference for Veteran Farmer and Ranchers when competing for funding pools made available to beginning farmer and ranchers and socially-disadvantaged farmers and ranchers.

**Program Objectives.** America faces serious environmental challenges that financial and technical assistance delivered through EQIP can help address. Federal, State, tribal and private lands face pressing environmental concerns that pose risks to the long-term sustainability of our natural resources. For example, regulation of on-farm air pollution poses challenges to agriculture, while changing growing and marketing conditions for producers, high costs for energy, and the desire on the part of many producers to reduce greenhouse gas emissions are some of the new challenges faced by today's agriculture industry. To meet these and other challenges to agricultural sustainability, EQIP promotes the voluntary application of land-based conservation practices and activities that maintain or improve the condition of the soil, water, plants, and air; conserve energy; and address other natural resource concerns.

NRCS carries out EQIP in a manner that optimizes environmental benefits. EQIP provides:

- Technical and financial assistance to farmers and ranchers that face the most serious threats to soil, water, plants, and air, to help them conserve energy and address related natural resources concerns;

- Assistance to farmers and ranchers in complying with Federal, State, and local environmental regulatory requirements;
- Assistance to farmers and ranchers in making beneficial, cost-effective changes to cropping systems; grazing systems; manure, nutrient, pest, or irrigation management systems; or land uses to conserve and improve soil, water, air, and related natural resources; and
- Consolidated and simplified conservation planning and implementation to reduce the administrative burden on producers.

**National Priorities.** EQIP statutory provisions require that at least 60 percent of the financial assistance funds for EQIP be targeted to livestock-related operations, including both confined livestock operations and grazed lands. The 2014 Act added developing and improving wildlife habitat as a national priority requiring at least five percent of the financial assistance funds be targeted to wildlife practices. With input from the public, agricultural and environmental organizations, Conservation Districts, agencies, and other partners, NRCS has the following national priorities for EQIP:

- Reduction of nonpoint source pollution, such as nutrients, sediment, pesticides, or excess salinity in impaired watersheds consistent with Total Maximum Daily Loads (TMDLs), where available;
- Reduction of contamination from agricultural point sources, such as concentrated animal feeding operations;
- Reduction of surface and groundwater contamination and conservation of surface and groundwater resources;
- Reduction of emissions, such as particulate matter, nitrogen oxides, volatile organic compounds, and ozone precursors and depleters, that contribute to air quality impairment violations of National Ambient Air Quality Standards;
- Reduction in soil erosion and sedimentation;
- Promotion of at-risk species habitat conservation; and
- Promotion of energy conservation.

**Eligibility.** To participate in EQIP, both the land and the applicant must be eligible. Eligible land includes cropland, rangeland, pastureland, private nonindustrial forestland, tribal land, and other farm or ranch lands. The land must have an identified natural resource concern that poses a serious threat to soil, water, air, or related resources by reason of land use practices, soil type, terrain, climatic conditions, topography, flooding, saline characteristics, or other natural resource factors. Publicly-owned land is eligible when the land is under the control of an eligible producer for the contract period, is included in the participant's operating unit, and the participant has written authorization from the government agency to apply conservation practices. For irrigation-related practices, the land must have a history of being actively irrigated for two out of the last five years.

Applicants must be an agricultural producer, have control of the land for the life of the contract, develop an EQIP plan of operations, and be in compliance with statutory payment eligibility provisions and limitations including highly erodible land compliance, wetland conservation compliance, adjusted gross income limitations, and protection of tenants and sharecroppers. Eligible applications are accepted year-round at local USDA Service Centers, but ranking cut-off dates that vary by State are established to allow ranking and approval.

**Technical Assistance.** NRCS works with the participant to develop the EQIP plan of operations, which forms the basis of the EQIP contract. The plan may be developed with NRCS technical assistance, or EQIP may provide financial assistance to the participant to obtain the services of an Agency-certified Technical Service Provider (TSP) who develops a conservation plan or EQIP plan of operations for the offered acres initially determined eligible. The plan identifies the conservation practices and activities that will be implemented through EQIP.

Implementation of conservation practices must contribute to an improvement in the identified natural resource concern as determined through the application evaluation and ranking process. Conservation practices include structural practices, land management practices, vegetative practices, forest management practices, conservation activities, and other improvements that achieve the program purposes. Conservation activities supported through EQIP may include the development of specialized plans such as comprehensive nutrient management plans, agricultural energy management plans, dryland transition plans, forest management plans, integrated pest management, and other similar plans. To earn program payment, these plans, activities, and practices must meet NRCS technical standards adapted for local conditions.



**Financial Assistance.** EQIP payment rates may be up to 75 percent of the estimated incurred costs and up to 100 percent of income foregone related to certain conservation practices. Historically underserved producers, including socially disadvantaged, limited resource, or beginning farmers and ranchers, and Tribal members, may be eligible for payment rates up to 90 percent for estimated incurred costs. Payment rates and estimated incurred costs are documented in Agency developed and approved payment schedules. Contracts are for a minimum term that ends one year after the implementation of the last scheduled practices and for a maximum term of 10 years.

Total EQIP conservation payments are limited to \$450,000 in financial assistance per person or legal entity for contracts entered into between FY 2014 through 2018, regardless of the number of contracts.

**Partnerships.** NRCS cooperates with Federal, State, and local partners to address local and national conservation issues and to complement their conservation programs. Partners include the National Association of Conservation Districts, State Associations of Conservation Districts, and local conservation districts in efforts to deliver a program beneficial to program participants and the environment. Through interactive communication between the local community, local interest groups, and State and Federal agencies, EQIP provides the partners with information and resources needed to address local priorities and implement State and national programs, such as EQIP.

**Chiefs' Joint Landscape Restoration Partnership** – The Chiefs' Joint Landscape Restoration Partnership targets 13 priority watersheds where NRCS and Forest Service are combining resources and coordinating activities to restore landscapes across ownership boundaries. These projects aim to reduce wildfire threats to communities and landowners, protect water quality and supply, and improve habitat for at-risk species seamlessly across public and private lands. By working across Agency lines on adjacent public and private lands, conservation work in the watersheds will be more efficient and effective. The 13 priority watersheds chosen had existing local partnerships and work in progress. In 2014, NRCS obligated \$9.7 million to forestry activities in these watersheds. The agencies are reviewing lessons learned and considering additional sites for the partnership in 2015.

**StrikeForce Initiative** – The USDA StrikeForce Initiative's mission is to increase investments and create opportunities in persistent poverty-stricken rural communities using a multi-agency approach to achieve its mission. The Secretary of Agriculture launched StrikeForce in 2010 as a pilot project in persistent poverty areas in rural Arkansas, Georgia and Mississippi. By 2014, StrikeForce efforts have expanded an additional 17 persistent poverty counties in Colorado, New Mexico, Nevada, Alabama, Alaska, Arizona, North Carolina, North Dakota, South Carolina, South Dakota, Texas, Utah, Virginia, Kentucky, Louisiana, Tennessee, and West Virginia. There are now over 700 identified persistent-poverty counties, parishes, boroughs, Colonias, and Tribal reservations in the 20 States eligible to receive StrikeForce funding opportunities. Since its inception, StrikeForce has formed over 400 community based partnerships and supported over 80,300 projects and opportunities to strengthen America's rural economy. Additional States are being considered for eligibility in 2015.

#### **2014 Activities.**

In 2014, EQIP financial assistance obligations were over \$928 million in 37,207 active or completed contracts covering an estimated 11.2 million acres. In addition to regular EQIP projects, these funds also supported projects in resource-based initiatives, such as air quality, on-farm energy and energy conservation, migratory bird habitat, and the Mississippi River Basin, and projects in initiatives, such as organic production, seasonal high tunnels, and America's Great Outdoors, focused on environmental benefit and agricultural production as compatible goals.

**Air Quality** – In 2014, NRCS provided over \$29.5 million in financial and technical assistance to nine States through the national Air Quality Initiative to help producers meet requirements of the Clean Air Act. Through this initiative, NRCS provides assistance to farmers and ranchers to reduce air pollution generated from agricultural operations in areas designated by the Environmental Protection Agency as non-attainment areas for ozone and particulate matter. During 2014, 933 active and completed contracts supported some 2,011 practices on more than 105,983 acres.

**Organics** – The Organic Initiative is a nationwide special initiative that provides assistance to organic producers as well as producers in the process of transitioning to organic production. In 2014, NRCS obligated over \$4.9 million in EQIP funds to 388 active and completed contracts, treating 20,187 acres in organic production or in transition to

organic production. One critical benefit of the Organic Initiative is sustaining the natural physical, biological, and chemical properties of the soil, which is vital to organic production.

**Drought Assistance** – In 2014, NRCS obligated over \$3.9 million in 75 EQIP active and completed contracts with producers in five States that were severely affected by drought. These producers were able to use EQIP financial assistance for practices on their farm or ranch operation such as watering facilities, prescribed grazing, pasture and hayland planting, and cover crops. NRCS is developing strategies to assist producers address potential effects of future droughts by implementing conservation practices that will maintain and improve soil health.

EQIP is highly popular among producers, and demand for the program is high across the country. Nationally, slightly over 36.7 percent of qualifying projects (valid applications) were funded in 2014, as the table below shows.

**2014 Total EQIP Program Demands<sup>1</sup>**

State	Total Applications Received	Number of Active and Completed Contracts	Unfunded Valid Applications	Valid Applications Funded (Percent)	Average Contract Amount	Estimated Unfunded Application Amount
Alabama	3,765	1,192	1,529	43.8	\$13,045	\$19,945,805
Alaska	414	150	164	47.8	51,226	8,401,064
Arizona	364	128	147	46.5	60,914	8,954,358
Arkansas	8,631	1,476	5,533	21.1	31,861	176,286,913
California	9,423	2,410	3,655	39.7	40,812	149,167,860
Colorado	2,003	487	935	34.2	57,034	53,326,790
Connecticut	433	220	139	61.3	20,709	2,878,551
Delaware	484	224	182	55.2	26,991	4,912,362
Florida	1,333	413	487	45.9	29,915	14,568,605
Georgia	5,859	1,721	3,008	36.4	13,326	40,084,608
Hawaii	307	76	101	42.9	65,851	6,650,951
Idaho	1,191	309	577	34.9	36,702	21,177,054
Illinois	3,076	506	2,325	17.9	21,862	50,829,150
Indiana	1,732	634	767	45.3	24,401	18,715,567
Iowa	4,619	1,085	2,429	30.9	20,999	51,006,571
Kansas	2,041	748	716	51.1	24,534	17,566,344
Kentucky	2,295	778	771	50.2	14,978	11,548,038
Louisiana	2,592	714	1,328	35.0	22,982	30,520,096
Maine	1,728	561	872	39.1	17,579	15,328,888
Maryland	716	314	260	54.7	34,457	8,958,820
Massachusetts	327	146	136	51.8	17,139	2,330,904
Michigan	2,221	969	1,068	47.6	19,414	20,734,152
Minnesota	2,428	1,144	740	60.7	15,941	11,796,340
Mississippi	9,574	2,011	4,113	32.8	14,860	61,119,180
Missouri	5,118	964	2,882	25.1	23,016	66,332,112
Montana	1,243	186	691	21.2		49,649,732
Nebraska	5,724	1,064	3,307	24.3	24,813	82,056,591
Nevada	283	99	103	49.0	88,670	9,133,010
New Hampshire	627	306	252	54.8	14,852	3,742,704
New Jersey	338	203	13	94.0	24,472	318,136
New Mexico	1,629	416	897	31.7	50,221	45,048,237
New York	1,341	542	485	52.8	27,927	13,544,595
North Carolina	2,631	647	1,453	30.8	26,488	38,487,064
North Dakota	3,553	697	2,066	25.2	28,391	58,655,806
Ohio	3,614	843	2,221	27.5	22,230	49,372,830

State	Total Applications Received	Number of Active and Completed Contracts	Unfunded Valid Applications	Valid Applications Funded (Percent)	Average Contract Amount	Estimated Unfunded Application Amount
Oklahoma	7,473	1,086	4,255	20.3	17,993	76,560,215
Oregon	1,130	448	521	46.2	42,712	22,252,952
Pennsylvania	3,265	672	2,020	25.0	32,213	65,070,260
Rhode Island	266	170	38	81.7	11,512	437,456
South Carolina	1,963	637	875	42.1	20,643	18,062,625
South Dakota	2,513	687	1,313	34.4	23,862	31,330,806
Tennessee	3,398	1,176	1,273	48.0	16,931	21,553,163
Texas	7,428	3,456	2,922	54.2	24,290	70,975,380
Utah	1,691	415	630	39.7	47,089	29,666,070
Vermont	1,087	429	396	52.0	21,165	8,381,340
Virginia	1,480	799	444	64.3	23,781	10,558,764
Washington	1,793	434	855	33.7	29,381	25,120,755
West Virginia	1,625	506	772	39.6	19,690	15,200,680
Wisconsin	3,331	1,302	629	67.4	18,746	11,791,234
Wyoming	816	142	527	21.2	64,364	33,919,828
Pacific Basin	170	65	68	48.9	20,558	1,397,944
Caribbean Area	756	400	279	58.9	9,427	2,630,133
Total	133,842	37,207	64,169	36.7	24,966	1,668,059,393

<sup>1</sup>Source: Protracts as of October 5, 2014. Unfunded applications include pre-approved, deferred, eligible, and pending. Estimated Value of Unfunded Applications (\$) determined from number of unfunded valid applications multiplied by average contract amount.

### Significant EQIP Accomplishments.

**Conservation Innovation Grants (CIG).** In 2014, NRCS offered a funding opportunity through CIG to support the demonstration of projects addressing natural resources concerns. The Secretary of Agriculture awarded \$15.7 million in CIG to 47 organizations that will help develop and demonstrate cutting-edge ideas to accelerate innovation in private lands conservation. Examples of funded projects include:

- National Association of Conservation Districts received \$750,000 to overcome barriers and significantly increase the number of farmed acres nationwide that are successfully managed for soil health, appropriate to local conditions.
- National Corn Growers Association received \$998,000 to demonstrate the contributions improved soil health makes to increased agricultural productivity, profitability and environmental sustainability outcomes through the adoption of soil health promoting practices such as conservation tillage, cover crops, and advanced nutrient management in Iowa, Illinois, Indiana, Minnesota, Nebraska, Ohio and Wisconsin. The National Grazing Lands Coalition received \$279,720 to conduct outreach, education and demonstration activities on how prescribed grazing affects pasture and range productivity, conservation, and soil health using rainfall simulators in Texas, Louisiana, South Carolina, New York and North Dakota.
- Pinchot Institute for Conservation received \$125,000 to demonstrate the innovative "conservation for health care" incentive model, whereby family woodland owners will meet their health-related expenses by monetizing carbon credits generated through sustainable forestry instead of through timber liquidation or land sale in Oregon.
- Holmes County Food Hub received \$640,775 to introduce innovative conservation technologies and marketing techniques that encourage new and assist existing limited resource farm operations in west and central Mississippi. Seven of the approved grants support conservation technologies and approaches to help farmers and ranchers who historically have not had equal access to agricultural programs because of race, ethnicity, limited resources, or who are beginning farmers and ranchers.

## **Get Conservation on the Ground**

Facilitating forest-based offsets in water quality trading. The Alliance for the Chesapeake Bay, with funding from CIG, is developing tools to make it easier for people who own or manage forests to offer up their forested land for possible water quality and other ecosystem service credits. The Alliance is working to streamline the credit development process for water quality trading on forested land in the region. The new tools will help forest owners and managers determine if they are eligible, see which program makes the most sense for them, and find people that can help. These trading systems enable farmers, ranchers, and forest landowners in these Chesapeake Bay-area states to generate income by selling water quality credits to regulated entities such as waste water treatment facilities and developers. As this market matures, people will be able to incorporate clean water into their overall management objectives more seamlessly.

Bringing Greenhouse Gas Benefits to Market: Nutrient Management for Nitrous Oxide Reductions. NRCS awarded a CIG grant in 2011 to the Delta Institute to develop an innovative opportunity for farmers to receive greenhouse gas emissions reductions payments from the voluntary implementation of more efficient nitrogen fertilizer management techniques. Through the project, Delta Institute developed and field-tested a streamlined quantification technique that measures the effects of conservation on reducing nitrous oxide emissions. Nitrous oxide is a potent greenhouse gas released as part of the nitrogen cycle. The project uses an American Carbon Registry quantification methodology that was developed by Michigan State University and the Electric Power Research Institute. Credits quantified using this methodology and verified by a third party can then be sold through voluntary carbon markets. The project culminated in 2014 with an announcement of the first credit transaction generated by the project. Farmers are implementing nutrient management practices and reducing atmospheric emissions while maintaining yields.

Arizona: Organic and High Tunnels. An Arizona couple does their part in contributing to the burgeoning organic foods market. They have been ahead of the curve and growing organically since 1974. Starting with an abandoned dairy farm, a lonely cottonwood tree, and a passion for gardening, the farm is now beaming with life. Their passion has fueled the thriving organic vineyard and produce farm for nearly four decades. They continue to find and use new ways to utilize and conserve their land. With the technical and financial assistance provided by NRCS, they completed a 2,100 sq. ft. high tunnel in April 2014. The high tunnel was funded through NRCS's EQIP Organic Initiative. High tunnels are one of many organic practices NRCS can assist producers with improving their organic farms. Their new high tunnel helps improve their farm operations by providing an environmentally controlled growing area and a longer growing season to provide even more organic foods for America's grocery shelves.

Ohio: EQIP Overwhelming Demand for Lake Erie Cover Crops to Protect Endangered Toledo Water Supply. NRCS State Conservationist Terry Cosby announced the \$2 million emergency program in response to the Toledo water ban in early August. Cosby explained that cover crops could be planted immediately and has proven effective in reducing soil erosion and phosphorus run-off, the source of food that fuels algae growth during the summer. Due to the extraordinary farmer demand for the EQIP cover crop initiative in Ohio's portion of the Western Lake Erie Basin, Ohio received an additional \$1 million to fund applications submitted during the week-long sign-up period that began on August 19, bringing the total assistance provided to \$3 million. During this one-week period, NRCS received more than 450 applications to plant cover crops on 86,000 acres. To put that in perspective, in the five-year period from 2009 to 2013, NRCS funded 81,000 acres of cover crops in Ohio. In one week NRCS received more acres of cover crop applications than were funded in five years.

## CONSERVATION STEWARDSHIP PROGRAM

### **Current Activities.**

**Background.** Section 2301 of the Food, Conservation, and Energy Act of 2008 (2008 Act) amended the Food Security Act of 1985 to establish the Conservation Stewardship Program (CSP). The 2012 Agricultural Appropriations Act extended CSP enrollment authority through 2014. Section 2101 of the Agricultural Act of 2014 re-authorized the CSP through 2018 and made minor adjustments to its administration.

**Program Objective.** CSP encourages agricultural and forestry producers to maintain existing conservation activities and to adopt additional ones on their operations. CSP provides opportunities to recognize excellent stewards and deliver valuable new conservation. The program helps producers identify natural resource problems in

their operation and provides technical and financial assistance to solve those problems in an environmentally-beneficial and cost-effective manner.

CSP addresses priority resource concerns as identified at the national, State or local level. Below are examples of how the program addresses some priority concerns:

- Soil erosion - reducing the amount of soil lost through wind, sheet, and rill erosion from cropland, stream banks, and farm roads;
- Soil quality - increasing soil organic matter, reducing compaction, reducing organic matter oxidation, removing soil contaminants, and utilizing nutrient cycling;
- Water quantity - mitigating the impact of excess water, improving water usage through irrigation efficiency, and selecting crops based on available moisture;
- Water quality - reducing the negative impact of transported sediments, nutrients, pesticides, salinity, and pathogens on surface and subsurface water sources;
- Air quality - reducing the contribution of agricultural operations to airborne soil particles and greenhouse gas emissions, controlling chemical spray drift, and reducing odors from livestock operations;
- Plant resources - improving the quantity, diversity, health, and vigor of plants while creating conditions for recognized threatened and endangered species to reestablish;
- Animal resources - improving the cover, food, and water available for domestic and wildlife species and improving habitat for aquatic and recognized threatened and endangered species; and
- Energy - promoting energy efficiencies for on-farm activities.

**Program Operations.** CSP is a voluntary program available through a continuous sign-up process, with announced cut-off dates for ranking and funding applications. This allows producers to submit their applications at any time. Applications are evaluated relative to other applications addressing similar priority resource concerns to facilitate a competitive ranking process among applications that face similar resource challenges. The 2014 Act prescribed the following factors for evaluating and ranking applications:

- Level of conservation treatment on all applicable priority resource concerns at the time of application;
- Degree to which the proposed conservation activities effectively increases conservation performance;
- Number of applicable priority resource concerns proposed to be treated to meet or exceed the stewardship threshold by the end of the contract;
- Extent to which other priority resource concerns will be addressed to meet or exceed the stewardship threshold by the end of the contract period;
- Extent to which the actual and anticipated conservation benefits from the contract are provided at the least cost relative to other similarly beneficial contracts offers; and
- Extent to which priority resource concerns will be addressed when transitioning from the conservation reserve program to agricultural production.

Congress authorized the enrollment of an additional 10,000,000 acres each fiscal year 2014 through 2018 beginning October 1, 2013.

The program is national in scope, but NRCS did not establish national priority resource concerns. Instead, States determine not less than five priority resource concerns that are of specific concern for their State or for geographic areas within the State.

**Eligibility.** Eligibility to participate in CSP has three components - applicant, land, and stewardship threshold eligibility. CSP is available to all producers, regardless of operation size or crops produced, in all 50 States, the District of Columbia, and the Caribbean and Pacific Island areas. Individuals, legal entities, joint operations, or Indian Tribes may apply. To be accepted, the applicant must have effective control of the land and be the operator of record with the Farm Service Agency records system. Eligible lands include cropland, pastureland, rangeland and non-industrial private forestland, agricultural land under the jurisdiction of an Indian Tribe, and other private agricultural land (including cropped woodland, marshes, and agricultural land used for the production of livestock) on which resource concerns related to agricultural production could be addressed.

Once applicant and land eligibility are determined, NRCS uses a science-based stewardship threshold for each identified priority resource concern to assess an applicant’s conservation activities. These activities must meet or exceed the stewardship threshold for at least two priority resource concerns at the time of the application, and one additional priority resource concern by the end of the CSP contract.

**Financial Assistance.** CSP provides participants with two possible types of payments. An annual payment is available for installing new conservation activities and maintaining existing activities. A supplemental payment may be earned by participants receiving an annual payment who also adopt a resource-conserving crop rotation. CSP contracts are for a five-year period, and payments are made as soon as practicable after October 1 of each year for contract activities installed and maintained in the previous fiscal year. For all contracts, CSP payments to a person or legal entity may not exceed \$40,000 in any year and \$200,000 during any five-year period. However, joint operations may qualify for up to \$400,000 over the term of the initial contract period.

**Technical Assistance and Partnership.** CSP offers technical assistance to producers to address resource concerns in a comprehensive manner. Through the planning process, NRCS helps producers and forestry land owners identify natural resource problems in their operation, and provide technical and financial assistance to solve those problems in an environmentally-beneficial and cost-effective manner.

Partnerships have been created with Federal, State, and local entities, including the National Association of Conservation Districts, State Associations of Conservation Districts, and local conservation districts in order to deliver a program beneficial to program participants and the environment. NRCS cooperates with Federal, State, and local partners to address local and national conservation issues. Through interactive communication between the local community, local interest groups, and State and Federal agencies, the partnership provides the entities with information and resources needed to address local priorities and implement State and national programs, such as CSP.

**2014 Activities.**

In 2014, CSP provided more than \$140 million in financial assistance funding for new enrollments, as shown in the State distribution table below. These funds will be used to treat 9,598,224 acres.

**2014 Enrollement<sup>1</sup>**

<b>State</b>	<b>Acres Treated</b>	<b>Financial Assistance (\$ obligated)</b>
Alabama	13,424	\$230,790
Alaska	121,762	312,895
Arizona	1,140	24,502
Arkansas	417,293	12,428,292
California	57,533	348,586
Colorado	241,570	1,723,817
Connecticut	8,301	152,247
Delaware	58,081	348,226
Florida	168,471	6,959,858
Georgia	446	4,678
Idaho	80,928	807,948
Illinois	399,024	8,522,651
Indiana	58,588	1,203,545
Iowa	201,209	4,509,956
Kansas	298,974	3,775,682
Kentucky	11,112	204,924

<b>State</b>	<b>Acres Treated</b>	<b>Financial Assistance (\$ obligated)</b>
Louisiana	266,001	6,163,189
Maine	136	1,285
Maryland	619	34,810
Massachusetts	1,809	6,651
Michigan	27,083	508,834
Minnesota	475,208	12,459,305
Mississippi	217,314	5,995,903
Missouri	188,115	3,340,465
Montana	676,519	5,118,233
Nebraska	679,947	7,701,982
Nevada	1,793	36,941
New Jersey	1,493	40,892
New Mexico	909,194	4,404,479
New York	32,733	562,414
North Carolina	11,460	252,767
North Dakota	446,132	9,766,438
Ohio	49,717	1,034,201
Oklahoma	718,982	9,230,174
Oregon	459,633	4,101,933
Pennsylvania	12,233	352,685
Rhode Island	1,765	7,637
South Carolina	19,413	277,829
South Dakota	1,276,040	15,261,717
Tennessee	66,387	1,326,219
Texas	285,383	2,977,340
Utah	213,302	929,657
Vermont	266	4,209
Virginia	17,978	284,073
Washington	125,716	2,305,218
West Virginia	17,184	205,909
Wisconsin	162,016	3,274,870
Wyoming	98,797	492,798
<b>Total</b>	<b>9,598,224</b>	<b>140,019,654</b>

<sup>1</sup> Source: NRCS Protracts October 5, 2014

Since the program started in 2009, more than 67 million acres of agricultural land have been enrolled into the program. CSP helps farmers and ranchers who are already taking action to conserve natural resources do even more to benefit the soil, water, air and other resources on their operations. CSP has grown into a major force for conservation, and it continues to strongly inspire others with the desire to go the extra mile to conserve and protect America's natural resources. With the 2014 sign up enrollment of about 9.6 million acres, the total acreage of lands now enrolled in CSP exceeds 104,000 square miles, an area larger than Iowa and Indiana, combined.

### **Getting Conservation on the Ground.**

Wisconsin: As new owners of an 80-acre farm in Cadott, WI, the producers had new plans and goals for their acreage to address their natural resource concerns on the farm. They wanted to revitalize the woods on the property and create more wildlife habitat. What was permanent pasture is now productive pasture through planting native legumes and managed rotational grazing. Working with NRCS is an important part of their plan. Managed rotational grazing is the primary conservation practice and the foundation for making additional enhancements to their farm through the Conservation Stewardship Program (CSP). “When I learned about all the practices suggested through CSP, I wanted to do all of them because there are so many great things for the environment,” said the owner. “But we concentrated on only a few for now.” One of the CSP conservation enhancements includes improving pasture by planting a mix including legumes, which increase forage quality and improves soil fertility. Another enhancement includes monitoring the key grazing areas on the farm to improve grazing management. By monitoring plant productivity and measuring forage heights determinations can be made for grazing land management systems. An enhancement to establish a windbreak creates new wildlife habitat, and provides a shelter for many animal species. It took a lot of time and effort for the farm to become what is now a beautiful grass farm. The participant says that “NRCS is easy to work with and they are willing to share their expertise.” Today the operation provides direct-from-the-farm grass-fed beef and other naturally grown foods that are good for one’s health and for the environment.

## AGRICULTURAL CONSERVATION EASEMENT PROGRAM

### **Current Activities.**

**Background.** The Agricultural Conservation Easement Program (ACEP) is authorized by subtitle H of title XII of the Food Security Act of 1985, as amended by Section 2301 of the Agricultural Act of 2014, (P. L. 113-79). ACEP consolidates the purposes and functions of three former easement programs: the Farm and Ranch Lands Protection Program (FRPP), the Grassland Reserve Program (GRP), and the Wetlands Reserve Program (WRP). Lands enrolled under these former easement programs are considered enrolled in ACEP. ACEP is funded by the Commodity Credit Corporation (CCC) and administered by NRCS. ACEP provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits by directly acquiring or funding the acquisition of conservation easements.

**Program Objectives.** Through ACEP-Agricultural Land Easements (ALE), ACEP helps farmers and ranchers keep their land in agriculture. The program also protects grazing uses and related conservation values by conserving grassland, including rangeland, pastureland and shrubland. Cooperating entities include an Indian Tribe, State government, local government, or a nongovernmental organization which has a farmland or grassland protection program that purchases agricultural land easements for the purpose of protecting agriculture use and related conservation values, including grazing uses and related conservation values, by limiting conversion to non-agricultural uses of the land.

ACEP-ALE protects the Nation’s most valuable lands for the production of food, feed, and fiber by providing matching funds to keep productive farm and ranch lands in agricultural use. By enrolling in ACEP-ALE, farm and ranch lands threatened by development pressures can remain productive and sustainable. Keeping land in agricultural use reduces the amount of urban pollution (nitrogen, phosphorus and sedimentation) from land that would otherwise be converted to lawns and impervious surfaces such as paving and buildings. Ultimately this assists with efforts in managing the Total Maximum Daily Load (TMDL) of nutrients to public waters such as the Chesapeake Bay and Mississippi River. Additionally, ACEP-ALE supports the President’s America’s Great Outdoors Initiative by preserving the natural landscape features of non-urbanized areas and encouraging the continued agricultural uses of the lands.

Through ACEP-Wetland Reserve Easements (WRE), ACEP provides technical and financial assistance directly to private landowners and Indian Tribes to restore, protect, and enhance wetlands through the purchase of a wetland reserve easement or 30-year contract. Wetlands provide habitat for fish and wildlife, including threatened and endangered species, improve water quality by filtering sediments and chemicals, reduce flooding, recharge groundwater, protect biological diversity, and provide opportunities for educational, scientific and limited recreational activities. ACEP-WRE’s goal is to achieve the greatest wetlands functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. This is accomplished by restoring former wetland



and associated habitats on lands that were converted for agricultural use and have a high likelihood of successful restoration.

Over 50 percent of the Nation's wetlands in the lower 48 States have been lost since colonial times and the greatest potential for restoration exists on private lands. Over 80 percent of lands on which restoration is economically feasible are in private ownership. To achieve successful restoration that maximizes benefits to both the landowners and the public, ACEP-WRE focuses on: 1) enrolling marginal lands that have a history of crop failures or low production yields; 2) restoring and protecting wetland values on degraded wetlands; 3) maximizing wildlife benefits; 4) achieving cost-effective restoration with a priority on benefits to migratory birds; 5) protecting and improving water quality; 6) reducing the impact of flood events; 7) increasing ecosystem resilience; and 8) promoting scientific and educational uses of ACEP-WRE projects.

**Program Operations.** ACEP is a voluntary program, consisting of two components: 1) an agricultural land easement (ALE) component under which NRCS assists eligible entities to protect agricultural land by limiting non-agricultural uses of that land through the purchase of agricultural land easements; and 2) a wetland reserve easements (WRE) component under which NRCS provides financial and technical assistance directly to landowners to restore, protect and enhance wetlands through the purchase of wetlands reserve easements.

To enroll land through agricultural land easements, NRCS enters into cooperative agreements with cooperating entities that include the terms and conditions under which the partner is permitted to use ACEP cost-share assistance. Each agricultural land easement must be managed according to an agricultural land easement plan that promotes the long-term viability of the land.

To enroll land through wetland reserve easements, NRCS enters into purchase agreements with eligible private landowners or Indian tribes that include the right for NRCS to develop and implement a wetland reserve restoration easement plan. This plan restores, protects, and enhances the wetlands functions and values of the land. NRCS may authorize enrolled land to be used for compatible economic uses, including activities such as hunting and fishing, managed timber harvest, or periodic haying or grazing if such uses are consistent with the long-term protection and enhancement of the wetland resources for which the easement was established.

**Eligibility.** ACEP is available in any of the 50 States, the District of Columbia, Commonwealth of Puerto Rico, Guam, the Virgin Islands of the United States, American Samoa, and the Commonwealth of the Northern Mariana Islands on all lands meeting any of the following eligibility criteria:

- Land eligible for agricultural easements includes cropland, rangeland, grassland, pastureland and nonindustrial private forest land. NRCS will prioritize applications that protect agricultural uses and related conservation values of the land and those that maximize the protection of contiguous acres devoted to agricultural use;
- Land eligible for wetland reserve easements includes farmed or converted wetland that can be successfully and cost-effectively restored. NRCS will prioritize applications based the easement's potential for protecting and enhancing habitat for migratory birds and other wildlife.

**Project Selection.**

**ALE:** NRCS uses a continuous signup under which eligible entities may propose and submit parcels for funding. Upon receipt of the applications for parcels from an eligible entity, each NRCS State office evaluates the entities, land, and landowners for eligibility, and ranks and prioritizes parcels based on established criteria. NRCS awards funds to the partners that submit the highest ranked parcels for which the NRCS State office has ACEP funding. NRCS priorities include farms that face the greatest pressure to convert to non-agricultural uses, are accessible to appropriate markets, contain prime soils or other farmlands of significance, have adequate infrastructure and agricultural support services, have surrounding parcels of land that can support long-term agricultural production, and grasslands of special environmental significance.

**WRE:** To enroll land through wetland reserve easements, landowners may apply at any time at a local USDA Service Center. NRCS determines landowner and land eligibility, ranks each application based upon ranking criteria developed with input from the State Technical Committee, and makes tentative funding selections. NRCS priorities include the extent to ACEP-WRE purposes would be achieved on the land, including the value of the easement for

protecting and enhancing habitat for migratory birds and other wildlife, the conservation benefits of obtaining an easement, the cost-effectiveness of each easement, and whether Federal funds are being leveraged.

**Financial Assistance. ALE:** NRCS and eligible entities sign a cooperative agreement to obligate ACEP funds. The cooperating entities acquire the conservation easements, and then hold, monitor, manage, and enforce the acquired easements. Generally, the Federal share for any easement acquisition cannot exceed 50 percent of the appraised fair market value of the conservation easement. Where NRCS determines that grasslands of special environmental significance will be protected, NRCS may contribute up to 75 percent of the fair market value of the agricultural land easement. Each conservation easement deed must include a provision granting the United States the right of enforcement to protect the Federal investment. To ensure the long-term viability of the land, the landowner must implement an agricultural land easement plan on each parcel acquired in part with Federal funds.

**WRE:** NRCS and an eligible landowner sign an Agreement to Purchase a Conservation Easement to enroll land and obligate ACEP funds. Through the wetland reserve enrollment options, NRCS may enroll eligible land through:

- *Permanent Easements*, which are conservation easements in perpetuity. NRCS pays 100 percent of the easement value for the purchase of the easement, and between 75 to 100 percent of the restoration costs.
- *30-Year Easements*, which expire after 30 years. Under 30-year easements, NRCS pays 50 to 75 percent of the easement value for the purchase of the easement, and between 50 to 75 percent of the restoration costs.
- *Term Easements*, which are easements that are for the maximum duration allowed under applicable state laws. NRCS pays 50 to 75 percent of the easement value for the purchase of the term easement and between 50 to 75 percent of the restoration costs.
- *30-year Contracts*, which are only available to enroll acreage owned by Indian Tribes. Program payment rates are commensurate with 30-year easements.

For wetland reserve easements, NRCS pays all costs associated with recording the easement in the local land records office, including recording fees, charges for abstracts, survey and appraisal fees, and title insurance.

**Technical Assistance. ALE:** In addition to helping landowners and entities develop conservation easement deeds and agricultural land easement plans, NRCS provides technical assistance through verification of the eligibility of the entity, landowner, and land; assessment of the risk of hazardous materials; evaluation and ranking applications; development of cooperative agreements; review of deeds, title, and appraisals; and payment processing.

**WRE:** NRCS conducts ecological and cost ranking and develops a preliminary site plan for the offered acres, with input from State wildlife agencies and the Department of the Interior's Fish and Wildlife Service. Once the landowner accepts an offer, NRCS completes restoration designs and implements the conservation practices necessary to restore the identified habitats on the easement, contract, or agreement area.

NRCS continues to provide assistance to the landowner throughout the life of the project, after the initial completion of the restoration activities. NRCS works cooperatively with the private landowners to develop management and maintenance plans, conduct monitoring and enforcement, identify enhancement or repair needs, and provide biological and engineering advice on how to achieve optimum results for wetland-dependent wildlife or other desired ecosystem services.

### **2014 Activities.**

For 2014, \$328 million in ACEP funding was used to enroll an estimated 143,833 acres of farmland, grasslands, and wetlands through 485 new ACEP easements. An additional \$10 million in ACEP funds have been dedicated to a FY 2014 Contribution Agreement with partners for the protection and restoration of wetland and agricultural resources in the Gulf Coast states. This agreement leverages Federal funds with the partners providing an equal contribution in non-Federal funds.

### **ACEP-ALE Enrollment.**

NRCS received 323 high priority ACEP-ALE applications for nearly \$125 million in funding requests on over 137,000 acres, including 28 applications for ACEP-ALE on over 58,000 acres of Grasslands of Special Environmental Significance. Available funding allowed for the enrollment of 55 percent of high priority

applications for ACEP-ALE. Enrollment is defined as the point at which the cooperating entity and NRCS enter into the cooperative agreement authorizing the cooperating entity to proceed with the purchase of the easement.

In 2014, NRCS enrolled a total of 88,892 acres in 190 new ACEP-ALE enrollments (table below). This includes both general agricultural land easements and agricultural land easements on Grasslands of Special Environmental Significance. The average project size was 232 acres in general ALE and 2,588 acres in ALE on Grasslands of Special Environmental Significance.

Agreement Type	2014 Agreements	2014 Acres Enrolled
ALE	171	39,719
ALE-Grasslands of Special Environmental Significance	19	49,173
Total	190	88,892

#### **ACEP-WRE Enrollment.**

NRCS received 450 high priority ACEP-WRE applications for nearly \$300 million in funding requests on over 83,000 acres. Available funding allowed for the enrollment of 51 percent of high priority applications for ACEP-WRE. Enrollment is defined as the point at which the landowner and NRCS enter into the agreement authorizing NRCS to proceed with the purchase of the easement or 30-year contract. NRCS estimates the funding needed for enrollment of new acres in a given year by projecting the number of acres by enrollment option (i.e. permanent easements, 30-year easements, or 30-year contracts) and the geographic rate cap for the location of the acres to be enrolled.

In 2014, NRCS enrolled a total of 54,941 acres in 295 new ACEP-WRE enrollments (table below). The majority were in easements (46,724 acres in 255 permanent easements and 8,217 acres in 40 30-year easements). The average project size was 186 acres.

Agreement Type	2014 Agreements	2014 Acres Enrolled
30-year contracts with Tribes	-	-
30-year easement	40	8,217
Permanent easement	255	46,724
Total	295	54,941

#### **Get Conservation on the Ground.**

**Florida.** In 2014, NRCS demonstrated its continued commitment to restoring and protecting wetlands in the critically important Northern Everglades Watershed by providing \$18 million in ACEP-WRE funds and enrolling an additional 6,700 acres in the watershed. These funds support the restoration and protection of habitat for a variety of listed species, including the Federally-listed Wood Stork, Crested caracara, and Eastern indigo snake.

**Georgia.** In 2014, ACEP-WRE funds were used to complete the Roundabout Swamp project. The original WRP enrollment in 2002 protected 2,630 acres. The additional 270-acre ACEP-WRE enrollment adds more of the Carolina Bay and helps toward the goal of restoring and protecting the entire bay ecosystem from agriculture to historic hydrology and vegetation. Additionally, 1,600 acres enrolled in ACEP-WRE will add significantly to the restoration and protection of land along the Altamaha River Corridor, which is a high priority waterway in Georgia.

### REGIONAL CONSERVATION PARTNERSHIP PROGRAM

#### **Current Activities.**

##### **Background.**

The Regional Conservation Partnership Program (RCPP) is authorized by Subtitle I of Title XII of the Food Security Act of 1985 (the 1985 Act), as amended by Section 2401 of the Agricultural Act of 2014 (P.L. 113-79). The Secretary of Agriculture has delegated the authority to administer RCPP to the Chief of the Natural Resources Conservation Service (NRCS), who is Vice President of the Commodity Credit Corporation (CCC). RCPP is delivered through the authorities and rules of four NRCS programs, collectively known as the covered programs, and certain authorities under the Watershed Protection and Flood Prevention Act (Public Law 83-566). The covered

programs for RCPP are the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Healthy Forests Reserve Program (HFRP), and Agricultural Conservation Easement Program (ACEP).

**Program Objectives.** The purpose of RCPP is to further the conservation, restoration, and sustainable use of soil, water, wildlife and related natural resources on eligible land on a regional or watershed scale. It encourages eligible partners to cooperate with producers in meeting or avoiding the need for regulatory requirements related to agricultural production. Through RCPP, NRCS and State, local and regional partners coordinate resources to help producers install and maintain conservation activities in selected project areas. Partners leverage RCPP funding in project areas and report on the benefits achieved to increase the restoration and sustainable use of soil, water, wildlife and related natural resources on regional or watershed scales. The goal is to implement projects that will result in the installation and maintenance of eligible activities that affect multiple agricultural or non-industrial private forest operations on a local, regional, State, or multi-state basis. RCPP offers new opportunities for NRCS to work with partners to encourage locally-driven innovation and create high-performing solutions, harness innovation, accelerate the conservation mission, launch bold ideas, and demonstrate the value and efficacy of voluntary, private lands conservation.

**Program Operations.** RCPP provides funding in the form of financial assistance and or technical assistance to participating partners, landowners, and producers. RCPP funding is allocated across three competitive funding pools. The funding pools split the total available RCPP funds as required by statute: 40 percent are allocated to the National pool; 35 percent are allocated to the Critical Conservation Area (CCA) pool; and 25 percent are allocated to the State pool. The Critical Conservation Areas are determined by the Secretary of Agriculture.

NRCS funds approved partner proposals by entering into partnership agreements with an eligible partner to implement a project that will assist producers with installing and maintaining eligible activities on eligible land. The partners contribute towards a significant portion of meeting the overall costs of the scope of the project. The partner contributions are used to leverage the benefits to the natural resources being protected and increase the protections provided by RCPP funds. The partnership agreement details the arrangement between NRCS and the partner including the programs being offered and any alternative funding arrangements.

**Eligible Partners.** RCPP eligible partners include agricultural or silvicultural producer associations; farmer cooperatives or other groups of producers; State or local governments; American Indian Tribes; municipal water treatment entities; water and irrigation districts; conservation-driven nongovernmental organizations; and institutions of higher education.

**Eligible Participants.** Under RCPP, eligible producers and landowners of agricultural land and non-industrial private forestland may enter into conservation program contracts or easement agreements under the framework of a partner cooperative agreement, or independently of a partner in a selected project area.

**Project Selection.** NRCS outlines the RCPP project selection process through announcements for program funding posted on grants.gov. Selection for RCPP proposals occurs in a two phase application process. The first phase consists of submission of a pre-proposal identifying and defining the activities, programs, funding pool, contributing funds, resource concerns, project area, and the entities providing funds and support for the project. Pre-proposals are evaluated by NRCS based on criteria detailed in the announcement for program funding. Selected pre-proposals are invited to submit a full proposal containing a detailed account of the resource concerns, program funding needed, project goals, project partners, partner contributions, and any terms necessary to implement the project. Upon selection of funded full proposal projects, the partner and NRCS enter into partnership agreements that outline the timeline, scope and deliverables necessary for successful completion of the project.

**Financial Assistance.** Funded projects are provided financial assistance based on the terms agreed upon between NRCS and the participating partners. RCPP operates by providing direct funds to landowners and producers under the covered program authorities. The delivery of the financial assistance for RCPP projects is individually tailored to each project based upon the needs and delivery options described in the proposal. Financial assistance for RCPP may also be delivered through partners under an alternative funding arrangement. RCPP authorizes up to 20 alternative funding arrangements with multi-state water agencies or authorities.

**Technical Assistance.** NRCS provides technical assistance either directly to producers and landowners or through the partners for the implementation of practices and activities under the covered programs.

#### **2014 Activities.**

In 2014, NRCS issued the Announcement for Program Funding (APF) and providing training to NRCS and partners about the RCPP process and funding sources. NRCS identified the availability of \$394 million in its May 27, 2014, RCPP APF, and established a deadline of July 14, 2014 for submittal of pre-proposals for State, CCA, and national funding pools. NRCS received pre-proposals that requested a total of \$2.7 billion in NRCS program funds and provided a partner contribution of \$2.9 billion in support of those funds; thus, the pre-proposals requested NRCS funding six times greater than the amount available. Pre-proposals were received from all 50 States and in every CCA designated, and the funding requests varied from \$6,000 for a project to \$20 million. NRCS invited approximately 210 applicants to submit a full proposal due on October 2, 2014, 200 applicant's actually submitted full proposals.

#### **Get Conservation on the Ground.**

Pre-proposals received emphasize need for resource concern solutions. NRCS received almost 600 pre-proposals in response to the APF. These submissions called upon potential support of about 5,000 partner organizations to help address resource concerns. Of the 543 eligible pre-proposals received, 205 were for projects in designated Critical Conservation Areas. The Mississippi River Basin CCA received the most eligible pre-proposals with 62. California received 19 pre-proposals, the largest number of pre-proposals for the State funding pool. The wide geographic variation in the amount of pre-proposals received emphasizes the need and desire of partners to address local resource concerns in many different areas. The pre-proposals received emphasized partnering on a local watershed level, State level, and multi-state levels to provide practices to benefit resource concerns affecting the entire nation.

### AGRICULTURAL MANAGEMENT ASSISTANCE PROGRAM

#### **Current Activities.**

**Background.** Section 524(b) of the Federal Crop Insurance Act (7 U.S.C. 1524(b)), Agricultural Management Assistance (AMA), authorizes the Secretary of Agriculture to use \$10 million of Commodity Credit Corporation (CCC) funds for financial assistance in selected States where participation in the Federal Crop Insurance Program is historically low (the authorized level of funding was \$15 million in FYs 2008 through 2014). Section 524(b) was added by Title I, Section 133, of the Agricultural Risk Protection Act of 2000 (P.L. 106-224). Section 133 was amended by the Farm Security and Rural Investment Act of 2002 (P.L. 107-171). This amendment identified the following States as eligible for AMA: Connecticut, Delaware, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Utah, Vermont, West Virginia, and Wyoming. Section 133 was further amended by the Food, Conservation and Energy Act of 2008 (2008 Act) (P.L. 110-246) to add Hawaii as the 16<sup>th</sup> State eligible for participation in AMA. The 2008 Act amendment also specified the amount of funds to be apportioned to NRCS, the Risk Management Agency (RMA), and the Agricultural Marketing Service (AMS). The Agricultural Act of 2014 did not make any amendments to the AMA program.

**Program Objectives.** NRCS administers the conservation provisions of the AMA program, which provides financial assistance to agricultural producers to address water management, water quality, and erosion control issues by incorporating conservation into their farming operations. With AMA funds, 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, including soil erosion control, integrated pest management, or transition to organic farming.

**Program Operations.** The AMA program addresses the following NRCS national priorities:

- Reducing non-point source pollution, such as nutrients, sediment, pesticides, or excess salinity in impaired watersheds consistent with Total Daily Maximum Loads, where available;
- Reducing surface and groundwater contamination;
- Promoting conservation of ground and surface water resources;

- Reducing emissions, such as particulate matter, nitrogen oxides, volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards;
- Reducing soil erosion and sedimentation from unacceptably high levels on agricultural land; and
- Promoting at-risk species habitat conservation.

Like other financial assistance programs, AMA implementation is based on a conservation plan, from which a contract is developed containing highly effective conservation practices that help mitigate the negative effects of resource concerns on the landscape and to the environment. The practices most frequently included in conservation plans and contracts include:

- Irrigation pipelines used to convey irrigation water in an efficient and effective manner;
- Micro-irrigation systems which have the highest irrigation efficiency and which can reduce water usage significantly;
- Sprinkler irrigation systems, which are the most widely used type of irrigation water delivery system that is both effective and efficient;
- Irrigation storage reservoirs used to store irrigation water for reuse;
- Pumping plants installed in conjunction with other irrigation system components to assist in water use or reuse;
- Water wells as a means by which to effectively utilize groundwater, often in conjunction with sprinkler and micro-irrigation systems;
- Fencing installed to assist in the management of livestock grazing, which is a vital component of any grazing management system;
- Brush management used to control invasive species and increase land productivity; and
- Seasonal high tunnel systems for crops, which are temporary structures that control the growing environment and improve the efficiency of water use.

NRCS developed the conservation provisions to make program implementation flexible enough to allow States the opportunity to use it to meet their resource needs. States individually determine the resource concerns to be addressed, eligible practices, applicant ranking criteria, the ranking process, and cutoff dates for ranking applications. States are responsible for fund allocations within the State, payment methods, and public outreach and information activities. Participants may use AMA in conjunction with other USDA conservation programs.

**Eligibility.** Applicants must own or control the land, which must be within one of the States in which the program is authorized, and comply with adjusted gross income limitation provisions. Eligible land includes cropland, rangeland, grassland, pastureland, nonindustrial forestland, and other private land that produces crops or livestock where risk may be mitigated through operation diversification or change in resource conservation practices.

**Financial Assistance.** AMA provides financial assistance to eligible participants. Participation is voluntary, but requires a conservation plan. NRCS works with the applicant to develop the plan. A contract may be for duration of not more than ten years. Participants must agree to maintain cost-shared practices for the life of the practice. They may contribute to the cost of a practice through in-kind contributions, which may include personal labor, use of personal equipment, donated labor or materials, and on-hand or approved used materials.

#### **2014 Activities.**

In 2014, NRCS allocated \$6.9 million of CCC funds for financial and technical assistance for approval of new AMA contracts. Of this amount, over \$5.1 million was obligated into 190 contracts covering 4,227 acres. Cumulatively, AMA has 477 contracts in implementation, and a continuing backlog of applications that indicates strong interest among producers in the program. At the end of 2014, AMA had a backlog of 323 applications, with an estimated contract value of \$4.8 million on 7,400 acres. Backlog estimates are based on 2014 average contract value and contract acreage.

AMA provides many producers a first-time opportunity to address natural resource concerns on their lands. For example, many producers have not been able to participate in the Environmental Quality Incentives Program (EQIP) because they do not meet the eligibility requirement that land must have been irrigated for two of the previous five years to receive EQIP funding. A number of these EQIP-ineligible producers are small-acreage or specialty-crop farming operations that provide high dollar value products to the general public. By helping to mitigate the risks

associated with these kinds of agricultural enterprises, AMA helps agriculture remain a valuable segment of local economies.

### **Get Conservation on the Ground.**

Hartly, Delaware. Seasonal high tunnels have emerged as an important tool of small farmers for extending their growing season and Mary Brown of Hartly, Delaware is one example of a small farmer who is reaping the benefits of her newly constructed high tunnel. Brown began construction on her high tunnel funded through the AMA program in the summer of 2013 and finished construction in time for the 2014 planting season. She installed plastic mulch to control weeds, moderate soil temperature and conserve water in the plant root zone, and she installed drip irrigation. She has grown raspberries, lettuce, strawberries, and three types of peppers, four varieties of tomatoes, string beans, cucumbers, and butternut squash. Her future plans include growing spinach, beets, lettuce, and more tomatoes. Since 2009, USDA's Natural Resources Conservation Service in Delaware has provided assistance to help producers construct 43 high tunnels Statewide.

## HEALTHY FORESTS RESERVE PROGRAM

### **Current Activities.**

**Background.** Title V of the Healthy Forests Restoration Act of 2003 (P.L. 108-148) authorized the establishment of the Healthy Forests Reserve Program (HFRP). The Food, Conservation, and Energy Act of 2008 (P.L. 110-246) amended the program to provide mandatory funding through the Commodity Credit Corporation (CCC). The Agricultural Act of 2014 made minor changes to HFRP by adding a definition of the term "acreage owned by Indian Tribes", identifying HFRP as a contributing program authorized to accomplish the purposes of the RCPP (Subtitle I of Title XII of the Food Security Act of 1985, replacing mandatory funding with authorization of appropriations, and authorizing the use of conservation operations funds for HFRP stewardship responsibilities.

**Program Objectives.** HFRP assists landowners in restoring, enhancing, and protecting forest ecosystems in order to: 1) promote the recovery of threatened and endangered species; 2) improve biodiversity; and 3) enhance carbon sequestration.

**Program Operations.** HFRP provides financial assistance for specific conservation actions completed by the landowner. The NRCS Chief solicits project proposals that State Conservationists have developed in cooperation with partnering organizations. States with approved projects provide public notice of the availability of funding within the selected geographic area(s). HFRP offers four enrollment options:

- 10-year restoration agreement. The landowner may receive 50 percent of the average cost of the approved conservation practices;
- 30-year contract (equivalent to the value of a 30-year easement). The landowner may receive 75 percent of the easement value of the enrolled land plus 75 percent of the average cost of the approved conservation restoration practices. This option is only available on acreage owned by Indian Tribes;
- 30-year easement. The landowner may receive 75 percent of the easement value of the enrolled land plus 75 percent of the average cost of the approved conservation practices; or
- Permanent easement. The landowners may receive 100 percent of the easement value of the enrolled land plus 100 percent of the average cost of the approved conservation practices.

**Eligibility and Restoration Plans.** Only privately held land, including acreage owned by Native American Indian Tribes, is eligible for enrollment in HFRP. The definition of land owned by Indian Tribes was expanded in the Agricultural Act of 2014 to include land that is held in trust by the United States for Indian Tribes or individual Indians. In addition, to be eligible, the landowner must commit to restoring, enhancing, or measurably increasing the likelihood of recovery of an at-risk species. At-risk species include threatened or endangered species or candidates for the Federal or State threatened or endangered species list. Landowners must also improve biological diversity or increase carbon sequestration on enrolled land. For all enrollment options, landowners develop a restoration plan that includes practices necessary to restore and enhance habitat for at-risk species. NRCS provides technical assistance to help land owners develop and comply with the terms of their HFRP restoration plans.

Landowners may receive “safe harbor” assurances for land enrolled in HFRP if they agree, for a specified period, to protect, restore, or enhance their land for threatened or endangered species habitat. In exchange, landowners avoid future regulatory restrictions on the use of that land under the Endangered Species Act.

**Financial Assistance.** NRCS provides payments consistent with the enrollment option in either a single payment or in no more than ten annual payments, as agreed to between NRCS and the landowner. NRCS also provides cost-share payments upon a determination that an eligible conservation practice or an identifiable component of the conservation practice has been established in compliance with appropriate standards and specifications.

**Technical Assistance.** In coordination with the Department of the Interior’s Fish and Wildlife Service and the Department of Commerce’s National Marine Fisheries Service, NRCS works with landowners to develop healthy forests management conservation plans for land eligible for enrollment in HFRP. The conservation plan integrates compatible silvicultural practices and habitat considerations to protect, restore, and enhance forest ecosystems for the recovery of threatened and endangered species and candidate species. NRCS continues to provide assistance to the landowner after the project is enrolled by reviewing restoration measures and providing guidance on management activities and biological advice to achieve optimum results.

**2014 Activities.**

Cumulatively, through HFRP, NRCS has enrolled 109 agreements, encompassing approximately 676,932 acres, as the table below shows.

<b>Cumulative Program Activity (Through 2014)</b>	
<b>Closed Easements (Permanent and 30-Year)</b>	<b>Cumulative</b>
Number of Easements	64
Number of Acres	16,427
<b>Active Restoration Cost-Share Agreements</b>	<b>Cumulative</b>
Number of Agreements	16
Number of Acres	654,509
<b>Summary</b>	<b>Cumulative Summary</b>
Total Agreements Enrolled	109
Total Acres	676,932

**Getting Conservation on the Ground.**

**St. Joseph Watershed, Indiana.** The St. Joseph Watershed located in Allen, DeKalb, Noble, and Steuben Counties has been part of a Tri-State Healthy Forests Reserve Program Project Area since 2009. The area, particularly the core area of the Fish Creek Watershed, is part of an effort to expand and protect habitat for the Federally-listed threatened northern copperbelly water snake (*Nerodia erythrogaster neglecta*). This species relies on a mosaic of seasonally-flooded and floodplain wetlands surrounded by grassland and forested upland. The HFRP has offered landowners within this watershed an opportunity to help in the protection of this species by placing permanent protection on their forest land and restoring wetlands on their property, all while maintaining their ability to harvest timber as an economic resource.

To date, eight properties encompassing 1,137 acres have been protected, with another 80 acres currently in the process of being enrolled. Projects have used the conservation practices such as Wetland Restoration and Enhancement, Forest Stand Improvement, and Tree and Shrub Establishment to restore and enhance the upland and wetland habitat needed by this reptile species and providing corridors for it to travel between wetland pools. These same practices have also benefited the Federally-listed endangered Indiana Bat (*Myotis sodalis*). Working in partnership with the United States Fish and Wildlife Service and Indiana Department of Natural Resources, several of the HFRP landowners in the watershed have developed timber management plans and a successful harvest was conducted last winter on one of the properties. This project has been an example of a positive conservation and working lands partnership, with benefits for both the copperbelly water snake and the forest landowners.



## CONSERVATION SECURITY PROGRAM

### **Current Activities.**

**Background.** The Conservation Security Program is not currently authorized for new enrollments. It was originally authorized by the Farm Security and Rural Investment Act of 2002 (the 2002 Act). Section 2001 of the 2002 Act amended the Food Security Act of 1985 by adding Chapter 2, Subchapter A, Conservation Security Program. Section 1202(a) of the Deficit Reduction Act of 2005 extended the program into 2011, but the Food, Conservation, and Energy Act of 2008 (the 2008 Act) (P.L. 110-246), prohibits any Conservation Security Program to be entered into or renewed after September 30, 2008. Pursuant to Section 2301 of the 2008 Act, the Secretary must make payments on contracts entered into before September 30, 2008, using such sums as are necessary. The Agricultural Act of 2014 did not make any changes to the authority for NRCS to continue to make payments on existing contracts.

**Program Objectives.** The Conservation Security Program was a voluntary program that provided financial and technical assistance for the conservation, protection, and improvement of natural resources on tribal and private working lands. It provided payments for producers who practice good stewardship on their agricultural lands and provided incentives for those who wanted to do more. The program purpose was to:

- Identify and reward those farmers and ranchers meeting the very highest standards of conservation and environmental management on their operations;
- Create powerful incentives for other producers to meet the same standards of conservation performance on their operations; and
- Provide public benefits for generations to come.

NRCS is not authorized to enter into new Conservation Security Program contracts, but continues to make payments to producers with five- to ten-year contracts from prior years.

### **2014 Activities.**

In 2014, NRCS provided nearly \$101.7 million in financial assistance payments on slightly more than 10,000 contracts from signups held in 2005, 2006, and 2008. Among the many benefits of this program, the Conservation Security Program has been a significant contributor within the emerging areas of carbon and energy management. NRCS provides payments for enhancement activities to promote carbon sequestration, energy conservation, and the production and use of renewable fuels and electricity. Funded activities include:

- Sequestration of greenhouse gases as measured by improvements to the soil conditioning index, which reflects soil organic matter levels;
- Generation of renewable energy;
- Use of renewable energy fuels such as biodiesel and ethanol;
- Recycling of on-farm lubricants; and
- Reductions in soil tillage intensity ratings.

## WETLANDS RESERVE PROGRAM

### **Current Activities.**

**Background.** The Wetlands Reserve Program (WRP) was authorized by Section 1237 of the Food Security Act of 1985 (P.L. 99-198), as amended, to assist landowners and Tribes in restoring and protecting wetlands. WRP was repealed by Section 2703 of the Agricultural Act of 2014 (P.L. 113-79), enacted February 7, 2014. However, Section 2703 also provided transitional language that ensured prior enrollments will continue to be provided technical and financial assistance by NRCS. The WRP program purposes have been rolled into the Wetland Reserve Easements (WRE) component of the Agricultural Conservation Easement Program in the 2014 Farm Bill. Lands previously enrolled in WRP are now considered enrolled in ACEP and the repeal of WRP does not affect the validity or terms of any contract, agreement, or easement entered into prior to the enactment of the 2014 Farm Bill.

**Program Objectives.** WRP was a voluntary program that provided technical and financial assistance to enable eligible landowners to protect and restore valuable wetland ecosystems, including associated habitats such as uplands, riparian areas, and forest lands. WRP addressed wetland, wildlife habitat, soil, water and related natural

resource concerns on private lands and acreage owned by Indian Tribes in an environmentally beneficial and cost-effective manner. The program achieved solutions to local community issues related to farms, ranches, rural lands, and other areas by establishing easements and long-term agreements on eligible farmlands and by establishing 30-year contracts on acreage owned by Indian Tribes. This unique program offered landowners an opportunity to establish, at minimal cost, long-term conservation and wildlife habitat enhancement practices and protection.

The goal of WRP was to achieve the greatest wetlands functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. This was accomplished by restoring former wetland and associated habitats on lands that were converted for agricultural use and had a high likelihood of successful restoration. Wetlands provided a variety of important environmental services that were increasingly valued by society. These included filtering nutrients, trapping sediments and associated pollutants, improving water quality, providing fish and wildlife habitat, dampening floodwater runoff peaks, recharging aquifers, buffering shorelines from storm impacts, and myriad other benefits.

To achieve successful restoration that maximized benefits to both the landowners and the public, WRP focused on: 1) enrolling marginal lands that have a history of crop failures or low production yields; 2) restoring and protecting wetland values on degraded wetlands; 3) maximizing wildlife benefits; 4) achieving cost-effective restoration with a priority on benefits to migratory birds; 5) protecting and improving water quality; 6) reducing the impact of flood events; 7) increasing ecosystem resilience; and 8) promoting scientific and educational uses of WRP projects.

**Program Operations.** Under WRP, at least 70 percent of the wetlands and associated habitats were restored to their original condition to the extent practicable; the remaining 30 percent of the project area could be restored or enhanced to alternative habitat conditions. For example, instead of restoring a bottomland hardwood site to all trees, a portion of the site could be restored to an emergent marsh condition if the landowner or NRCS wanted to create habitat for targeted wildlife species. This flexibility allowed NRCS to implement projects that met landowner objectives, addressed specific species or habitat needs, and maximized wildlife and environmental benefits.

**Eligibility.** Prior to its repeal, WRP was available in all 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the United States Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Island, and the Trust Territories of the Pacific Islands on all lands meeting any of the following eligibility criteria:

- Altered, cropped, and grazed wetlands along with upland buffer areas;
- Rangeland and wooded areas where hydrology is significantly degraded but substantially restorable;
- Croplands or grasslands subject to flooding from overflow of a closed basin, lake, or pothole;
- Riparian areas linking protected wetlands;
- Natural wetlands that contribute to the value of other eligible land;
- Eligible priority wetland acres already enrolled in the Conservation Reserve Program; and
- Wetlands restored under a Federal or State cost-share program with an easement or deed restriction with a duration of less than 30 years.

**Financial Assistance.** Prior to its repeal, WRP provided landowners four methods to enroll acreage through permanent easements, 30-year easements, restoration cost-share agreements, or 30-year contract (on acreage owned by an Indian tribe only).

The 2014 Farm Bill authorized the agency to use prior year unobligated balances from FY 2009-2013 in the repealed WRP to continue to implement certain restoration and closing activities on WRP projects enrolled prior to the date of enactment on February 7, 2014. Authorized activities include restoration of the easement site and acquisition-related costs such as title reports, hazardous substance evaluations, due diligence, boundary surveys, and easement closing.

**Technical Assistance.** In 2014, NRCS used the prior year WRP funding to provide on-going technical assistance to existing WRP easements and contracts entered into prior to the date of enactment of the 2014 Farm Bill. Authorized activities include: completion of due diligence, easement closings, boundary surveys, restoration planning and design, and restoration implementation.

**WRP Partnership Activities.** NRCS continues to emphasize partnerships with conservation organizations and agencies as a mechanism to leverage WRP funds and maximize conservation benefits. NRCS maintained cooperative and interagency agreements with a focus on completing the acquisition, restoration and monitoring of existing WRP easements. Through these agreements, Federal funds were leveraged with conservation partners to provide an average of over 25 percent matching funds. The partners included an array of conservation organizations including non-governmental organizations such as Ducks Unlimited, Trout Unlimited, California Waterfowl Association, The Nature Conservancy, Mississippi Fish and Wildlife Foundation, Mississippi River Trust, and the Audubon Society; along with numerous resource conservation and development councils, local and State wildlife agencies, the Department of the Interior’s Fish and Wildlife Service, and other conservation partners. These agreements supplemented NRCS’s capacity to expedite easement acquisition, restoration implementation and to ensure annual monitoring was conducted. These activities help guarantee the public and natural resource benefits of WRP are fully realized and maintained.

**2014 Activities.**

**WRP Acreage.** NRCS provides on-going technical and financial assistance on WRP acreage enrolled prior to its repeal by the Agricultural Act of 2014. Enrollment is defined as the point at which the landowner and NRCS enter into the agreement authorizing NRCS to proceed with the purchase of the easement or 30-year contract, prior to the enactment of the Agricultural Act of 2014. At the time of enrollment, funds were obligated for the acquisition of the easement or contract.

Once enrollment has occurred, NRCS precedes with acquisition activities such as obtaining title review and boundary surveys, culminating in the executing and recording of the easement, identified as easement closing. Following the easement closing, NRCS completes restoration on the easement. Enrollment through easement closing to completed restoration takes three to five years, after which annual monitoring takes place for the life of the easement. Funding needs for the activities that occur in years after the projects’ original enrollment are based on the number of acres in each phase of the process in a given year and the costs related to those various activities.

The table below shows the total cumulative acres and number of enrollments in WRP and the cumulative acres and number of easements closed, which is a subset of the total acres enrolled. The cumulative number of acres enrolled in WRP throughout the life of the program is 2,680,774 acres; this excludes cancelled, terminated or expired enrollment transactions. In 2014, NRCS closed easements on 106,606 acres through 559 easement transactions, including 163 30-year easements on 26,450 acres and 396 permanent easements on 80,156 acres. This data is part of the cumulative totals below.

<b>WRP Cumulative Enrolled Easements, Restoration Cost-Share Agreements and Contracts with Tribes and Closed Easements</b>		
<b>Agreement Type</b>	<b>Cumulative Agreements</b>	<b>Cumulative Acres</b>
Enrolled Permanent Easements	10,932	2,111,351
Enrolled 30-year Easements	2,786	448,477
Restoration Cost-Share Agreement	794	118,031
30-Year Contract with Tribes	15	2,915
Total	14,527	2,680,774
<b>Agreement Type</b>	<b>Cumulative Easements</b>	<b>Cumulative Acres</b>
Closed Permanent Easements	10,508	2,054,694
Closed 30-Year Easements	2,565	424,720
Total	13,073	2,479,414

<b>Emergency Wetlands Reserve Program (EWRP) Cumulative Closed Permanent Easements</b>		
<b>Agreement Type</b>	<b>Cumulative Agreements</b>	<b>Cumulative Acres</b>
Closed Easements	732	84,152

The type of wetlands restored through WRP varies from vernal pools in the west and northeast to bottomland hardwood forests in the southeast, to prairie potholes in the upper Midwest, to coastal marshes, to mountain meadows, but consists primarily of floodplain forests and emergent marsh wetlands. Restoration and protection of these varied and valuable wetland type accounts for 85 percent of the acreage enrolled in WRP, while the remaining

15 percent of WRP acres includes adjacent upland habitats that provide nesting habitat and buffer area to the wetland areas. Most acres offered into WRP occur in areas that, despite having been drained or cleared for agricultural production, are still subject to frequent flooding or prolonged saturation, making them ideally suited for restoration and usually marginal for agricultural production.

**Initiatives and Partnership Projects.** NRCS had a number of initiatives and program options that provide targeted delivery of conservation assistance to address specific resource concerns on a geographic, species, habitat, natural disaster, or other basis that benefits from a tailored or rapid response. WRP was a key tool in delivering conservation benefits to these initiative efforts:

- **Indiana:** The Nature Conservancy, in partnership with NRCS launched a Wetlands Reserve Enhancement Program (WREP) aimed at connecting 78 existing WRP sites to restore and protect a 60 mile stretch along the Wabash River. This area now has up to 80 percent of the floodplain restored to riparian forest and wetlands.
- **Nebraska:** WREP along the Missouri River from Ponca to Rulo has been a huge success. The project enhances the State's wetland restoration efforts by maximizing environmental benefits in a cost-effective manner with the aid of multiple partners. WREP has brought Federal, State, tribal and local resources agencies together to restore wetlands, provide habitat for wildlife, and improve water quality. Enrollment and restoration will provide habitat for numerous sensitive species found in the Missouri River Valley ecosystem. The Federally-listed Interior Least Tern, Piping Plover, and Pallid Sturgeon populations associated with the Missouri River diminished with the loss of natural habitat, altered flow and sediment regimes, and other factors.

#### **Get Conservation on the Ground.**

**Florida.** Protecting the Everglades—An ecosystem vitally important to Florida and the Nation. Since 2009, USDA has invested \$448 million in WRP funds to restore and protect more than 108,000 acres of wetland habitat in Florida's Northern Everglades, demonstrating a strong commitment to partnerships with Florida's ranchers and farmers to improve water quality and wildlife and fish habitat within the greater Everglades ecosystem. Funding provides for the restoration and protection of critical habitat for a variety of listed species; including the Federally-listed Wood stork, Crested caracara, Eastern Indigo snake, and the Florida panther.

**California.** A nearly 1,000 acre WRP restoration project has documented the first occurrence of the Federally-listed endangered Riparian Brush rabbit on the riverfront property located at the confluence of the Tuolumne and San Joaquin Rivers. The species is critically endangered and was thought to be extinct following extensive floods in 1997. The wetlands and riparian habitats on the property had been converted for agricultural use over a century ago, but the agricultural operation continued to be subject to frequent and intense flooding from the adjacent river. The restoration of the wetland and riparian habitats on this easement will occur in phases until all 1,000 acres are restored. The restoration will re-establish self-sustaining native plant communities that will serve as a critical riparian corridor and provide a linkage to other suitable habitat for the endangered rabbit.

**Louisiana.** Black Bear were once considered abundant in Louisiana. In 1950, estimates showed their numbers down to 80 bears remaining in Louisiana. The bears need large contiguous blocks of bottomland hardwood forest to thrive and these began to disappear with improvements in farming and land clearing methods. Through WRP, these cropland areas that were once forest are now restored back to their original forested wetland habitat. Through these efforts, black bears are recovering and their numbers are now estimated from between 500-700.

**Vermont.** A large WRP restoration project along Otter Creek contributed to flood attenuation during Tropical Storm Irene, benefiting landowners throughout the watershed. Water flow data collected at U.S. Geological Survey (USGS) gauging stations along Otter Creek show significant flood mitigation due to the capacity of the restored wetlands in the floodplain to hold and dissipate flood waters.

**Washington.** The Puyallup NRCS Field Office assisted the Nisqually Indian Tribe to restore Braget Marsh. This project restored the original native plant community where the Nisqually River meets Puget Sound. The Braget Marsh project is the largest restoration reforestation undertaken by the Tribe.

## AGRICULTURAL WATER ENHANCEMENT PROGRAM

### **Current Activities.**

**Background.** Section 2510 of the Food, Conservation, and Energy Act of 2008 (the 2008 Act) (P.L. 110-246) established the Agricultural Water Enhancement Program (AWEP) by amending section 1240I of the Food Security Act of 1985 (16 U.S.C. 3839aa-9). Section 2706 of the Agricultural Act of 2014 (P.L. 113-79) repealed AWEP. However, Section 2706 also provided transitional language that ensured prior enrollments will continue to be provided technical and financial assistance by NRCS. The 2014 Act consolidated AWEP purposes into the Regional Conservation Partnership Program (RCPP), which was authorized by Section 2401 of the 2014 Act.

**Program Objectives.** The purpose of AWEP was to promote improved ground and surface water conservation and water quality by leveraging the Federal government's investment in natural resources conservation with services and resources of other eligible partners. Eligible partners included Federal, State, and local entities and local conservation districts whose conservation goals complement and were compatible with NRCS's mission.

AWEP was specifically created to address serious surface and ground water shortages and water quality concerns in many agricultural areas. AWEP followed the established national priorities for the Environmental Quality Incentives Program (EQIP):

- Conservation of ground and surface water resources;
- Reduction of nonpoint source pollution, such as nutrients, sediment, pesticides, or excess salinity, in impaired watersheds consistent with Total Maximum Daily Loads (TMDLs) where available;
- Reduction of surface and groundwater contamination;
- Reduction of contamination from agricultural point sources, such as concentrated animal feeding operations; and
- Reduction in soil erosion and sedimentation from unacceptable levels on agricultural land.

**Program Operations.** Through AWEP, eligible partners submitted proposals for funding to NRCS. The proposals were evaluated and successful applicants entered into multi-year agreements with NRCS to promote ground and surface water conservation and improve water quality on eligible agricultural lands in a specific geographic area. In evaluating partnership proposals, NRCS gave priority to those that:

- Included a high percentage of agricultural land and producers in the region or other appropriate area;
- Resulted in high levels of applied agricultural water quality and water conservation activities;
- Significantly enhanced agricultural activity;
- Allowed for monitoring and evaluation;
- Assisted agricultural producers in meeting a regulatory requirement that might otherwise reduce the economic scope of the producer's operation;
- Were able to achieve the project's land and water treatment objectives within no more than five years;
- Included conservation practices supporting conversion of agricultural land from irrigated to dryland farming;
- Leveraged AWEP funds with funds provided by partners; and
- Assisted producers in areas with high-priority water quantity concerns in the following regions: Eastern Snake Plains Aquifer, Puget Sound, Ogallala Aquifer, Sacramento River Basin, Upper Mississippi River Basin, Red River, or Everglades.

As part of EQIP, AWEP contracts provided technical and financial assistance directly to eligible producers to do the following:

- Construct or improve irrigation systems and increased irrigation efficiency; and
- Implement conservation practices to improve water quality, and mitigate the effects of drought by conversion to less water-intense agricultural commodities or to dryland farming.

Eligible program participants receive a payment amount that includes up to 75 percent of the incurred costs to implement one or more structural, vegetative, or land management practices, and up to 100 percent of estimated foregone income. Limited resource farmers, beginning farmers, and landowners or operators that are socially disadvantaged receive up to 90 percent of the incurred costs and up to 100 percent of foregone income.

Total conservation payments are limited to \$300,000 per person or legal entity during any six-year period, regardless of the number of farms or contracts. No person or legal entity may receive AWEP payments in any crop year if their average adjusted gross income for the preceding three years exceeded \$1 million, unless two-thirds of that income was from farming, ranching, or forestry interests.

**2014 Activities.**

The opportunity for new AWEP funding was limited to the first four months of the fiscal year. During that period, NRCS provided support for 91 project areas approved between 2009 and 2014. In 2014, NRCS obligated \$355,046 in 13 new contracts in existing project areas to implement conservation practices on 1,599 acres of agricultural land. The ability to leverage funding through partnership agreements remained strong. Partners provide matching technical and financial assistance throughout 2009-2014 has been nearly equivalent to NRCS’s AWEP investment.

The 2014 Act repealed the authority to enter into new AWEP agreements and contracts. As a result NRCS shifted priority to assist producers to implement existing contracts. As a result, NRCS assisted producers to implement more than 18,000 practices in 2014 on about 1,000,000 acres and made \$211 million in payments for the completed practices.

**2014 Applications Backlog.** While a backlog of applications existed at the time AWEP was repealed, NRCS was able to address the backlog by providing producers the opportunity to apply for financial assistance under EQIP.

**2014 Total AWEP Program Demands<sup>1</sup>**

State	Total Applications Received	Number of Active and Completed Contracts	Unfunded Valid Applications	Valid Applications Funded (Percent)	Average Contract Amount	Estimated Unfunded Application Amount
Indiana	13	12	0	100	\$23,968	-
North Dakota	1	1	0	100	67,431	-
Total	14	13	0	100	91,399	-

<sup>1</sup>Source: Protracts as of October 5, 2014. Unfunded applications include pre-approved, deferred, eligible, and pending. Estimated Value of Unfunded Applications (\$) determined from number of unfunded valid applications multiplied by average contract amount.

**2014 Funding.**

NRCS obligated \$355,046 of AWEP funding prior to February 7, 2014, the date of enactment of the 2014 Act. AWEP funding was invaluable in helping NRCS address areas in which water demand outstrips water supply. Approximately 30 percent of the contracts approved in 2014 were located in the designated high-priority water quantity concern areas. None of the 2014 AWEP contracts went to socially disadvantaged producers. These important AWEP purposes and priorities are now addressed through RCPP.

**Get Conservation on the Ground.**

New York - AWEP. NRCS partnered with the Watershed Agricultural Council (WAC) through an AWEP agreement to address livestock waste concerns in the New York City watershed. Since inception, nine farms have been awarded AWEP contracts totaling \$1.4 million for livestock waste projects. One project, recently completed, is a manure storage tank in Delaware County. The farm is at the headwaters of the Little Delaware River in the Town of Bovina in the Cannonsville Reservoir Watershed. The Cannonsville Reservoir provides unfiltered drinking water to New York City. A new storage structure funded through AWEP replaced an outdated and aging earthen lagoon manure storage which had limited capacity for holding all the farms runoff. The new structure will provide containment of the all farm runoff and help protect New York City’s drinking water supply.

## WILDLIFE HABITAT INCENTIVE PROGRAM

### **Current Activities.**

The Wildlife Habitat Incentive Program (WHIP) was authorized by Section 1240N of the Food Security Act of 1985 (16 U.S.C. 3839bb-1), as amended. The Natural Resources Conservation Service (NRCS) administered WHIP with funds made available through the Commodity Credit Corporation. Section 2707 of the Agricultural Act of 2014 (P.L. 113–79) repealed WHIP. However, Section 2707 also provided transitional language that ensured prior enrollments will continue to be provided technical and financial assistance by NRCS. The purposes of WHIP were consolidated into the Environmental Quality Incentives Program (EQIP) by the 2014 Act.

**Program Objectives.** WHIP provided assistance to agricultural landowners for the protection, restoration or enhancement of upland wildlife habitat, wetland wildlife habit, threatened and endangered species, fisheries, and other types of habitat. Focused efforts on habitat for fish and wildlife also contributed to more sustainable use of resources and reduced greenhouse gas emissions. WHIP was implemented in any of the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the United States Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands. By prioritizing specific geographic areas, WHIP was able to target financial and technical assistance funds to improve habitats needed for specific declining fish and wildlife species.

WHIP practices were often compatible with, and beneficial to, farming and ranching enterprises. Some practices enhanced farm profitability by improving grazing conditions, reducing management expenses, and producing non-crop income from the lease of rights to harvest and observe wild game and fish. WHIP had been used to control invasive plant species; re-establish native vegetation; manage non-industrial private forestland; stabilize stream banks; protect, restore, develop or enhance unique habitats; and remove barriers that impede migration of certain wildlife species.

**Program Operations.** The national priorities in implementing WHIP were to:

- Promote the restoration of declining or important native fish and wildlife habitats;
- Protect, restore, develop or enhance fish and wildlife habitat to benefit at-risk species;
- Reduce the effects of invasive species on fish and wildlife habitats;
- Protect, restore, develop, or enhance declining or important aquatic wildlife species' habitats; and
- Protect, restore, develop, or enhance important migration and other movement corridors for wildlife.

The State Conservationist, with recommendations from the State Technical Committee and other partners, identified priorities for enrollment in WHIP that complemented the goals and objectives of relevant fish and wildlife conservation initiatives at the national, regional, and State level. The priorities served as a guide for the development of WHIP ranking criteria in each State. States generally selected two to six priority habitat types.

**Eligibility.** To be eligible for WHIP, the land had to be private agricultural land, nonindustrial private forest land, or tribal land. Applicants had to own or control the land for the duration of the WHIP contract.

**Financial Assistance.** WHIP provided up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat through contracts that last from one to ten years. Higher payments were available to eligible socially disadvantaged farmers or ranchers, to beginning and limited resource farmers or ranchers, and Indian Tribes. WHIP provided additional financial assistance to landowners who enter into 15-year or longer contracts to protect and restore high value, essential plant and animal habitat. Section 2707 of the 2014 Act authorized the use of unobligated WHIP funds from FY 2009 through 2013 to be used to support contracts entered into WHIP prior to the date of enactment of the 2014 Act, February 7, 2014. A WHIP contract may be modified to increase funds provided the increased cost is the result of a valid contract modification within the original contract scope and intent.

**Technical Assistance.** NRCS and its partners provided program participants with an assessment of wildlife habitat conditions, recommendations for practices to improve these habitat conditions, and a wildlife habitat development plan that incorporates practices and strategies for maximizing habitat for target species. All remaining technical assistance through WHIP will be used to help agricultural producers implement their existing contracts.

### **2014 Activities.**

In 2014, the opportunity for new WHIP funding was limited to the first four months of the fiscal year. During that period, NRCS obligated almost \$2.1 million in 144 contracts to enroll over 18,000 acres in WHIP. Of these 14 contracts valued at over \$ 40,000 on over 3,000 acres are with American Indian and Alaskan Natives. In 2014, WHIP contracts addressed the following five major habitat types and declining species:

- Upland wildlife habitat (including grasslands, shrub/scrub, and forests);
- Wetland wildlife habitat;
- Riparian habitat (including areas along streams, rivers, lakes, and sloughs and coastal areas);
- Shallow water habitat (including lands where water can be impounded or regulated by diking, excavating, ditching, and/ or flooding); and
- Rare and declining habitat (areas that once supported or currently support a unique, dwindling, or imperiled native plant and animal community).

The 2014 Act repealed the authority to enter into new WHIP contracts. As a result NRCS shifted priority to assist producers to implement existing contracts. NRCS assisted producers with existing WHIP contracts to implement 10,614 practices in 2014 on 1.3 million acres and made \$36.2 million in payments for the completed practices.

**Initiatives.** WHIP played an important role implementing the Working Lands for Wildlife, a new partnership with an overall goal of maintaining profitable food and fiber production on private and public lands while also benefitting wildlife populations. NRCS works with partners and private landowners to benefit habitat for a range of wildlife species while also offering innovative approaches for providing producers and landowners with regulatory predictability in partnership with the U.S. Fish and Wildlife Service. NRCS and FWS initially selected seven at-risk wildlife species whose decline can be reversed given sufficient resources and landowner participation. Primary objectives are to:

- Provide landowners with financial and technical assistance to help them improve their lands through wildlife habitat management and protection;
- Implement conservation practices that will help restore populations of declining wildlife species (candidate, Federally-listed endangered and threatened or other at-risk wildlife species); and
- Provide landowners with Endangered Species Act predictability and confidence that conservation investments they make on their lands today can help sustain their operations over the long term.

Following are WHIP-WLFW accomplishments for the seven wildlife species selected for priority:

**Bog Turtle.** The Bog Turtle is a Federally-listed threatened wildlife species. A Biological Opinion and Addendum for implementation of Working Lands for Wildlife have been completed. In 2014, NRCS assisted participants in implementing 27 practices on over 94 acres to improve Bog Turtle habitat. Payments of \$63,743 through these practices, the participants improved the habitat for the turtle while maintaining agricultural operations in Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, and Pennsylvania.

**Golden-Winged Warbler.** The Golden-Winged Warbler is an at-risk wildlife species. It is also being considered a declining wildlife species. In 2014, NRCS assisted participants in implementing 258 practices on over 5,000 acres to improve Golden-Winged Warbler habitat payments of \$1.05 million in the States of Maryland, New Jersey, New York, North Carolina, Pennsylvania, Virginia, and West Virginia.

**Gopher Tortoise.** The Gopher Tortoise is a Federally-listed threatened wildlife species in some ranges, and a candidate wildlife species in other ranges. In 2014, NRCS assisted participants in implementing 2,178 practices on over 202,000 acres to improve Gopher Tortoise habitat payments of \$7.8 million. The States for the western population where the gopher tortoise is listed as a threatened species include Louisiana, Mississippi, and Alabama (three counties), and the States for the eastern population where the gopher tortoise is considered a candidate species include Alabama, Florida, Georgia, and South Carolina.

**Lesser Prairie Chicken.** The Lesser Prairie Chicken is a candidate species. In 2014, NRCS assisted participants in implementing 86 practices on 62,000 acres and payments of \$770,000 to improve Lesser Prairie Chicken habitat in Kansas and New Mexico.



New England Cottontail. The New England Cottontail is a candidate species. In 2014, NRCS assisted participants in implementing 117 practices on 1,800 acres and payments of \$684,000 to improve New England Cottontail habitat in Connecticut, Maine, Massachusetts, New Hampshire, New York, and Rhode Island. Providing habitat for this cottontail will assist in preventing the cottontail from being listed and ultimately prevent its extinction while maintaining agricultural operations.

Sage Grouse. The Sage Grouse is a candidate species. In 2014, NRCS assisted participants in implementing 262 practices on 212,000 acres and payments of \$2.25 million to improve Sage Grouse habitat in 11 States, including California, Colorado, Idaho, Montana, Nevada, North Dakota, South Dakota, Oregon, Utah, Washington, and Wyoming.

Southwestern Willow Flycatcher. The Southwestern Willow Flycatcher is a Federally-listed threatened wildlife species. In 2014, NRCS assisted participants in implementing 48 practices on 410 acres and payments of \$245,000 to improve Southwestern Willow Flycatcher habitat. Providing needed habitat for the Flycatcher will move towards delisting it under the Endangered Species Act, while allowing private property owners to maintain their ranching operations. These efforts support recovery and eventual delisting of this species under the Endangered Species Act while also allowing the ranching operations of private property owners to remain economically viable.

### **Getting Conservation on the Ground.**

California. For some farmers, poor drainage in a corner of their cropland field could appear to be a troublesome issue. For others, like a couple of brothers who farm in Woodland California, it presented an opportunity to turn that small slice of acreage into something really special and important. Through WHIP NRCS provided \$65,000 for the 10-acre wetland construction, including installing a quarter mile of canal bank set back, native grasses, and shrubs. The project took low-producing cropland out of production, but the benefits are immense. The wetland eliminates flooding conditions and bank erosion, which improves local water quality and provides a healthy habitat for waterfowl, hawks, and raptors.

## FARM AND RANCH LANDS PROTECTION PROGRAM

### **Current Activities.**

**Background.** The Farm and Ranch Lands Protection Program (FRPP) was authorized by Subchapter C of Chapter 2 of Subtitle D of Title XII of the Food Security Act of 1985 (16 U.S.C. 3838h et seq.), as amended. FRPP was repealed by Section 2301 of the Agricultural Act of 2014 (P.L. 113-79). However, Section 2704 also provided transitional language that ensured prior enrollments will continue to be provided technical and financial assistance by NRCS. The purposes and functions of FRPP were consolidated into the Agricultural Land Easements component of the Agricultural Conservation Easement Program (ACEP). Lands enrolled under FRPP are considered enrolled in ACEP and will continue to receive financial and technical assistance.

Title III of the Federal Agriculture Improvement and Reform Act of 1996 established the Farmland Protection Program (FPP) as a new farmland protection program. The Farm Security and Rural Investment Act of 2002 (the 2002 Act) authorized FPP as a Title XII program under the Food Security Act of 1985 (the 1985 Act), and authorized NRCS to purchase conservation easements for the purpose of protecting topsoil by limiting non-agricultural uses of the land. NRCS identified the program as the Farm and Ranch Lands Protection Program (FRPP) in the 2003 Final Rule to distinguish it from the 1996 authorization and to more accurately reflect the types of land the program protects. The Food, Conservation, and Energy Act of 2008 (the 2008 Act) amended FRPP by changing the purpose of the program to protecting the agricultural use and related conservation values of eligible land by limiting non-agricultural uses of that land. Additionally, the 2008 Act changed FRPP from a Federal land acquisition program to a program through which NRCS provides financial assistance for the purchase of conservation easements by eligible entities.

**Program Objectives.** FRPP protected the Nation's most valuable lands for the production of food, feed, and fiber by providing matching funds to keep productive farm and ranch lands in agricultural use. According to NRCS National Resources Inventory (NRI) data, over 7.5 million acres of farmland, an area equivalent to the States of Maryland and Delaware, were converted to non-agricultural uses between 2007 and 2012. The same study tells us that more than one-third of all land that has ever been developed in the lower 48 States during our Nation's history

was developed in the last quarter century. Such conversion decreases the availability of local food markets and increases the travel distance and cost of delivery of food to the consumer market. Having enrolled in FRPP, farm and ranch lands threatened by development pressures remain productive and sustainable.

**Program Operations.** NRCS worked with State and local governments, soil and water conservation districts, Indian Tribes, and eligible non-governmental organizations to purchase conservation easements to protect the agricultural use of eligible land. Potential partners provided written evidence of their:

- Commitment to long-term conservation of agricultural lands;
- Staff dedicated to monitoring and easement stewardship;
- Capability to acquire, manage, and enforce easement rights or other interests in land; and
- Capability to provide, in cash, a minimum of 25 percent of the purchase price (appraised fair market value minus the landowner donation) for the conservation easement.

**Eligibility.** Individual landowners applied to and were accepted by an eligible State, Indian tribe, or local governments or non-governmental programs to participate in FRPP. As a Title XII program, these individual landowners were required to meet payment eligibility requirements for adjusted gross income, wetland conservation compliance, and highly erodible land conservation compliance. The land enrolled in FRPP met one of three criteria to qualify for consideration: 1) had at least 50 percent prime, unique, or important farmland soils; 2) had historic or archeological resources; or 3) furthered a State or local government policy that is consistent with the purposes of the FRPP.

**Application and Selection Process.** NRCS used a continuous sign-up under which cooperating entities proposed and submitted parcels for funding. Upon receipt of the applications for parcels from an eligible cooperating entity, each NRCS State office evaluated the entities, land, and landowners for eligibility, and ranked and prioritized parcels based on established criteria. NRCS awarded funds to the eligible cooperating entities that submitted the highest ranked parcels for which the NRCS State office had FRPP funding. NRCS priorities included farms that faced the greatest pressure to convert to non-agricultural uses, were accessible to appropriate markets, contained prime soils or other farmland of significance, had adequate infrastructure and agricultural support services, and had surrounding parcels of land that could support long-term agricultural production.

NRCS and the cooperating entities signed a cooperative agreement to obligate FRPP funds. The cooperating entities acquired the conservation easements, and then hold, monitor, manage, and enforce the acquired easements. The Federal share for any easement acquisition could not exceed 50 percent of the appraised fair market value of the conservation easement. Each conservation easement deed includes a provision granting the United States the right of enforcement to protect the Federal investment. To ensure responsible land stewardship, the landowner must implement a conservation plan protecting highly erodible land on each parcel acquired in part with Federal funds. NRCS provided technical assistance to develop conservation easements deeds with enforceable provisions and conservation plans for the highly erodible cropland accepted into FRPP.

Section 2704 of the 2014 Act authorized the continued validity of FRPP contracts, agreements, and easements, and authorized any unobligated FRPP funds made available between FYs 2009 to 2013 to be used to support such FRPP activities entered into prior to the date of enactment of the 2014 Act, February 7, 2014. Upon exhaustion of these prior year FRPP funds, the 2014 Act authorizes the use of ACEP funds to carry out these FRPP activities. As identified above, lands enrolled through FRPP are considered enrolled in ACEP.

**NRCS Technical Assistance.** In addition to helping landowners and entities develop conservation easement deeds and conservation plans, NRCS may use FRPP prior year funds to provide technical assistance through verification of the eligibility of the entity, landowner, and land; assessment of the risk of hazardous materials; evaluation and ranking applications; development of cooperative agreements; review of deeds, title, and appraisals; and payment processing on lands enrolled into FRPP prior to February 7, 2014.

#### **2014 Activities.**

No new enrollments of FRPP occurred in 2014.

<b>Cumulative Program Activity Through 2014</b>	
<b>Closed Easements (Permanent)</b>	<b>Cumulative</b>
Number of Easements	3,950
Number of Acres	927,259
<b>Enrolled Easements (Permanent)</b>	<b>Cumulative</b>
Number of Easements	4,440
Number of Acres	1,100,647

<b>FY 2009 to FY 2014 FRPP Enrollment Summary</b>	
	<b>Easements</b>
No. of Agreements	1,741
No. of Acres Enrolled	543,631
FA Funding	\$666,019,600

### **Get Conservation on the Ground.**

American Farmland Trust study. In addition to keeping land available for agricultural use, FRPP improved agricultural viability, encouraged on farm conservation, and helps farmers gain access to land according to a study recently published by the American Farmland Trust. The study reported that of FRPP landowners who took part in the study:

- 84 percent spent a portion of the proceeds from the sale of their easement on improving their agricultural operation;
- 75 percent applied at least one conservation practice, in addition to conserving their land through FRPP. Of these, the majority applied practices intended to protect soil from erosion; and
- 55 percent spent a portion of their easement proceeds on repaying loans on agricultural land or buying additional land.

Connecticut. Through financial and technical assistance provided by FRPP, Wintonbury Land Trust, the Town of Bloomfield, the Connecticut Department Energy and Environmental Protection, and NRCS worked together to protect the integrity of Lisa Lane Farm, a small urban farm that lies in the midst of the most densely populated census tract in Bloomfield. The purchase of development rights means these 10 acres are safe from further development, and will be kept in agriculture permanently. The farm, which has been cultivated and managed continuously by the Tomasiello-Pitz family using sustainable farming methods since the 1930s, is leased to Desmond Samuda, who maintains a successful produce business specializing in high quality produce for the area's West Indian Community.

Although the property and its high amounts of organic matter are perfect farm material, it is also surrounded by an amazing wildlife habitat area. The farm is ringed by a wooded buffer and is adjacent to the Town of Windsor's Meadow Brook Wildlife Corridor. A wide variety of trees and shrubs line the property edges, there are two wetland areas housing vernal pools, and an abundance of wildlife.

The purchase of development rights is significant in this community as it promotes environmental equity; and provides neighborhood access to a walking trail with views of wetlands, vernal pools, and the working farm. Children raised in an urban setting typically have limited opportunities to see how their food is grown. Lisa Lane allows on-the-ground training for Bloomfield High School's Harris Vo-Ag Center students in both agricultural and environmental education. Lisa Lane Farm also provides space for residents to participate in a community garden.

## **GRASSLAND RESERVE PROGRAM**

### **Current Activities.**

**Background.** The Grassland Reserve Program (GRP) was authorized by Sections 1238 N through Q of the Food Security Act of 1985 (P.L. 99-198), as amended. Section 2705 of the Agricultural Act of 2014 (P.L. 113-79) repealed GRP. However, Section 2705 also provided transitional language that ensured prior enrollments will continue to be provided technical and financial assistance by NRCS. The 2014 Act combined the purposes and

functions of GRP into the Agricultural Conservation Easement Program (ACEP) Agricultural Land Easement Component. Lands previously enrolled in GRP are now considered enrolled in ACEP and the repeal of GRP does not affect the validity or terms of any contract, agreement, or easement entered into prior to the enactment of the 2014 Act.

**Program Objectives.** GRP helped landowners and operators restore and protect rangeland, pastureland, and other grassland while maintaining the land's suitability for grazing. Participants voluntarily limited future development and cropping uses of the land while retaining the right to conduct common grazing practices and operations related to the production of forage and seeding. GRP, by limiting development and providing habitat needed by threatened and endangered species, preserved agricultural heritage and green space, provided for recreational activities, and ensured the Nation's ability to produce its own food.

**Program Operations.** NRCS and the Farm Service Agency (FSA) jointly administered GRP. NRCS had lead responsibility for conservation planning, technical assistance to owners and operators, and easement administration. FSA had lead responsibility for rental contract administration and financial activities. National ranking criteria guided the development of State ranking criteria to ensure GRP funds were focused on projects that supported grazing operations, protected grassland from conversion to other uses, enhanced plant and animal biodiversity, leveraged non-Federal funds, and addressed that State's program priorities. Priority was given to expiring Conservation Reserve Program (CRP) grasslands. Applications, ranking criteria, and program forms were publicly available through agency Web sites.

GRP participants are required to follow a grazing management plan developed with NRCS to ensure that the grassland is sustained and that livestock grazing on the enrolled land are healthy and well-managed. All enrollment options permit grazing on the land in a manner that maintains the viability of natural grasses, shrubs, and forbs. Haying, mowing, or harvesting seed is permitted, except during the nesting seasons for local bird species that are in significant decline or are protected under Federal or State law.

**Eligibility.** Eligible land was limited to private or tribal land that is: 1) grassland that contained forbs or shrubs (including rangeland and pastureland) for which grazing was the predominant use; or 2) located in an area that had been historically dominated by grassland, forbs, or shrubs. The land also had to have potential to provide habitat for animal or plant populations of significant ecological value if it was either retained in its current use or restored to a natural condition.

**Financial Assistance.** The program operated under a continuous signup process with the following enrollment options:

- **Rental contract.** Participants chose a 10-year, 15-year, or 20-year rental contract, during which USDA provides annual payments in an amount not more than 75 percent of the grazing value established by FSA;
- **Permanent easement.** Easement duration is in perpetuity or to the maximum extent allowed by State law. Participants received an easement payment at the time of easement purchase. Easement payment amounts could not exceed the current market value of the land less the grazing value of the land encumbered by the easement;
- **Restoration agreement.** If NRCS and the landowner determined that restoration was necessary to return the vegetation to a desired condition, cost-share assistance was available through a restoration agreement that paid up to 50 percent of the restoration cost, up to \$50,000 per person or legal entity per year. Participants could pay part of their share through in-kind contributions. If funds were limited, USDA gave higher priority to applications with high-quality grassland that did not need restoration than to poorer-quality grassland that also required restoration; or
- **Cooperative agreement.** The Food, Conservation, and Energy Act of 2008 amended GRP to authorize USDA to enter into cooperative agreements with a unit of State or local government, Indian Tribe, or non-governmental organization that demonstrated it had the relevant mission, experience, and resources to administer a GRP easement. Under a cooperative agreement, USDA could pay up to 50 percent of the purchase price of the easement. The cooperating entity had the responsibility to enforce the easement, but the United States maintained a contingent right of enforcement.

Section 2705 of the 2014 Act authorized the continued validity of GRP contracts, agreements, and easements, and authorized any unobligated GRP funds made available between FY 2009 to 2013 to be used to support such GRP

activities entered into prior to the date of enactment of the 2014 Act on February 7, 2014. The 2014 Act also authorized the use of ACEP funds to carry out these GRP activities.

**Technical Assistance.** NRCS technical assistance includes reviews of restoration measures, guidance on management activities, and biological advice to achieve optimum results considering all grassland resources. The 2014 Act authorized GRP prior year funds to be used by NRCS to provide NRCS technical assistance to the prior GRP enrollment.

**2014 Activities.**

The 2014 Act repealed the GRP program and combined its purposes with the Wetlands Reserve Program and the Farm and Ranch Lands Protection Program to create ACEP. No new additional enrollment of GRP lands occurred in 2014; however contracts and easements signed prior to February 7, 2014, continued to be serviced by NRCS. The Food, Conservation, and Energy Act of 2008 authorized GRP to enroll an additional 1,220,000 acres of eligible land in FY 2009 through 2013. In FY 2009 to 2013, the program obligated and committed \$320.6 million of the financial assistance funding allocated to the States and enrolled 278,512 acres. Enrollments include current active and completed agreements.

<b>2009 to 2014 GRP Enrollment Summary</b>			
	<b>Active Easements</b>	<b>Rental Contracts Signed</b>	<b>Total</b>
No. of Agreements	407	1,650	2,057
No. of Acres Enrolled	278,512	839,422	1,117,934
Financial Assistance Funding	\$320,641,800	\$ 93,123,211	\$ 413,765,011

<b>GRP Cumulative Program Activity</b>						
<b>GRP Accomplishments</b>	<b>2003 to 2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Number of Enrolled Easements	251	52	134	114	65	42
Enrolled Easement Acres	117,610	28,331	69,999	74,121	46,968	59,092
Rental Acres Enrolled	618,103	89,580	273,519	124,039	227,715	89,390
Total Acres Enrolled	735,721	117,191	341,308	202,362	274,764	148,574
Cumulative Acres enrolled under 2008 Farm Bill		117,191	458,499	660,861	935,625	1,084,199

**Get Conservation on the Ground.**

Idaho: GRP Enrollments Support Agency Commitment to Sage Grouse Habitat. NRCS provided funding for the Sage Grouse Initiative through several programs, including GRP, to work proactively with ranchers voluntarily enrolling critical habitat. Idaho has experienced higher-than-expected interest in the Sage Grouse Initiative that will help protect Idaho ranches through preserving large swaths of sage grouse habitat. Interest was so high that the NRCS has enrolled over 42,000 acres in the Sage Grouse Initiative area under GRP. These efforts give ranchers local control over sage grouse recovery while maintaining these large tracts of grazing lands that support both healthy sage grouse populations and sustainable ranching businesses. This provides habitat to provide viable areas for sage grouse and grazing lands to sustain the sage grouse populations.

Colorado: GRP Easement through Cooperative Agreement. The San Isabel Land Protection Trust, an accredited land trust, completed the first GRP easement acquisition in the country funded through a Cooperative Agreement. USDA provided \$300,000 in GRP funds which was matched by State funding from Great Outdoors Colorado to conserve the 1,200 acre cattle grazing operation on a ranch originally homesteaded in the late 1800’s. The ranching family donated an additional \$300,000. The protected ranch offers grass fed beef and now offers guests the opportunity to step into the role of rancher and assist in the yearling operation.

South Dakota: Targeting grassland protection. South Dakota landowners enrolled 5,800 acres of native grasslands into permanent GRP easements in the heart of the prairie pothole region known as the “duck factory.” This area is critical to the region’s success of supporting approximately 50 percent of the breeding ducks in North America; remaining native grasslands are under severe risk of conversion due to high land and commodity prices. Protection of this land will help to continue regional efforts to keep the prairie pothole region as native grasslands.

## CHESAPEAKE BAY WATERSHED PROGRAM

### **Current Activities.**

**Background.** The Chesapeake Bay Watershed Program (CBWP) was authorized by Section 1240Q of the Food Security Act of 1985, as added by Section 2605 of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246). However, authority for new funding for CBWP expired at the end of 2013. Section 2709(a) of the Agricultural Act of 2014 (P.L. 113-79) repealed the Chesapeake Bay Watershed Program. However, Section 2709 also provided transitional language that ensured prior enrollments will continue to be provided technical and financial assistance by NRCS. The purposes and activities of CBWP were consolidated into the Regional Conservation Partnership Program (RCPP), which was authorized by Section 2401 of the 2014 Act.

**Program Objectives.** The Chesapeake Bay is a national treasure, constituting the largest estuary in the United States and one of the largest and most biologically productive estuaries in the world. However, water pollution in the Chesapeake Bay is preventing the attainment of existing State water-quality standards and the “fishable and swimmable” goals of the Clean Water Act.

The CBWP helped agricultural producers improve water quality and quantity, and restore, enhance, and preserve soil, air, and related resources in the Chesapeake Bay Watershed through the implementation of conservation practices. These conservation practices reduce soil erosion and nutrient levels in ground and surface water; improve, restore, and enhance wildlife habitat; and help address air quality and related natural resource concerns. CBWP encompassed all tributaries, backwaters, and side channels, including their watersheds, which drain into the Chesapeake Bay. This area included portions of the States of Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia, and the District of Columbia.

**Program Operations.** CBWP funding supported the Chesapeake Bay Restoration Program, a regional initiative that helps Federal and State agencies, local governments, nonprofit groups, and citizens address resource concerns and reach mutually established goals for clean and sustainable ecosystems. CBWP funding also supported Executive Order 13508, Chesapeake Bay Protection and Restoration, issued by President Obama in May 2009. This Executive Order declared the Chesapeake Bay a national treasure and ushered in a new era of shared Federal leadership, action, and accountability. Thus, CBWP priorities were also national priorities and included focusing on high priority watersheds, focusing and integrating Federal and State programs, accelerating conservation adoption, and accelerating development of new conservation technologies.

**Financial Assistance.** Section 2709 of the 2014 Act authorizes NRCS to use any funds made available for CBWP prior to October 1, 2013, to be used to carry out contracts, agreements, and easements entered into prior to the date of enactment of the 2014 Act, February 7, 2014. Therefore, financial assistance under CBWP will be used to support existing contracts. The CBWP contracts may be modified to increase funds provided the increased cost is the result of a valid contract modification within the original contract scope and intent.

**Technical Assistance.** All remaining technical assistance through CBWP will be used to help agricultural producers implement their existing contracts.

### **2014 Activities.**

In 2014, there were no new CWBP funds authorized for new contracts. As such, all activities focused on implementing existing contracts. Under CBWP, NRCS assisted producers to implement 5,438 practices in 2014 on 190,000 acres and made \$25.2 million in payments for the completed practices. Implementation of existing CBWP contracts played an important role in 2014 in the improvement of water quality by addressing numerous natural resource concerns:

- Nitrogen, phosphorous, sediment and chemical contaminants make achieving water quality goals throughout the Chesapeake Bay and its watershed a challenge;
- Low or fluctuating populations of fish and shellfish, including American and hickory shad, river herring, striped bass, eel, weakfish, bluefish, flounder, oysters, and blue crabs, continue to be a concern. These various populations hold tremendous ecological, commercial, and cultural value; and
- Development leads to continued loss of habitats and agricultural land.

### **Get Conservation on the Ground.**

Delaware. The State of Delaware and NRCS are working cooperatively to help producers reduce nutrient loadings within the Chesapeake Bay Watershed in an effort to meet the established Total Maximum Daily Loads requirements. A very popular cover crop program offered by the State of Delaware has seen a significant reduction in the amount of funding available to its producers. Cover crops play a major role in absorbing excessive nitrogen and phosphorous. This led NRCS to restructure the way it implemented cover crops under the EQIP program in an effort to complement the State program and align with the requirements of the Chesapeake Bay Model to reduce nutrient loadings. NRCS also led a very successful effort to provide landowners with technical and financial assistance to remediate abandoned poultry houses. Remediation ensures that the nutrient-rich soil floor of an unused poultry house is not subject to leaching from exposure to rainwater.

Maryland. Two young students fled Vietnam in 1980 in order to escape the communist regime in the wake of the war. Little did they know that after years of hard work, they would one day end up owning a poultry operation on Maryland's Eastern Shore. After a stressful start-up, they were referred to NRCS. Through CBWP they learned how to add amendments to treat their chicken waste. The amendments help to decrease ammonia emissions, a major air quality concern at regional, national, and global levels. Recently through the same program, they installed heavy use area protection pads at the ends of their chicken houses to protect the soil from erosion. After incurring millions of dollars of debt in order to construct the houses, the new poultry growers could not afford to install the necessary conservation practices to comply with the Chesapeake Bay environmental requirements without the assistance of NRCS's CBWP.

**Shared Funding Projects**

(Dollars in thousands)

	2013	2014	2015	2016
	<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
<b>Working Capital Fund:</b>				
Administration:				
Integrated Procurement Systems.....	\$1,858,218	\$1,743,633	\$1,843,060	\$1,843,060
Procurement Operations.....			549,082	484,601
Material Management Service Center.....	89,680	89,178	153,287	166,814
Mail and Reproduction Services.....	1,648,224	1,482,894	1,042,540	1,051,547
Subtotal	<u>3,596,122</u>	<u>3,315,705</u>	<u>3,587,969</u>	<u>3,546,021</u>
Communications:				
Creative Media and Broadcast Center.....	44,739	154,924	388,616	372,000
Subtotal	<u>44,739</u>	<u>154,924</u>	<u>388,616</u>	<u>372,000</u>
Correspondence Management:				
Correspondence Management.....	178,871	156,949	139,354	132,023
Subtotal	<u>178,871</u>	<u>156,949</u>	<u>139,354</u>	<u>132,023</u>
Finance and Management:				
Controller Operations.....	2,718,658	4,432,297	3,378,704	3,544,351
Financial Systems.....	9,679,915	10,030,396	5,423,896	7,401,940
Internal Control Support Services.....	163,483	140,410	184,964	185,088
National Finance Center.....	2,713,906	3,001,754	2,773,291	2,728,096
Subtotal	<u>15,275,962</u>	<u>17,604,857</u>	<u>11,760,855</u>	<u>13,859,475</u>
Information Technology:				
International Technology Services.....	120,261,666	106,715,198	106,897,969	109,834,022
National Information Technology Center.....	5,330,294	4,325,786	8,386,590	8,603,445
Telecommunications Services.....	442,965	443,120	508,490	497,930
Subtotal.....	<u>126,034,924</u>	<u>111,484,104</u>	<u>115,793,049</u>	<u>118,935,397</u>
Total, Working Capital Fund.....	145,130,619	132,716,538	131,669,843	136,844,917
<b>Department-Wide Reimbursable Programs:</b>				
1890 USDA Initiatives.....	304,558	308,496	303,362	303,362
Advisory Committee Liaison Services.....	7,792	1,477	1,869	1,869
Classified National Security Information.....	-	-	108,413	108,413
Continuity of Operations Planning.....	215,475	212,826	218,786	219,548
Emergency Operations Center.....	241,164	243,742	242,080	243,060
Facility and Infrastructure Review and Assessment.....	43,512	46,886	46,587	46,696
Faith-Based & Neighborhood Partnerships.....	40,300	22,982	40,601	41,471
Federal Biobased Products Preferred Procurement Program.....	36,019	36,504	-	-
Hispanic-Serving Institutions National Program.....	205,769	210,251	205,724	205,724
Honor Awards.....	4,720	7,997	7,946	7,946
Human Resources Transformation.....	166,600	179,970	181,560	182,431
Identity & Access Management (HSPD-12).....	687,792	710,454	698,592	699,354
Intertribal Technical Assistance Network.....	321,742	322,437	319,717	319,717
Medical Services.....	23,684	27,270	62,413	64,568
People's Garden.....	66,326	60,763	76,630	68,248
Personnel Security Branch (was PDSB).....	88,099	92,721	77,790	77,790
Preauthorized Funding.....	354,278	381,705	384,781	384,781
Retirement Processor Web Application.....	59,190	59,984	62,262	62,262
Sign Language Interpreter.....	86,944	61,838	-	-
TARGET Center.....	94,445	96,583	150,103	150,320
USDA 1994 Program.....	79,640	79,377	80,875	80,875
Virtual University.....	214,984	206,078	205,071	206,051
Visitor Information Center.....	23,063	24,299	-	-
Total, Department-Wide Reimbursable Programs.....	<u>3,366,096</u>	<u>3,394,640</u>	<u>3,475,162</u>	<u>3,474,486</u>



Shared Funding Projects

(Dollars in thousands)

	2013	2014	2015	2016
	<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
<b>E-Gov:</b>				
Budget Formulation and Execution Line of Business.....	10,445	10,573	10,341	10,341
Enterprise HR Integration.....	259,799	236,469	218,167	226,893
E-Training.....	375,452	293,810	287,361	287,361
Financial Management Line of Business.....	18,417	18,642	17,338	18,233
HR Management Line of Business.....	28,681	29,033	28,395	28,395
Integrated Acquisition Environment.....	71,866	70,609	69,059	69,059
Integrated Acquisition Environment - Loans & Grants.....	141,341	200,244	195,848	195,848
Disaster Assistance Improvement Plan.....	44,603	51,266	38,886	38,887
E-Rulemaking.....	109,679	108,213	82,443	53,398
Geospatial Line of Business.....	13,251	-	-	29,031
GovBenefits.....	114,947	139,169	132,662	142,542
Grants.gov.....	73,484	65,687	55,586	57,451
<b>Total, E-Gov.....</b>	<b>1,261,965</b>	<b>1,223,715</b>	<b>1,136,086</b>	<b>1,157,440</b>
<b>Agency Total.....</b>	<b>149,758,680</b>	<b>137,334,893</b>	<b>136,281,091</b>	<b>141,476,843</b>

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## NATURAL RESOURCES CONSERVATION SERVICE

### Summary of Budget and Performance Statement of Department Goals and Objectives

The Natural Resources Conservation Service (NRCS) was established pursuant to the Department of Agriculture Reorganization Act of 1994, (P.L. 103-354, 7 U.S.C. 6962). The mission of NRCS is “Helping People Help the Land.” The Agency accomplishes its mission by providing products and services that enable people to be good stewards of the Nation’s soil, water, and related natural resources on non-Federal lands. NRCS administers the following discretionary programs: Conservation Technical Assistance (CTA), Soil Survey (SOIL), Snow Survey and Water Supply Forecasting (SNOW), Plant Materials Centers (PMCs), Watershed Rehabilitation Program (REHAB), Emergency Watershed Protection Program (EWP), Watershed and Flood Prevention Operations (WFPO, P.L. 78-534), Small Watersheds (P.L. 83-566), Resource Conservation and Development (RC&D), Healthy Forests Reserve Program (HFRP), and Water Bank. NRCS also administers the following mandatory programs, authorized through the 2014 Farm Bill: Agricultural Conservation Easement Program (ACEP), Agricultural Management Assistance Program (AMA), Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CStP), and the Regional Conservation Partnership Program (RCPP). Finally, the agency provides technical assistance to the Conservation Reserve Program (CRP) administered by the Farm Service Agency.

All agency programs and performance support USDA’s Strategic Goal 2 as outlined in the following table.

**USDA Strategic Goal 2: Ensure Our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources.**

**USDA Strategic Objective: Improve the Health of the Nation’s Forests, Grasslands, and Working Lands by Managing Natural Resources (Objective 2.1)**

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcomes
Get More Conservation on the Ground	Advance the performance of voluntary, incentive-based conservation solutions	CTA, EQIP, SOIL, CStP, ACEP, RCPP, HFRP, PMC, RC&D, HFRP, AMA	1. Maintain productive working farms and ranches.
		CTA, EQIP, ACEP, RCPP, HFRP	2. Decrease threats to “candidate” and threatened/endangered species.

**Key Performance Measures:**

USDA provides assistance to private landowners and managers to improve soil health since it is the foundation for maintaining working productive farms and ranches. The two primary focuses for improving soil health on cropland are reducing erosion and increasing organic matter. Reducing soil erosion preserves the “topsoil”, the rich upper layer that supports the majority of a plant’s life cycle. Intensive agricultural practices often reduce the amount of organic matter (carbon) in the soil over time. This reduces the soil’s ability to efficiently hold nutrients and water. Maintaining and increasing the percentage of organic matter in our soils is vital to retaining the ability to feed ourselves as a nation.

In addition, USDA is committed to reducing agriculture’s carbon footprint and assisting America’s farmers, ranchers and forest owner’s adapting to new challenges caused by a changing climate – ranging from more intense weather events, to increased risk of wildfire, to a greater prevalence of invasive species. While assessments on the future of agriculture and forestry show that climate change holds these and other challenges in the years ahead, American producers are longtime leaders in innovation, risk management and adaptation. USDA has supported these efforts for more than a century.

Soil has tremendous potential to store carbon, which reduces the levels of carbon dioxide in the atmosphere, one of the leading greenhouse gases contributing to climate change. Storage potential varies among soils, land covers, land uses and management, but it is known that increasing soil carbon is the single most important component of soil health. NRCS assists agricultural producers to apply science-based conservation practices that deliver environmental benefits such as improved soil health and carbon retained on cropland. The benefits of implementing these

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standardized practices can be measured and modeled nationally, especially when combined with land, soil, climate, and other data. The combination of practices used to improve soil health is called a Soil Health Management System.

Measures	2010 <sup>2/</sup> Actual	2011 <sup>2/</sup> Actual	2012 <sup>2/</sup> Actual	2013 <sup>2/</sup> Actual	2014 Actual	2015 Target	2016 Target
Cropland with conservation applied to improve soil quality, million acres <sup>1/</sup>							
CTA	N/A	N/A	N/A	N/A	6.2	6.8	6.8
EQIP	N/A	N/A	N/A	N/A	3.1	3.4	3.4

<sup>1/</sup> All practices reported under this measure must comply with NRCS General Manual (GM) \_180\_409 and NRCS GM\_450\_407, which require agency staff with appropriate technical approval authority certify that each practice meets agency-approved technical specifications, in addition to a sampling protocol for quality assurance of conservation practices certified as applied.

<sup>2/</sup>Past year actuals were assigned N/A in the 2015 Budget Summary and Annual Performance Plan due to a data transition in the agency in 2014.

Selected Past Accomplishments Toward the Achievement of the Key Outcome:

Several NRCS conservation practices directly impact soil carbon storage. For example, conservation crop rotations (4.2 million acres applied in 2014) or planting cover crops (with 1.2 million acres applied in 2014) help increase carbon storage in soil. These crops take carbon dioxide out of the atmosphere and deposit it into the soil as organic matter. They also help reduce erosion and increase water-holding capacity and water infiltration, which increases the resiliency to drought, heavy precipitation and extreme temperatures. In 2014, across all NRCS programs, over 10 million acres of cropland had conservation applied to improve soil quality. This measure is used as the USDA indicator for maintaining or enhancing sustained production of a safe, healthy, and abundant food supply. These annual outputs contribute significantly to long-term outcome measurements. According to the science-based USDA National Resources Inventory (NRI), between 1982 and 2007 soil erosion on U.S. cropland decreased 43 percent. Water (sheet & rill) erosion on cropland in 2007 declined from 1.68 billion to 960 million tons per year, and erosion due to wind declined from 1.38 billion to 765 million tons per year.

Selected Accomplishments Expected at the 2016 Proposed Resource Level:

Soil health will be improved on over 10 million acres of the Nation’s cropland, by preventing soil erosion and carbon loss. Through the conservation planning and delivery system, NRCS personnel will provide technical assistance to landowners and managers in addressing soil health concerns. Financial assistance programs will facilitate conservation activities, especially the more costly structural practices that are difficult for landowners to afford.

Key Performance Measures:

Range and pasture lands are located in all 50 states. According to the NRI, privately-owned range and pasture lands make up over 27 percent (528 million acres) of the total acreage of the contiguous 48 states. These lands constitute the largest private lands use category, exceeding both forest land (21 percent) and crop land (18 percent). Properly managed grazing land has multiple benefits, including reduced storm water runoff, improved carbon storage in the soil, wildlife habitat, and beautiful open space.

Measure	2010 <sup>3/</sup> Actual	2011 <sup>3/</sup> Actual	2012 <sup>3/</sup> Actual	2013 <sup>3/</sup> Actual	2014 Actual	2015 Target	2016 Target
Grazing and forest land with conservation applied to protect and improve the resource base, million acres <sup>1,2/</sup>							
CTA	N/A	N/A	N/A	N/A	13.1	12.8	12.8
EQIP	N/A	N/A	N/A	N/A	14.8	13.7	13.7

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<sup>1/</sup> In 2011, Grazing lands and forestlands were combined into one measure. In the previous year’s report the measures for grazing and forest land were reported separately. This table includes combined numbers for all years.

<sup>2/</sup> All practices reported under this measure must comply with NRCS General Manual (GM)\_180\_409 and NRCS GM\_450\_407, which require agency staff with appropriate technical approval authority certify that each practice meets agency-approved technical specifications, in addition to a sampling protocol for quality assurance of conservation practices certified as applied.

<sup>3/</sup> Past year actuals were assigned N/A in the 2015 Budget Summary and Annual Performance Plan due to a data transition in the agency in 2014

Selected Past Accomplishments Toward the Achievement of the Key Outcome:

Range and pasture management methods enhance sustainable livestock production, but they can also improve soil and water resources by preventing erosion, increasing infiltration, facilitating soil building grasses in rotation systems, and sequestering carbon from the atmosphere. They are production systems that can be used as tools to conserve and restore our natural resources as well as provide a direct and short-term economic return to farmers and ranchers.

For example, rising energy costs increase the costs of producing and transporting hay and grain. Livestock producers are working with NRCS and looking for ways to save on these inputs as well as improve the nutrition of their herds. Stockpiling forage to extend the grazing season and strip grazing to improve forage utilization offers economic and environmental benefits. Although the savings on diesel fuel, improvements in animal health, and higher-quality pastures are unique to each operation, economic returns are realized quickly by using a variety of grasses and properly rotating the animals with fencing and water systems.

In 2014, all NRCS programs contributed to the application of over 28 million acres of conservation systems to improve grazing and forest land health. In addition to directly applied conservation, NRCS also provided technical assistance on the application of effective grazing and forest land management practices.

Selected Accomplishments Expected at the 2016 Proposed Resource Level:

The NRI findings show that 20 percent of the rangeland is in need of conservation treatment for soil stability, hydrologic function, and/or biotic integrity. USDA has prioritized grazing land conservation through initiatives to assist America’s ranchers with improving the health of their lands and animals. With these funds, NRCS can assist landowners and managers in installing prescribed grazing and forestry systems that improve ecosystem health on almost 30 million acres.

Key Performance Measures:

Nearly 70 percent of the fish and wildlife habitat in the U.S. is on privately-owned lands. USDA provides private landowners financial and on-site technical assistance to assess the quality of wildlife habitat, to install practices necessary to restore or enhance that habitat, and to create a management plan to sustain the habitat. NRCS provides technical and financial assistance to maintain and enhance fish and wildlife habitat on non-Federal lands.

Measure	2010 <sup>2/</sup> Actual	2011 <sup>2/</sup> Actual	2012 <sup>2/</sup> Actual	2013 <sup>2/</sup> Actual	2014 Actual	2015 Target	2016 Target
Non-Federal land with conservation applied to improve fish and wildlife habitat quality, million acres <sup>1/</sup>							
EQIP	N/A	N/A	N/A	N/A	1.4	1.4	1.4

<sup>1/</sup> All practices reported under this measure must comply with NRCS General Manual (GM)\_180\_409 and NRCS GM\_450\_407, which require agency staff with appropriate technical approval authority certify that each practice meets agency-approved technical specifications, in addition to a sampling protocol for quality assurance of conservation practices certified as applied.

<sup>2/</sup> Past year actuals were assigned N/A in the 2015 Budget Summary and Annual Performance Plan due to a data transition in the agency in 2014.

Selected Past Accomplishments Toward the Achievement of the Key Outcome:

In 2014, over 9 million acres of habitat were improved for wildlife over all NRCS programs. These acres included habitat for wildlife species on Federal and State Threatened and Endangered Species Lists and for other species of

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concern through focused initiatives including: Sage Grouse, Migratory Birds, Longleaf Pine, and the Lesser Prairie-Chicken. NRCS standard conservation practices applied for wildlife habitat improvement include riparian herbaceous cover, stream bank and shoreline protection, hedgerow plantings, upland wildlife habitat management, and wetland creation and restoration.

Through Working Lands for Wildlife, an NRCS partnership with the US Fish and Wildlife Service, landowners in 35 States enrolled approximately 3.5 million acres in conservation practices to improve habitat for these species. More than 2.5 million acres of those were enrolled in the Sage Grouse Initiative. Known for its mating dance, the sage grouse is a Western icon.

Ranchers across the West are actively reducing the threats to the sage grouse habitat, including a fence-marking initiative that decreased sage grouse deaths from running into barbed wire fences by 83 percent. They are also helping the grouse and other sagebrush wildlife species by improving rangeland health.

Removing invasive conifers that fragment the landscape and severely affect sage grouse populations, productivity of the land, and health of the range is making a positive mark on the landscape. In total, more than 200,000 acres of invasive conifer trees have been removed under SGI, tripling the probability of maintaining sage grouse populations.

Landowners in the Southeast are helping restore the habitat for the gopher tortoise, the keystone species of the longleaf pine ecosystem. About 360 other wildlife species depend on tortoises and their burrows. Conservation activities for at-risk species also directly benefit other wildlife. For example, one Florida landowner used NRCS conservation practices to restore the land into a vibrant longleaf pine forest which under proper management, will develop a robust understory that provides food and cover for a variety of wildlife, including the fox squirrel and northern bobwhite quail.

In addition to the wildlife benefits, these conservation activities also help the environment as a whole. By establishing native groundcover plants such as wiregrass, silk grass and partridge pea to increase plant diversity, this landowner is creating a landscape that will serve as a filter for water that eventually flows to the Gulf of Mexico, removing excess nutrients.

Selected Accomplishments Expected at the 2016 Proposed Resource Level:

For 2016, over 9 million acres of wildlife habitat are expected to be improved through all NRCS programs. Wildlife habitat such as riparian areas and in wetlands and upland areas will be improved through the application of NRCS conservation practices, especially in priority areas that have Threatened and Endangered Species. Through the focusing of the program dollars only in the highest priority areas, the direct impacts of the funding will be improved.

**USDA Strategic Objective: Contribute to Clean and Abundant Water by Protecting and Enhancing Water Resources in National Forests and on Working Lands (Objective 2.3)**

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcomes
Get More Conservation on the Ground	Advance the performance of voluntary, incentive-based conservation solutions	CTA, SOIL, PMC, EQIP, CStP, ACEP, RCPP, CRP, SNOW, Water Bank, AMA, REHAB, EWP, WFPO-P.L.78-534, P.L. 83-566	3. Eliminate and reduce impairments to water bodies and help prevent the listing of additional water bodies as “impaired”.

Key Performance Measures:

Within USDA, NRCS is the lead Agency on Objective 2.3: Contribute to clean and abundant water by protecting and enhancing water resources in National Forests and on Working Lands. Water running off or infiltrating the ground from agricultural operations can carry a number of pollutants into streams, lakes, groundwater, and estuaries.

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States and tribal governments have identified sediment and nutrients as the greatest agricultural contaminants affecting surface water quality. Nutrients and agrichemicals are the major concerns for groundwater.

USDA has made great strides in improving water quality through landowner participation in voluntary conservation programs. However, “nonpoint” source pollution remains a significant economic, environmental, and public health challenge that requires policy attention and thoughtful new approaches. NRCS, along with other key Federal partners such as the United States Geological Survey, and the Environmental Protection Agency, will work collaboratively with stakeholders, including agriculture producer organizations, conservation districts, States and tribal governments, Non-Governmental Organizations (NGOs), and other local leaders, to identify areas where a more targeted and coordinated approach can achieve substantial improvements in water quality.

Measure	2010 <sup>2/</sup> Actual	2011 <sup>2/</sup> Actual	2012 <sup>2/</sup> Actual	2013 <sup>2/</sup> Actual	2014 Actual	2015 Target	2016 Target
Land with conservation applied to improve water quality, million acres <sup>1/</sup>							
CTA	N/A	N/A	N/A	N/A	18.2	17.2	17.2
EQIP	N/A	N/A	N/A	N/A	12.3	12.0	12.0

<sup>1/</sup> All practices reported under this measure must comply with NRCS General Manual (GM)\_180\_409 and NRCS GM\_450\_407, which require agency staff with appropriate technical approval authority certify that each practice meets agency-approved technical specifications, in addition to a sampling protocol for quality assurance of conservation practices certified as applied.

<sup>2/</sup> Past year actuals were assigned N/A in the 2015 Budget Summary and Annual Performance Plan due to a data transition in the agency in 2014.

Selected Past Accomplishments Toward the Achievement of the Key Outcome:

In 2014, USDA assisted landowners and managers in application of over 32 million acres of conservation practices designed to improve water quality across all NRCS programs. USDA conservation practices are science-based and have a demonstrated effect. A scientific study was done by the Conservation Effects Assessment Project (CEAP) with the following results: Adoption of conservation practices in agriculture in the Chesapeake Bay watershed has reduced edge-of-field sediment loss by 55 percent, losses of nitrogen with surface runoff by 42 percent, losses of nitrogen in subsurface flows by 31 percent, and losses of phosphorus (sediment attached and soluble) by 41 percent.

Farmers have also significantly reduced the loss of sediment and nutrients from farm fields through voluntary conservation work in the lower Mississippi River basin. In the Mississippi River basin, conservation work, like controlling erosion and managing nutrients, has reduced the edge-of-field losses of sediment by 35 percent, nitrogen by 21 percent and phosphorous by 52 percent.

These losses are derived from comparing losses of sediment and nutrients from cultivated cropland to losses that would be expected if conservation practices were not used. The results show that an increase in cover crops will have a significant impact on reducing edge-of-field losses of sediment and nutrients and improve water quality. In 2014, NRCS assisted with the application of 1.2 million acres of cover crop nationwide.

Over the past few years, similar assessments were completed in the upper Mississippi River, Tennessee-Ohio, Missouri and Arkansas-Red-White basins. As a whole, assessments in this project have shown:

Conservation on cropland prevents an estimated 243 million tons of sediment, 2.1 billion pounds of nitrogen and 375 million pounds of phosphorus from leaving fields each year. These figures translate to a 55 percent, 34 percent and 46 percent reduction in sediment, nitrogen and phosphorus edge-of-field losses, respectively, compared to what would have been lost if no conservation practices were in place.

Similarly, conservation has resulted in an estimated 17 percent reduction in nitrogen and 22 percent reduction in phosphorus entering the Gulf of Mexico annually. An additional reduction of 15 percent of nitrogen and 12 percent of phosphorus can be achieved by implementing comprehensive conservation plans on all cropland in the basin in areas that have not adequately addressed nutrient loss.

The scientific-based modeling also pointed out that higher rainfall and more intense storms lead to higher edge-of-field losses of sediment and nutrients in the lower Mississippi River basin than the other four

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basins in the Mississippi River watershed. Because of this, more soil erosion control and better management of nutrients are important in the basin.

Selected Accomplishments Expected at the 2016 Proposed Resource Level:

In 2016, there will continue to be an increased focus of programs and conservation investments in water quality and quantity, especially in priority watersheds. Through all NRCS programs, nearly 35 million acres of conservation will be applied using science-based conservation practices, such as vegetation planted on slopes to reduce soil erosion, drainage water management, conservation buffers, water conservation, and nutrient management.

Key Performance Measures:

Agriculture is one of the largest users of the Nation’s surface water and groundwater, with irrigation being the greatest use. Agriculture is a major user of ground and surface water in the United States. In arid and semi-arid areas, crop production depends almost entirely on irrigation.

Farm-level Irrigation Water Management (IWM) involves managing water and related inputs in irrigated crop production to financial returns, often in energy savings, and minimizing environmental impacts. Improvements and expansion in IWM are essential to the agricultural sector that depends on ground and surface water, especially in times of drought. Within the conservation systems approach, water conservation has always been considered a major factor in reducing soil erosion, runoff, and leaching of nutrients from cropland. However, as the focus shifted to consumptive use of water, NRCS accelerated water conservation efforts on agricultural operations.

<b>Measure</b>	<b>2010<sup>2/</sup> Actual</b>	<b>2011<sup>2/</sup> Actual</b>	<b>2012<sup>2/</sup> Actual</b>	<b>2013<sup>2/</sup> Actual</b>	<b>2014 Actual</b>	<b>2015 Target</b>	<b>2016 Target</b>
Land with conservation applied to improve irrigation efficiency, million acres <sup>1/</sup>							
CTA	N/A	N/A	N/A	N/A	0.8	0.7	0.7
EQIP	N/A	N/A	N/A	N/A	1.0	1.0	1.0

<sup>1/</sup> All practices reported under this measure must comply with NRCS General Manual (GM) \_180\_409 and NRCS GM\_450\_407, which require agency staff with appropriate technical approval authority certify that each practice meets agency-approved technical specifications, in addition to a sampling protocol for quality assurance of conservation practices certified as applied.

<sup>2/</sup>Past year actuals were assigned N/A in the 2015 Budget Summary and Annual Performance Plan due to a data transition in the agency in 2014.

Selected Past Accomplishments toward Achievement of the Key Outcome:

In 2014, USDA assisted landowners and managers in application of over 2 million acres of conservation for irrigation efficiencies. In response to the drought, energy savings from reduced pumping, and pressure on some of the Nation’s aquifers, NRCS is increasing focus on water conservation activities and practices in the next several years.

USDA assisted with conservation of Ogallala Aquifer water resources in 2014. The aquifer is a 225,000-square-mile underground basin vital to agriculture and to municipal and industrial development. The aquifer stretches from western Texas to South Dakota and supports nearly one-fifth of the wheat, corn, cotton, and cattle produced in the United States. During drought times, the aquifer becomes an even more critical water resource for America’s heartland as many rely on the aquifer in lieu of rainwater. By reducing an individual operation’s water use, conservation helps relieve some of the pressure put on the aquifer.

Many farmers are switching their irrigation systems from gravity to sprinkler center pivots and subsurface drip irrigation systems, which can increase pumping efficiencies by at least 40 percent. Technology is also playing a large role in water conservation. Some new pivots use variable rate irrigation, meaning as the pivot travels over areas, it adjusts water rates to match the need.

Conservation practices such as no-till and cover crops can help improve soil health and water quality. Healthy soils increase water capacity and infiltration making lands more resilient to drought. During 2014, cover crops were applied on 1.2 million acres and no-till and management of crop residue was applied on almost 4 million acres.



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One grower from Nebraska received a direct return on his farm. He converted a gravity irrigation system to center pivots and installed a subsurface drip irrigation system with NRCS assistance. These changes reduced water usage by at least 50 percent and increased corn yield by nine bushels per acre due to improved uniformity of irrigation. Efforts like this taken by farmers and ranchers have helped decrease the water withdrawn from the Ogallala Aquifer by more than 280 billion gallons over the past four years.

### Selected Accomplishments Expected at the 2016 Proposed Resource Level:

In 2016, there will continue to be an increased focus of programs and conservation investments in water conservation, with over 2 million acres of water conservation practices applied each year. One example is the Ogallala Aquifer Initiative, which is designed to reduce the quantity of water removed from the aquifer, improve water quality using conservation practices, and enhance the economic viability of the affected farms and ranches. Over the course of the initiative, irrigation efficiency will be improved by a minimum of 20 percent on 3.7 million acres.

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Strategic Goal Funding Matrix  
(Dollars in thousands)

Program / Program Items	<u>2013</u> <u>Actual</u>	<u>2014</u> <u>Actual</u>	<u>2015</u> <u>Estimate</u>	Increase or Decrease	<u>2016</u> <u>Estimate</u>
<b>Department Strategic Goal 2:</b> Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources					
<b>Discretionary:</b>					
Conservation Technical Assistance.....	\$675,771	\$714,383	\$747,728	-\$14,698	\$733,030
Staff Years.....	4,773	5,387	5,547	-\$157	5,390
Soil Survey.....	73,809	80,000	80,000	94	80,094
Staff Years.....	550	402	403	-	403
Snow Survey and Water Supply Forecasting.....	8,580	9,300	9,300	-363	8,937
Staff Years.....	52	50	50	-	50
Plant Materials Program.....	8,673	9,400	9,400	-230	9,170
Staff Years.....	96	77	77	-	77
Watershed Operations					
P.L. 78-534					
1. Technical Assistance.....	-	-	-	-	-
2. Financial Assistance.....	-	-	-	-	-
Subtotal, P.L. 78-534.....	-	-	-	-	-
Staff Years.....	-	-	2	-2	-
Emergency Watershed Protection Program					
1. Technical Assistance.....	49,621	-	19,645	-19,645	-
2. Financial Assistance.....	185,061	-	58,936	-58,936	-
Subtotal, EWP.....	234,682	-	78,581	-78,581	-
Staff Years.....	76	63	63	-63	-
Small Watershed Operations					
P.L. 83-566					
1. Technical Assistance.....	-	-	-	50,000	50,000
2. Financial Assistance.....	-	-	-	150,000	150,000
Subtotal, P.L. 83-566.....	-	-	-	200,000	200,000
Staff Years.....	36	4	5	72	77
Watershed Rehabilitation					
1. Technical Assistance.....	4,504	27,797	17,859	-17,859	-
2. Financial Assistance.....	9,079	234,203	136,083	-136,083	-
Subtotal, Rehabilitation.....	13,583	262,000	153,942	-153,942	-
Staff Years.....	29	40	34	-34	-
Water Bank Program					
1. Technical Assistance.....	-	400	400	-400	-
2. Financial Assistance.....	-	3,600	3,600	-3,600	-
Subtotal, Water Bank.....	-	4,000	4,000	-4,000	-
Staff Years.....	-	1	1	-1	-
<b>Total Cost, Discretionary.....</b>	<b>1,015,098</b>	<b>1,079,083</b>	<b>1,082,951</b>	<b>-51,720</b>	<b>1,031,231</b>
<b>Total Staff Years, Discretionary.....</b>	<b>5,612</b>	<b>6,024</b>	<b>6,182</b>	<b>-185</b>	<b>5,997</b>

NATURAL RESOURCES CONSERVATION SERVICE

Program / Program Items	<u>2013</u> Actual	<u>2014</u> Actual	<u>2015</u> Estimate	Increase or Decrease	<u>2016</u> Estimate
<b>Mandatory:</b>					
<b>Wetlands Reserve Program</b>					
1. Technical Assistance.....	69,396	24,070	90,925	-90,925	-
2. Financial Assistance.....	330,796	37,762	135,714	64,286	200,000
Subtotal, WRP.....	400,192	61,833	226,639	-26,639	200,000
Staff Years	421	122	143	-143	-
<b>Environmental Quality Incentives Program</b>					
1. Technical Assistance.....	376,373	361,038	373,510	23,311	396,821
2. Financial Assistance.....	997,486	936,030	1,025,176	-8,997	1,016,179
Subtotal, EQIP.....	1,373,859	1,297,068	1,398,685	14,315	1,413,000
Staff Years	2,958	2,500	2,831	672	3,503
<b>Agricultural Water Enhancement Program</b>					
1. Technical Assistance.....	10,740	4,773	11,458	-11,458	-
2. Financial Assistance.....	44,518	611	3,388	8,612	12,000
Subtotal, AWEPP.....	55,258	5,384	14,846	-2,846	12,000
Staff Years	69	38	45	-45	-
<b>Wildlife Habitat Incentives Program</b>					
1. Technical Assistance.....	19,116	7,080	18,721	-18,721	-
2. Financial Assistance.....	44,397	2,532	5,295	14,705	20,000
Subtotal, WHIP.....	63,513	9,612	24,016	-4,016	20,000
Staff Years	112	54	63	-63	-
<b>Farm and Ranch Lands Protection Program</b>					
1. Technical Assistance.....	8,827	2,382	25,099	-25,099	-
2. Financial Assistance.....	109,302	494	68,741	259	69,000
Subtotal, FRPP.....	118,129	2,877	93,840	-24,840	69,000
Staff Years	43	14	16	-16	-
<b>Conservation Security Program</b>					
1. Technical Assistance.....	13,181	5,225	7,324	-6,684	640
2. Financial Assistance.....	145,675	115,186	20,976	-12,616	8,360
Subtotal, CSP.....	158,856	120,411	28,299	-19,299	9,000
Staff Years	105	48	56	-38	18
<b>Conservation Stewardship Program</b>					
1. Technical Assistance.....	92,364	111,171	266,357	-104,136	162,221
2. Financial Assistance.....	790,188	919,700	943,810	350,190	1,294,000
Subtotal, CStP.....	882,552	1,030,871	1,210,167	246,054	1,456,221
Staff Years	595	622	729	248	977
<b>Grassland Reserve Program</b>					
1. Technical Assistance.....	6,202	806	11,961	-11,961	-
2. Financial Assistance.....	56,655	646	13,014	8,986	22,000
Subtotal, GRP.....	62,857	1,452	24,976	-2,976	22,000
Staff Years	36	5	6	-6	-

NATURAL RESOURCES CONSERVATION SERVICE

Program / Program Items	<u>2013</u> Actual	<u>2014</u> Actual	<u>2015</u> Estimate	Increase or Decrease	<u>2016</u> Estimate
<b>Agricultural Management Assistance</b>					
1. Technical Assistance.....	492	1,385	973	61	1,034
2. Financial Assistance.....	1,958	5,185	3,662	304	3,966
Subtotal, AMA.....	2,450	6,570	4,635	365	5,000
Staff Years	5	5	6	-	6
<b>Chesapeake Bay Watershed Program</b>					
1. Technical Assistance.....	6,581	4,598	5,165	-5,165	-
2. Financial Assistance.....	42,818	2,329	1,608	3,392	5,000
Subtotal, CBWP.....	49,399	6,927	6,773	-1,773	5,000
Staff Years	56	43	50	-50	-
<b>Healthy Forests Reserve Program</b>					
1. Technical Assistance.....	1,183	-3,047	943	-943	-
2. Financial Assistance.....	5,258	3,624	3,212	-212	3,000
Subtotal, HFRP.....	6,441	577	4,154	-1,154	3,000
Staff Years	8	3	4	-4	-
<b>Agricultural Conservation Easement Program</b>					
1. Technical Assistance.....	-	90,768	140,432	2,164	142,596
2. Financial Assistance.....	-	226,107	302,734	4,670	307,404
Subtotal, ACEP.....	-	316,875	443,166	6,834	450,000
Staff Years	-	259	303	5	308
<b>Regional Conservation Partnership Program</b>					
1. Technical Assistance.....	-	1,908	39,719	-18,419	21,300
2. Financial Assistance.....	-	-1	146,754	-68,054	78,700
Subtotal, RCPP.....	-	1,907	186,473	-86,473	100,000
Staff Years	-	2	100	-46	54
<b>Voluntary Public Access and Habitat Incentive Program</b>					
1. Technical Assistance.....	-	525	6,695	-6,695	-
2. Financial Assistance.....	-	17,532	15,247	-15,247	-
Subtotal, VPA.....	-	18,058	21,942	-21,942	-
Staff Years	-	-	-	-	-
<b>Wetlands Mitigation Banking Program</b>					
1. Technical Assistance.....	-	-	1,000	-1,000	-
2. Financial Assistance.....	-	-	9,000	-9,000	-
Subtotal, WMBP.....	-	-	10,000	-10,000	-
Staff Years	-	-	-	-	-
<b>Conservation Reserve Program</b>					
1. Technical Assistance.....	64,920	65,510	48,689	1,311	50,000
2. Financial Assistance.....	-	-	-	-	-
Subtotal, CRP.....	64,920	65,510	48,689	1,311	50,000
Staff Years	611	554	649	17	666
Total Costs, Mandatory	3,238,427	2,945,931	3,747,302	66,919	3,814,221
Total Staff Years, Mandatory	5,019	4,269	5,001	531	5,532
Total Costs, All Strategic Goals	4,253,525	4,025,014	4,830,253	15,199	4,845,452
Total Staff Years, All Strategic Goals	10,631	10,293	11,183	346	11,529

NATURAL RESOURCES CONSERVATION SERVICE

Full Cost by Department Strategic Goal  
(Dollars in thousands)

**Department Strategic Goal: Ensure Our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources**

Program/Program Items	2013 Actual	2014 Actual	2015 Estimate	2016 Estimate
<u>Conservation Technical Assistance</u>				
Technical Assistance	\$675,771	\$714,383	\$747,728	\$733,030
Total Costs	675,771	714,383	747,728	733,030
Staff Years	4,773	5,387	5,547	5,390
Performance measure: Cropland with conservation applied to improve soil quality				
Performance, million acres	N/A	6.2	6.8	6.8
Performance measure: Grazing and forest land with conservation applied to protect and improve the resource base				
Performance, million acres	N/A	13.1	12.8	12.8
Performance measure: Land with conservation applied to improve water quality				
Performance, million acres	N/A	18.2	17.2	17.2
Performance measure: Land with conservation applied to improve irrigation efficiency				
Performance, million acres	N/A	0.8	0.7	0.7
<u>Soil Survey</u>				
Technical Assistance	73,809	80,000	80,000	80,094
Total Costs	73,809	80,000	80,000	80,094
Staff Years	550	402	403	403
Performance measure: Soil surveys mapped or updated				
Performance: million acres	45.7	59.3	38.0	38.0
Performance measure: Ecological Site Descriptions developed				
Performance: million acres	24.4	23.6	24.0	24.0
<u>Snow Survey &amp; Water Supply Forecasting</u>				
Technical Assistance	8,580	9,300	9,300	8,937
Total Costs	8,580	9,300	9,300	8,937
Staff Years	52	50	50	50
Performance measure: Water supply forecasts issued				
Performance, number	5,993	11,942	11,800	11,800
<u>Plant Materials Centers</u>				
Technical Assistance	8,673	9,400	9,400	9,170
Total Costs	8,673	9,400	9,400	9,170
Staff Years	96	77	77	77
Performance measure: Technical documents prepared and transferred to customers				
Performance, number	327	221	240	240
Performance measure: Plant materials technical training delivered to conservation delivery staff				
Performance, number of participants	2,015	2,029	1,600	1,600

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Full Cost by Department Strategic Goal  
(Dollars in thousands)

**Department Strategic Goal: Ensure Our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources**

	2013	2014	2015	2016
<u>Flood Prevention Operations P.L. 78-534</u>				
Technical Assistance	-	-	-	-
Financial Assistance	-	-	-	-
Total Costs	-	-	-	-
Staff Years	-	-	2	-
<u>Watershed Operations P.L. 83-566</u>				
Technical Assistance	-	-	-	50,000
Financial Assistance	-	-	-	150,000
Total Costs	-	-	-	200,000
Staff Years	5	4	5	77
<u>Emergency Watershed Protection Program</u>				
Technical Assistance	49,621	-	19,645	-
Financial Assistance	185,061	-	58,936	-
Total Costs	234,682	-	78,581	-
Staff Years	76	63	63	-
<u>Watershed Rehabilitation Program</u>				
Technical Assistance	4,504	27,797	17,859	-
Financial Assistance	9,079	234,203	136,083	-
Total Costs	13,583	262,000	153,942	-
Staff Years	29	40	34	-
Performance measure: Dams with watershed rehabilitation plans authorized				
Performance, number	3	2	21	60
<u>Water Bank</u>				
Technical Assistance	-	400	400	-
Financial Assistance	-	3,600	3,600	-
Total Costs	-	4,000	4,000	-
Staff Years	-	1	1	-
<u>Discretionary Total</u>				
Total Costs	1,015,098	1,079,083	1,082,951	1,031,231
Staff Years	5,581	6,024	6,182	5,997
<u>Wetlands Reserve Program</u>				
Technical Assistance	69,396	24,070	90,925	-
Financial Assistance	330,796	37,762	135,714	200,000
Total Costs	400,192	61,833	226,639	200,000
Staff Years	421	122	143	-

NATURAL RESOURCES CONSERVATION SERVICE

Full Cost by Department Strategic Goal  
(Dollars in thousands)

**Department Strategic Goal: Ensure Our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources**

	2013	2014	2015	2016
<u>Environmental Quality Incentives Program</u>				
Technical Assistance	376,373	361,038	373,510	396,821
Financial Assistance	997,486	936,030	1,025,176	1,016,179
Total Costs	1,373,859	1,297,068	1,398,685	1,413,000
Staff Years	2,958	2,500	2,831	3,503
Performance measure: Land with conservation applied to improve water quality				
Performance, million acres	N/A	12.3	12.0	12.0
Performance measure: Cropland with conservation applied to improve soil quality				
Performance, million acres	N/A	3.1	3.4	3.4
Performance measure: Non-Federal land with conservation applied to improve fish and wildlife habitat quality				
Performance, million acres	N/A	1.4	1.4	1.4
Performance measure: Grazing and forest land with conservation applied to protect the resource base				
Performance, million acres	N/A	14.8	13.7	13.7
Performance measure: Land with conservation applied to improve irrigation efficiency				
Performance, million acres	N/A	1.0	1.0	1.0
<u>Grassland Reserve Program</u>				
Technical Assistance	6,202	806	11,961	-
Financial Assistance	56,655	646	13,014	22,000
Total Costs	62,857	1,452	24,976	22,000
Staff Years	36	5	6	-
<u>Agricultural Water Enhancement Program</u>				
Technical Assistance	10,740	4,773	11,458	-
Financial Assistance	44,518	611	3,388	12,000
Total Costs	55,258	5,384	14,846	12,000
Staff Years	69	38	45	-
<u>Wildlife Habitat Incentives Program</u>				
Technical Assistance	19,116	7,080	18,721	-
Financial Assistance	44,397	2,532	5,295	20,000
Total Costs	63,513	9,612	24,016	20,000
Staff Years	112	54	63	-
<u>Farm and Ranch Lands Protection Program</u>				
Technical Assistance	8,827	2,382	25,099	-
Financial Assistance	109,302	494	68,741	69,000
Total Costs	118,129	2,877	93,840	69,000
Staff Years	43	14	16	-

NATURAL RESOURCES CONSERVATION SERVICE

Full Cost by Department Strategic Goal  
(Dollars in thousands)

**Department Strategic Goal: Ensure Our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources**

	2013	2014	2015	2016
<u>Conservation Security Program</u>				
Technical Assistance	13,181	5,225	7,324	640
Financial Assistance	145,675	115,186	20,976	8,360
Total Costs	158,856	120,411	28,299	9,000
Staff Years	105	48	56	18
<u>Conservation Stewardship Program</u>				
Technical Assistance	92,364	111,171	266,357	162,221
Financial Assistance	790,188	919,700	943,810	1,294,000
Total Costs	882,552	1,030,871	1,210,167	1,456,221
Staff Years	595	622	729	977
Performance measure: Stewardship plans written				
Performance, acres	N/A	9.6	7.7	7.0
<u>Agricultural Management Assistance</u>				
Technical Assistance	492	1,385	973	1,034
Financial Assistance	1,958	5,185	3,662	3,966
Total Costs	2,450	6,570	4,635	5,000
Staff Years	5	5	6	6
<u>Healthy Forests Reserve Program</u>				
Technical Assistance	1,183	-3,047	943	-
Financial Assistance	5,258	3,624	3,212	3,000
Total Costs	6,441	577	4,154	3,000
Staff Years	8	3	4	-
<u>Chesapeake Bay Watershed Program</u>				
Technical Assistance	6,581	4,598	5,165	-
Financial Assistance	42,818	2,329	1,608	5,000
Total Costs	49,399	6,927	6,773	5,000
Staff Years	56	43	50	-
<u>Conservation Reserve Program</u>				
Technical Assistance	64,920	65,510	48,689	50,000
Total Costs	64,920	65,510	48,689	50,000
Staff Years	611	554	649	666
<u>Agricultural Conservation Easement Program</u>				
Technical Assistance	-	90,768	140,432	142,596
Financial Assistance	-	226,107	302,734	307,404
Total Costs	-	316,875	443,166	450,000
Staff Years	-	259	303	308
Performance measure: Agricultural land protected in conservation easements				
Performance, acres	N/A	N/A	206.0	206.0



NATURAL RESOURCES CONSERVATION SERVICE

Full Cost by Department Strategic Goal  
(Dollars in thousands)

**Department Strategic Goal: Ensure Our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources**

	2013	2014	2015	2016
<u>Regional Conservation Partnership Program</u>				
Technical Assistance	-	1,908	39,719	21,300
Financial Assistance	-	-1	146,754	78,700
Total Costs	-	1,907	186,473	100,000
Staff Years	-	2	100	54
<u>Voluntary Public Access and Habitat Incentive Program</u>				
Technical Assistance	-	525	6,695	-
Financial Assistance	-	17,532	15,247	-
Total Costs	-	18,058	21,942	-
Staff Years	-	-	-	-
<u>Wetlands Mitigation Banking Program</u>				
Technical Assistance	-	-	1,000	-
Financial Assistance	-	-	9,000	-
Total Costs	-	-	10,000	-
Staff Years	-	-	-	-
<u>Mandatory Total</u>				
Total Costs	3,238,427	2,945,931	3,747,302	3,814,221
Staff Years	5,019	4,269	5,001	5,532
<u>Agency Total</u>				
Total Costs	4,253,525	4,025,014	4,830,253	4,845,452
Staff Years	10,600	10,293	11,183	11,529

## NATURAL RESOURCES CONSERVATION SERVICE

### EVIDENCE AND EVALUATION

NRCS will be expanding evaluations and improving data access, reliability, and integrity for a comprehensive approach to developing evidence-based budgets. The Budget invests \$10 million over two years to determine the effect incentive payments and outreach efforts have on farmers' willingness to adopt conservation practices and improve the efficiency of private lands conservation programs. This multi-year effort will leverage administrative data as well as census and survey data within USDA (and potentially across other agencies) to build rigorous evidence and strengthen conservation implementation at least cost.

The following are both ongoing and proposed efforts that support evaluation and improvement of agency programs.

#### (1) Streamlining Program Delivery.

Enterprise Business Initiatives (EBI) team is redesigning and modernizing the agency's business model for program delivery. EBI will integrate business process improvements with new information technology systems to remove duplicative clerical tasks, reduce overhead costs, and free NRCS technical staff to refocus on conservation planning and customer service. When fully implemented, field conservationists will be geospatially locating land units and conservation practices. These data can be used as input to environmental models to perform a science-driven analysis in determining the benefits of conservation assistance and conservation programs at the national level.

The Foundational Maintenance Improvements (FMI) is a series of enhancements to NRCS's current conservation delivery systems. By 2016, the enhancements will prepare the agency to move to new planning and contracting tools such as Conservation Desktop, Mobile Planning Tool and Client Gateway. The data access and quality improvements include implementing a Document Management System (DMS), geospatial web services for State and local Geographic Information System data, functional and database updates to Customer Service Toolkit (CST), and CST plugins for field staff to assist landowners with science-driven decisions on wind and water erosion prevention.

FMI and future CDSI enhancements will assist with evidence and innovation through adaptive management at the field level in addition to the comprehensive agency data system discussed below.

#### (2) Using Science-Driven Analysis to Enhance Agency Program and Performance Data.

Evidence-based targeting of program funding requires a credible, comprehensive, science-based approach. Although NRCS has been conducting natural resource inventory and evaluation of ecological conditions for decades, the agency recently gained knowledge and technological tools for supporting natural resource assessment that provided decision makers with data-driven resources to understand the direct connections between agency budgets and performance. CEAP provides the agency with the capacity to analyze the onsite and offsite environmental effects of our conservation activities. CEAP was initiated in 2003 by NRCS in partnership with the USDA's Agricultural Research Service and National Institute of Food and Agriculture in response to the need for greater accountability of investment in conservation programs

CEAP's science based approach underpins the ongoing transformation of conservation program and practice delivery towards a more targeted approach to increase conservation impacts on resources of concern. Current CEAP assessments help guide program delivery and focus conservation technical and financial assistance by providing NRCS with additional information on conservation needs and potential benefits. CEAP assessments are integrated into the evaluation of outcomes of some landscape-scale Conservation Initiatives and are providing analyses to adaptively fine-tune conservation strategy and planning. For example, several CEAP Wildlife assessments aimed at assessing conservation effects on sage-grouse are now enabling land managers to improve habitat and decrease bird mortality through adoption of more appropriate conservation practices. As part of these wildlife assessments, several science-based decision support tools were developed that reduce sage-grouse fence collision risk and reduce habitat threats by prioritizing conservation efforts to address conifer encroachment, development and tillage risks. These new tools are now integral elements for conservationists in carrying out NRCS's Sage Grouse Initiative, informing conservation planning and improving outcomes for

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sage-grouse. CEAP also supported the development of Conservation Practice Standards in NRCS: lessons learned from CEAP Watershed assessment studies were integrated into the development of two new National Conservation Activity standards – 201 (Edge-of-field water quality monitoring – Data collection and evaluation) and 202 (Edge-of-field water quality monitoring – System Installation).

NRCS will continue working with partners to further develop assessments for multiple land uses – croplands, rangelands, wetlands, wildlife concerns, as well as continue the efforts to meet the challenge of providing data for smaller scale evaluations at the regional level and in watersheds.

CEAP is working to enhance the conservation planning and delivery process as facilitated by the agency's Business Enterprise Initiative, which will give NRCS field staff greater flexibility and efficiency in providing assistance to producers. The Agricultural Policy/Environmental Extender (APEX) model, the Rangeland Hydrology and Erosion Model, and other watershed scale tools used for CEAP analyses will support better analysis of conservation effects and benefits within CDSI in the future.

APEX can provide simulations of the effects of conservation practices across individual fields, whole farms, and small watersheds. APEX is ideally suited for field-level planning since it uses information specific to a field(s), including soils and climate. APEX applies scientifically derived information to an individual landowner's operation to provide a unique planning template. It takes into account not only the farming operations and soils, but also the conservation systems that are present. Further, APEX may be used to simulate "what if" scenarios, estimating positive or negative effects of individual practices or suites of practices based on CEAP scientific evidence. The output from APEX compares the current condition and the effect of any options discussed with landowners. The investment can be measured by the program cost and the landowners' cost-share amount against the estimated benefits for each proposed practice. By controlling variables, APEX can help conservationists and landowners make more informed decisions by predicting agro-ecological outcomes of conservation on specific fields, including impacts and benefits to soils, yields, and water quality based on copious scientific data and an individual landowner's farming operation. APEX outputs inform larger watershed scale modeling efforts, allowing a science-based, statistically sound means of exploring conservation benefits at larger landscape scales.

The CEAP Conservation Benefits Identifier (CCBI), a field tool in development, will be an interim product delivered in CDSI to better enable the analysis of conservation effects and benefits. CCBI provides planners with a snapshot of information on the vulnerability and risk associated with particular fields (the conservation treatment need level) and the potential estimated benefits that could be gained by applying a suite of conservation practices. CCBI considers current treatment efforts in the context of inherent vulnerability, applying CEAP results that quantify the relationship to qualify and rank individual fields by their potential to provide additional conservation benefits through additional treatment. CCBI field level ranking can also be aggregated to predict impacts at larger scales, providing a valuable conservation planning tool for landscape and area wide planning. By considering conservation impacts and opportunities at multiple spatial scales, CCBI highlights the location, concentration, and distribution of critically undertreated acres and provides estimates of where the conservation benefits greatest potential is located. The CCBI was first used for demonstration projects in Missouri and Maryland. In 2014, a version of the CCBI was delivered to groups in the Arkansas State office who feel it can help them in Mississippi River Basin Healthy Watersheds Initiative and Regional Conservation Partnership Program Critical Conservation Areas planning. A version of the CCBI has also been completed for all States in the Mississippi River Basin Healthy Watersheds Initiative and Great Lakes Restoration Initiative region. Similarly, the CCBI was also used in the Gulf States region to evaluate performance of NRCS's Gulf of Mexico Initiative and for assistance on the Resources and Ecosystems Sustainability, Tourist Opportunities and Revived Economies Act project.

### (3) Adaptive Management and Comprehensive Data Strategies.

Maximizing agency success requires adaptive management strategies – systematically and accurately assessing work and processes and making improvements. Key features of adaptive management require a feedback system to improve conservation solutions and monitor success in order to achieve efficient investments in conservation. The NRCS feedback system includes performance measures, program evaluation methods and

## NATURAL RESOURCES CONSERVATION SERVICE

connecting scientific evidence to conservation outcomes such as the CEAP efforts discussed above. Program evaluations help the agency learn about the successes, share information with key audiences, and make rapid adjustment to improve services under changing conditions. The key components of the adaptive management strategy for measuring and evaluating programs include:

- Developing a variety of performance measures and performance metrics that align with the purpose and success factors of the program;
- Monitoring evidence of efficient program design and results (outputs and outcomes) on a regular basis;
- Developing, maintaining, and auditing internal controls for program compliance; and
- Making evidence-based and targeted program improvements on an on-going basis.

To implement the long-term adaptive management and data strategies, there are three main efforts planned for 2015 and 2016:

- Improving data integrity and analysis;
- Incorporating business intelligence and methodology along with process improvement techniques; and
- Linking agency scientific inventory and assessments to agency key performance metrics.

During 2012 and 2013, the detailed business requirements were developed for a comprehensive agency data system. In 2014, NRCS developed a new agency data system that connects some key data sources such as financial and program data for program measurement and analysis. In 2015, NRCS will continue to expand the data sources to other scientific and workforce data. The system will also interact with other databases in order to receive supplemental data or to provide data to models inside or outside NRCS. The investment in this system is critical to meeting the long-term goals of CDSI, along with providing access to legacy data, and a process for agency accountability reporting during the development of the new integrated business tools and data systems. The comprehensive agency data and reporting system will result in considerable savings because each tool will not need to build out reporting functionality, but rather use this system.

Adaptive management strategies that target program funding require a comprehensive, science-based approach. Although the agency has been doing scientific inventory and evaluation for decades, the body of knowledge and technological tools are becoming available to integrate science with budget and performance data. For program investments and environmental outcomes, investment on the ground can be evaluated with the CEAP approach. Using the now proven and scientifically-credible CEAP approach of measuring conservation practice effects, and in alignment with other on-going efforts in NRCS and USDA, meaningful performance measures can now be tracked and linked to costs over the long-term. The connection of agency scientific data and outcome models, and the ability to generate projections and “what if” scenarios through integrated data, will allow the agency to employ business intelligence to use evidence to rapidly evaluate and reallocate activities and programs thereby improving our return on our investments.