

**2013 Explanatory Notes  
Natural Resources Conservation Service**

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NATURAL RESOURCES CONSERVATION SERVICE  
**Purpose Statement**

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 the Natural Resources Conservation Service (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 the Dust Bowl. Although the Dust Bowl has passed, that relationship between landowner 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.

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, result in productive lands, and to maintain healthy ecosystems.

Science and technology are critical to good 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. The method by which NRCS provides this assistance is its Conservation Delivery System.

The NRCS Conservation Delivery System is based on providing 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. The districts are tasked with 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 those groups which have a common and vested interest in the local landscape, community, or watershed, NRCS is able to facilitate collaboration between the groups which collectively support sustainable agriculture and maintain natural resource quality.

Under this umbrella of agency mission and local cooperation, NRCS employees provide assistance directly to the landowner or land manager to help them 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. Employees provide these services directly to the customer through field offices at USDA Service Centers in nearly every county and territory of the United States. NRCS employees' 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 was 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, (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, tribes, 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.

Specific objectives of CTA are to:

- Provide conservation technical assistance to individuals or groups of decision makers, communities, conservation districts, units of State and local government, tribes, 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 past and future Farm Bills;
- Provide conservation technical assistance to aid private landowners in complying with other Federal, State, tribe, and local environmental regulations and related requirements, and prepare them to become eligible to participate in other Federal, State, and local conservation programs;
- Provide soils information and interpretation to individuals or groups of decision-makers; communities, States, and others to aid sound decision-making in the wise use and management of soil resources;
- 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 soil surveys. Soil Surveys include maps and interpretive analyses for a county or other designated area. NRCS uses Soil Surveys to help people make informed land use and management decisions that take into consideration various soil characteristics and capabilities.

NRCS conducts Soil Surveys cooperatively with other Federal agencies, Land Grant Universities, State agencies, tribal, and local governments. The major NRCS objectives of the National Cooperative Soil Survey (NCSS) Program 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
- Lead the National Cooperative Soil Survey Program.

Much work needs to be done to integrate soils data for 3,000 counties across the Nation into a single dataset that eliminates discrepancies which occur in older Soil Surveys and 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 (NSSC) 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 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 Surveys and Water Supply Forecasts (SSWSF). The SSWSF Program collects high elevation snow data in the Western United States and provides land managers and users with snowpack data and Water Supply Forecasts. NRCS field staffs collect and analyze data on snow depth, snow water equivalent, and other climate parameters at over 1,800 mountain sites. The program is actively transitioning to a fully automated system which provides near-real time data available on the Internet. At the end of 2011, 834 of the data collection sites (SNOTEL) were automated and provide data for 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 U.S. 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. The National Weather Service includes these forecasts in their river forecasting function. Reports on the snowpack characteristics are used by the ski industry, transportation departments, and others to plan their seasonal work in 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 Western States;
- 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 (SCAN) provides similar climate information as well as soil moisture and temperature at lower elevations and consists of 179 sites in 40 States across the U.S.

Plant Material Centers. The Plant Materials Centers (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 such as: 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 dune; producing biomass; improving air quality; and addressing other conservation treatment needs. Plant Materials Centers 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.

The mission of PMCs is moving away from releasing new conservation plant materials to an increased focus on: the utilization of plants for specific objectives and purposes, such as soil health, soil stabilization, and pollinator/wildlife habitat; the collection of data to improve conservation planning efforts; and the validation of plant materials for use in NRCS vegetative conservation practices. The shift in focus better 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, 2,300 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 (WFPO).** Authorization includes watershed operations authorized by the Flood Control Act of 1944 (P.L. 78-534) and Small Watershed operations authorized by (P.L. 83-566; 16 U.S.C. 1001-1008), as amended.

Through these 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. 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 300 active small watershed projects throughout the country. The Flood Control Act of 1944 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 (EWP).** The program is authorized by Section 216, P.L. 81-516, (33 U.S.C. 701b-1) and Sections 403-405, P.L. 95-334 (16 U.S.C. 2203-2205). The Federal Agriculture Improvement and Reform Act of 1996 amended Section 403 of the Agricultural Credit Act of 1978 (P.L. 95-334) (16 U.S.C. 2203) by including the purchase of floodplain easements as an emergency measure authorized under EWP.

EWP 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, or other natural causes that results in life and property being endangered by flooding, erosion, sediment discharge or other associated hazards. The emergency area need not be declared a national disaster area to be eligible for assistance. Objectives of the program are to provide technical and financial assistance for disaster cleanup and subsequent rebuilding; stream corridor, wetland, and riparian area restoration; and for urban planning and site location assistance to Federal Emergency Management Agency when relocating communities out of floodplains. Local people are generally employed on a short-term basis to assist with disaster recovery. Activities include: establishing quick vegetative cover on denuded land, sloping steep land, and eroding banks; opening dangerously restricted channels; repairing diversions and levees; purchasing floodplain easements; and other emergency work.

**Watershed Rehabilitation Program.** The program is authorized under Section 14 of the Watershed Protection and Flood Prevention Act, as amended by Section 313 of (P.L. 106-472), November 9, 2000.

This program assists communities in addressing public health and safety concerns and environmental impacts of aging dams. Local communities have constructed more than 11,700 watershed dams with assistance. 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. Technical and financial assistance is provided for the planning, design, and implementation of rehabilitation projects that may include upgrading or removing the dams. 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.

**Resource Conservation and Development Program (RC&D)** is authorized by Section 102 of the Food and Agriculture Act of 1962 (P.L. 87-703), (7 U.S.C. 1010-1011) and Sections 1528-1538 of the Agriculture and Food Act of 1981 (P.L. 97-98). Section 383 of the 1996 Farm Bill (P.L. 104-127) (16 U.S.C. 3461) extended the RC&D program authority. Section 2504 of the 2002 Farm Bill removed the sunset provisions previously placed on this program. RC&D improves the capability of State and local units of government and local nonprofit organizations in rural areas to plan, develop, and carry out programs for resource conservation and development. RC&D plans address land conservation, water management, community development, or other elements including energy conservation, protection of agricultural land, or protection of fish and wildlife habitats. RC&D is initiated and directed at the local level by volunteers and may encompass multiple communities, various units of government, tribes, municipalities, and grassroots organizations. The program serves as a catalyst for these civic groups to share knowledge and resources collectively in order to solve common problems facing their region. RC&D councils obtain assistance from the private sector, tribes, corporations, foundations, and all levels of government.

**Wetlands Reserve Program (WRP).** The program was authorized by Section 1237 of the Food Security Act of 1985 (P.L. 99-198), as amended by the Food, Agriculture, Conservation and Trade Act of 1990 (P.L. 101-624), 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 (P.L. 110-246), to assist owners in restoring and protecting wetlands. WRP is a program funded by the Commodity Credit Corporation (CCC) and administered by NRCS.

WRP is a voluntary program offering landowners the opportunity to protect, restore, and enhance wetlands on their property. NRCS provides technical and financial support to help landowners with their wetland restoration efforts. The NRCS goal is to achieve the greatest wetland functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. WRP provides landowners four methods to enroll acreage: permanent easements; 30-year easements; 30-year contracts for acreage owned by Native American tribes; and restoration cost-share agreements. In addition to enrolling new easements, NRCS monitors, enforces, and manages easements enrolled in prior years. Proven elements of an effective Wetlands Reserve Program are strong relationships with landowners and adequate technical expertise to carry out these functions.

Since 1992, nearly 2.5 million acres of wetlands and associated upland buffers have been enrolled in WRP through conservation easements and cost-share agreements, thereby contributing significantly to wetland protection efforts in the United States. NRCS has long-term stewardship responsibility for the acreage enrolled through conservation easements.

WRP restores, protects, and enhances wetlands on eligible private or tribal lands to attain:

- Habitat for migratory birds and other wetland dependant wildlife, including threatened and endangered species and other species of special concern;
- Maintenance of plant and animal communities;
- Protection and improvement of water quality through particulate removal and filtration;
- Attenuation of water flows due to flooding;
- Recharge of groundwater;

- Protection and enhancement of open space and aesthetic quality;
- Protection of native flora and fauna contributing to the Nation's natural heritage;
- Sequestration of atmospheric carbon;
- Contribution to educational and scientific scholarships; and
- Nutrient cycling.

**Environmental Quality Incentives Program (EQIP).** The program was re-authorized by Section 2501 of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246). 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.

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 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.

**Agricultural Water Enhancement Program (AWEP).** AWEP is a voluntary conservation program that provides financial and technical assistance to agricultural producers to implement agricultural water enhancement activities on agricultural land in order to conserve surface and ground water and improve water quality. As part of the Environmental Quality Incentives Program, AWEP operates through contracts with producers to plan and implement conservation practices to conserve ground and surface water and improve water quality in project areas established through partnership agreements.

As authorized by statute, this is not a grant program. Rather, it is a program whereby eligible partners enter into multi-year agreements with NRCS to promote ground and surface water conservation or improve water quality on eligible agricultural lands. The intent of AWEP is for the Federal government to leverage its investment in natural resources conservation along with services and resources of other eligible partners. Individual producers are not eligible to submit a partnership proposal. Partnership efforts have been forged with Federal, State, and local entities, including 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. 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.

**Wildlife Habitat Incentive Program (WHIP).** The program is authorized by Section 1240N of the Food Security Act of 1985, as amended by Section 2502 of the Farm Security and Rural Investment Act (P.L. 107-171) of the 2002 Farm Bill. WHIP was reauthorized under Section 2602 of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246). WHIP provides financial and technical assistance to participants for the protection, restoration or enhancement of upland wildlife habitat, wetland wildlife habits, threatened and endangered species, fisheries, and other types of habitat. WHIP practices are often compatible with, and beneficial to, farming and ranching enterprises. Focused efforts on conservation of habitat for fish and wildlife also contribute to a more sustainable use of resources and reduced greenhouse gas emissions. By prioritizing specific geographic areas, WHIP is able to target financial and technical assistance funds to affect habitats needed for specific declining fish and wildlife species.

**Farm and Ranch Lands Protection Program (FRPP).** The program was authorized by the Farm Security and Rural Investment Act of 2002 as a Title XII program under the Food Security Act of 1985. NRCS was authorized 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 reflect more accurately the types of land the program protects. Section 2401 of the Food, Conservation and Energy Act of 2008 reauthorized FRPP and changed the purpose of the program to provide funding for the purchase of conservation easements by eligible entities.

FRPP 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 uses. By enrolling in FRPP, 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. Ultimately, this assists with efforts in managing Total Maximum Daily Load (TMDL) of nutrients to public waters such as the Chesapeake Bay and Mississippi River.

FRPP eligible land includes farm or ranch lands that have prime, unique, or other productive soil, contain historical or archaeological resources, or support the policies of a State or local farm and ranch land protection program. NRCS works through existing farmland protection programs by partnering with State and local governments, soil and water conservation districts, tribes, and eligible nongovernmental organizations to purchase conservation easements.

**Conservation Security Program.** The program was 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, the Conservation Security Program. Section 1202(a) of the Deficit Reduction Act of 2005 extended the program into 2011. The program was not reauthorized by the Food, Conservation, and Energy Act of 2008 (the 2008 Act) (P.L. 110-246), which stipulated that a Conservation Security Program contract may not be entered into or renewed after September 30, 2008. Pursuant to Section 2301 of the 2008 Act, the Secretary shall make payments on contracts entered into before September 30, 2008, using such sums as are necessary. 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 Act, 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.

**Conservation Stewardship Program (CSP).** The program was authorized by the Food, Conservation, and Energy Act of 2008 (P.L. 110-246), which amended the Food Security Act of 1985 to authorize the program in 2009 through 2012.

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. During the period beginning on October 1, 2008, and ending on September 30, 2017, the Secretary of Agriculture shall, to the maximum extent practicable - "(1) enroll in the program an additional 12,769,000 acres for each year"; and "(2) manage the program to achieve a national average rate of \$18 per acre, which shall include the costs of all financial assistance, technical assistance, and any other expenses associated with enrollment or participation in the program."

The Conservation Stewardship Program 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.

Congress authorized the enrollment of a maximum of 12,769,000 acres for the period beginning October 1, 2008, and ending on September 30, 2017. Continuous sign-up for CSP started on August 10, 2009.

**Grasslands Reserve Program (GRP).** The program is authorized by Section 1238N of the Food Security Act of 1985 (P.L. 99-198), as amended by Section 2401 of the Farm Security and Rural Investment Act of 2002 (P.L. 107-171). Section 2403 of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246) reauthorized GRP. GRP assists landowners and operators in restoring and protecting grazing uses and related conservation values. The program has a 1,220,000 acre enrollment cap. The program offers several enrollment options: permanent easements and 10-, 15- and 20- year rental contracts. The program also authorizes the enrollment of permanent easements through a cooperative agreement with an eligible entity.

GRP is jointly administered by NRCS and the Farm Service Agency (FSA). NRCS responsibilities include: accepting applications; providing technical assistance to the participant; evaluating and ranking applications for rental contracts and easements; ensuring conservation treatment is in accordance to program requirements; ranking and selecting applications for funding; providing payment documentation to FSA; and establishing quality assurance and control procedures to monitor land enrolled in easements or rental contracts.

FSA responsibilities include: accepting applications; issuing payments; assessing penalties and liquidated damages as applicable; accepting, modifying and terminating rental contracts; landowner eligibility determinations on easement and rental contracts; acreage determination on rental contracts; and maintaining GRP records and reports and enforcement of violations on rental contracts.

**Agricultural Management Assistance Program (AMA).** The program is authorized by Section 211 of the Agricultural Risk Protection Act of 2000 (P.L. 106-224). Subtitle I, Section 2801(b) (2) (ii) of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246) re-authorized AMA. AMA provides for financial assistance in 16 States, including 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.

NRCS provides AMA 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. The program also offers financial assistance to mitigate crop failure risks through diversification of production or implementation of resource conservation practices, including soil erosion control, integrated pest management, and transition to organic farming.

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.

**Chesapeake Bay Watershed Program (CBWP).** The program is authorized by Section 1240Q of the Food Security Act, as added by the Food, Conservation, and Energy Act of 2008 (P.L. 110–246). Section 1240Q established the CBWP and defines the Chesapeake Bay Watershed to mean all tributaries, backwaters, and side channels, including their watersheds, draining into the Chesapeake Bay. This area includes portions of the states of Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia. The program gives special, but not exclusive consideration to the following river basins: Susquehanna River, Shenandoah River, Potomac River (including North and South Potomac), and the Patuxent River.

CBWP helps 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.

To carry out the CBWP, NRCS may choose to use any of the following programs authorized under Subtitle D of Title XII of the Food Security Act of 1985: WRP; EQIP; AWEP; WHIP; FRPP; CSP; GRP; AMA; Healthy Forests Reserve Program; or Conservation Reserve Program. NRCS targets watersheds where funding can have the greatest impact and takes a comprehensive ecosystem-wide approach to restoration.

**Healthy Forests Reserve Program (HFRP).** The program was authorized by Title V of the Healthy Forests Restoration Act of 2003 (P.L. 108-148) as amended by the Food, Conservation, and Energy Act of 2008 (P.L. 110-246). HFRP assists landowners in restoring, enhancing, and protecting forest ecosystems to: promote the recovery of threatened and endangered species; improve biodiversity; and enhance carbon sequestration.

**Cooperative Conservation Partnership Initiative (CCPI)** is authorized by Section 2707 of the Food Conservation and Energy Act of 2008 (P.L. 110-246), which establishes CCPI by amending Section 1243 of the Food Security Act of 1985 (16 U.S.C. 3843). Under CCPI, a voluntary conservation initiative, NRCS enters into multi-year partnership agreements with eligible entities that want to enhance conservation outcomes on agricultural and nonindustrial private forest lands. The 2008 Farm Bill Act requires six percent of the funds for EQIP and WHIP and six percent of the allowed acres for the CSP programs be reserved for support of producer approved contracts. The intent of CCPI is to leverage resources of certain Federal government programs along with services and resources of non-Federal partners to implement natural resource conservation practices.

**Water Bank Program.** The Water Bank Program will be implemented in the Northern Pothole States of North Dakota, South Dakota, and Minnesota. This new program will focus technical and financial assistance on flooded lands, especially flooded cropland. The initial sign-up period will be in early 2012 and rental rates will be announced by the Chief at that time.

**Programmatic and Landscape Conservation Initiatives.** In order 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 2008 Farm Bill Programs including: EQIP, WHIP, WRP, Conservation Innovation Grants (CIG), Cooperative Conservation Partnership Initiative (CPPI), AWEP, and the Wetland Reserve Enhancement Program (WREP). NRCS technical assistance is also provided through its CTA Program. Financial support may also come from partners.

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's 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. Please see the above description of the Chesapeake Bay Watershed Program for a summary of that initiative.

Sage Grouse Initiative (SGI). 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. SGI 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 (ESA) 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 some certainty regarding identified conservation activities if Sage-Grouse are listed under ESA.

Longleaf Pine Initiative (LLPI). 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 and 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/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/State partnership in support of balancing water quality concerns, water supply and ecosystem restoration in the Central Valley. NRCS supports this initiative through AWEP, CCPI, CIG, CSP, EQIP, WHIP, and WRP.

Lesser Prairie Chicken Initiative (LPCI). NRCS has developed the LPCI to provide landowners assistance throughout the Lesser Prairie Chicken's current and historic range for the protection, enhancement, and expansion of suitable habitat, while also helping agricultural producers sustain their agricultural operations. The larger concentrations and target areas for the Lesser Prairie Chicken populations can be found in parts of Colorado, Kansas, New Mexico, Oklahoma, and Texas. As a consequence of habitat loss and population decline, the Lesser Prairie Chicken is a candidate for Federal listing as a threatened or endangered species. NRCS hopes to reduce the need for listing and aid in the sustainability and population increase of the Lesser Prairie Chicken and has cooperated with the US Fish and Wildlife Service to develop a conference report of the Lesser Prairie Chicken.

Mississippi River Basin Healthy Watersheds Initiative (MRBI). 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. Initiative implementation is done through CCPI, CIG, CSP, EQIP, WHIP, and WREP.

Great Lakes Restoration Initiative (GLRI). Great Lakes restoration became a national priority with \$475 million approved through the Environmental Protection Agency for GLRI in October 2009. A taskforce of

16 Federal departments and agencies developed the Great Lakes Restoration Action Plan (2010 – 2014) to guide restoration efforts. The 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.

New England/New York Forestry Initiative (NE/NYFI). Forests in New England and New York cover 52 million acres including the largest intact block of temperate broadleaf forest in the country. The NE/NYFI is designed to protect the region's forest land, ensure its sustainability, protect sources of drinking water, support rural economies, protect wildlife, and mitigate climate change.

Northern Plains - Migratory Bird Habitat Initiative (NP-MBHI). The Migratory Bird Habitat Initiative (MBHI) was established in 2010 to increase habitat availability and safeguard food resources for shorebirds, waterfowl, and other migratory birds in the Mississippi River Basin. In 2011, MBHI was expanded to include the major migratory corridors in the United States. The Northern Plains Migratory Bird Habitat Incentive (NP-MBHI) was selected to receive funding to restore and protect Prairie Pothole Region (PPR) wetland habitat in Iowa, Minnesota, Montana, North Dakota, and South Dakota.

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 Ogallala Aquifer Initiative (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 goal of the OAI is to re-establish the equilibrium of water recharge and water removal from the aquifer over time and to maintain water quality.

Illinois River Sub-Basin and Eucha-Spavinaw Lake Watershed Initiative (IRESI). The Illinois River Sub-Basin and the Eucha-Spavinaw Lake Watershed Initiative supports improved water quality while maintaining the food and fiber production of the agricultural project area. The IRESI targets areas in Arkansas and Oklahoma. Lakes and streams in this area provide drinking water for the city of Tulsa, but have been identified by the U.S. Geological Survey (USGS) as having high concentrations of nitrogen, phosphorus, sediments, and bacteria. Land treatment and structural practices will be installed on a voluntary basis in the targeted project areas using EQIP as well as Conservation Technical Assistance funds.

North Central Wetlands Conservation Initiative (NCWCI). The Prairie Pothole Region of the Dakotas, Minnesota, and Iowa, is critical to North American waterfowl. NRCS is required to make certified wetland determinations in this Region in accordance with the provisions of 7 CFR 12.6 and to determine if the site(s) meets the applicable wetland criteria. An increased wetlands conservation compliance workload has greatly hindered the agency's ability to service its customers in a timely manner and highlighted the need for the temporary special allocation of funding to address this unique workload. Special initiative funds have been used to hire term employees to work exclusively on reducing the backlog of wetland compliance requests and thereby expand NRCS's ability to meet its customers' needs.

**Technical Service Provider Assistance (TSP)**. Use of third parties to conduct conservation work was authorized under Section 1242 of the 1985 Food Security Act (P.L. 99-198), as amended by the Farm Security and Rural Investment Act of 2002. Section 2701 of the 2002 Farm Bill amended Section 1242 of the Food Security Act to require the Secretary of Agriculture to provide technical assistance under the Food Security Act Title XII conservation programs to a producer eligible for that assistance "directly ... or at the option of the producer, through a payment ... to the producer for an approved third party, if available." Section 2706 of the Food, Conservation, and Energy Act of 2008 further amended Section 1242 adding a third option to provide assistance to an eligible participant "through an agreement with a third party provider" and added the Agricultural Management Assistance Program to the list of eligible programs. Section 1242 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.

**Workforce Status and Locations.** As of September 30, 2011 NRCS had 11,007 full time employees with permanent appointments. Of this total, 410 employees were located in the Washington, D.C. metropolitan area and 10,597 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 of NRCS and extends through Regional Conservationists, State Conservationists, Area Conservationists, and the District Conservationists. Line officers are responsible for direct assistance to the public. Staff positions furnish specialized technical or administrative assistance to line officers.

As of September 30, 2011, NRCS had 2,827 offices located across the Nation and across the organization. Three offices are physically located in the Washington, DC metropolitan area and 2,824 are located in the field. Field offices include Centers, State Offices, Service Centers, and Support Offices.

National Headquarters (NHQ). 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 Chief, Regional Conservationists, and Deputy Chiefs carry out NHQ 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, NHQ 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 the Office of the Chief, Deputy Chief Areas, Regional Conservationists and other management or leadership components.

#### Centers.

Technological guidance and direction is also provided through NRCS's National Centers including the: Design, Construction and Soil Mechanics Center; Soil Survey Center; National Water and Climate Center; Information Technology Center; Water Management Center; Employee Development Center; Liaison Center; National Geospatial Management Center, and Remote Sensing Labs; and three National Technology Support Centers (NTSCs). 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 solutions to State resource issues. A State Conservationist heads each State Office. In the Pacific Islands Area, which includes Hawaii 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 the majority (81 percent) of employees located in Service Centers or specialized offices. 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 MLRA 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. The agency has announced that it will be closing 24 Soil Survey offices by the end of 2012.

**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 (AIMS) tracks and evaluates field and state level conservation planning efforts and practice implementation through the Performance Results System (PRS). In addition to AIMS, NRCS implemented a suite of actions to improve accountability:

#### Compliance Activities

- Conducted five national and five regional and/or state oversight and evaluation 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 Highly Erodible Land Conservation and Wetlands Conservation Compliance reviews on 18,704 tracts.
- NRCS started 2011 with 31 open audits and closed seven out of the 31 leaving, 24 active audits open. In 2011 there were 84 open recommendations NRCS closed 50 leaving, 34 still open. Of the seven audits closed in 2011 there were five that had no recommendations for NRCS.

#### 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 (PII), in order to remain in compliance with the Federal Information Security Management Act (FISMA) and National Institute of Standards and Technology Special Publication 800-53.
- Completeness of Data – 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 – allowing managers at appropriate levels to evaluate and monitor program performance.
- Reliability of Data – Data reported for performance are based on information validated and received from the National Conservation Planning database 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. Conservation plans are developed in consultation with the customer, created with the Customer Service Toolkit, and warehoused in the NCP. Applied conservation practices are date-stamped, geo-referenced, and linked to employee ID, 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 conservation plans written and conservation practices applied must be linked to the program that funded the staff time needed to carry out each activity.

**Strategic Plan.** The agency’s strategic plan is the foundation for all agency activities and helps the agency accomplish its core mission by setting the direction and focus of the agency for the next four years. It is both fluid and flexible while focusing on results and will be used to develop specific short term tactics in our annual business plans to meet natural resource challenges and opportunities. It is the critical starting point for an integrated budget and performance process. In the 2011-2015 Strategic Plan, NRCS’s core mission is delivered through one fundamental Strategic Goal: Get More Conservation on the Ground. This agency goal directly 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.

High-level strategies, tools and methods for implementation of the NRCS Goal are as follows:

- ConservationSTAT which is a process that tracks the annual business planning and enable agency leadership to effectively implement the Strategic Plan,
- Key Performance Measures which show progress in achieving the Strategic Plan measures identified for Strategic Goal, and
- State Resource Assessments which identify conservation needs at the local level and determine the short-term priorities, activities, and the means to “Get More Conservation on the Ground.”

**Completed and On-going Audits.** Audits conducted and/or completed in 2011 are as follows:

OIG Reports – In Progress

- OIG 10099-6-SF Farm and Ranch Lands Protection Program-Review of Non-Governmental Organizations (May 2007). Final report issued July 2009. All recommendations except recommendation 3 are closed. For recommendation 3, the Department of Justice reached a settlement agreement which resulted in a full resolution of all matters related to Western Wisconsin Land Trust and its former Executive Director involving the subject FRPP agreements and easements. NRCS is processing the agency response to reach management decision by OIG.
- OIG 10024-1-11 Fiscal Year 2011 NRCS Improper Payment Review (June, 2011). Field work still in progress.
- OIG 10099-3-CH Farm and Ranch Lands Protection Program Controls (March 2010). The agency responses we sent to OIG on August 4, 2011, with management decision being reached on all recommendation and final report was issued on 9/14/11.
- OIG 10401-2-FM FY NRCS Financial Statements for Fiscal Year 2008 (January 2008). Final report issued in November 2008. All recommendations except for recommendations 2, 4, 5, and 7 are closed. The remaining recommendations are pending receipt and/or processing of final action documentation.
- OIG 10401-3-FM NRCS Financial Statements for Fiscal Year 2009 (October 2009). Final report issued November, 2009. Recommendation 7 closed and the remaining 1-6 are pending receipt and/or processing of final action documentation.
- OIG 10401-4-FM FY NRCS Financial Statements for Fiscal Year 2010 (November 2010). Final report issued on 11/8/2011. Field work still in progress.
- OIG 10401-1-11- NRCS Financial Statement Audit FY 2011 (February, 2011) final report issued (agency response was provided to OIG on 12/28/2011. Approval to reach management decision is pending action by OIG.
- OIG 10601-0001-22 Oversight and Compliance Activities (August, 2011). Field work in progress.
- OIG 10704-1-32 - Migratory Bird Habitat Initiative: NRCS's Response to Issues Caused by the Deepwater Horizon/BP (British Petroleum) Oil Spill (01/13/2011). Field work is completed. OIG is in process of providing NRCS a Draft Discussion Report.
- OIG 50501-15-FM – 2011 Federal Information Security Management Act (June, 2011). Field work still in progress. All agency CIO/ISSPM’s will be contacted for information.

- OIG 10601-04-KC NRCS Conservation Security Program (CSP) (November 2006). Final report issued June 2009. Management decision has been reached on all recommendations. All recommendations are closed except for 6,8,9,16,17,18,21,22, and 23 which is pending receipt and/or processing of final action documentation.
- OIG 10601-6-KC Emergency Disaster Assistance for the 2008 Floods-Emergency Watershed Protection Plan (EWP) (January 2009). Final report issued on 4/5/2011. Field work still in progress.
- OIG 10703-1-AT Rehab of Flood Control Dams (September, 2010). In progress.
- OIG 10703-1-KC (Phase I) Emergency Watershed Protection Program Floodplain Easements (April 2009). Final report issued 9/8/2010. All recommendations have closed except for recommendation 4. Corrective actions have been completed and receipt of close-out documentation is being processed.
- OIG 10703-3-KC (2) Emergency Watershed Protection Program Floodplain Easements (January, 2010). In progress. NRCS provided responses to Discussion Draft Report on 11/22/11 to OIG.
- OIG-10703-4-KC - Watershed Protection and Flood Prevention - Grants and Locally Led Contracts Do Not Include All Required Recovery Act Award Terms (July, 2010). Phase I report issued on 7/1/2011. Phase II still in progress.
- OIG 10703-5-KC – NRCS American Recovery and Reinvestment Act- Emergency Watershed Protection Program Floodplain Easements –Phase II (Field Communications) (July, 2010). In progress.
- OIG 50601-18-TE– Pasture, Rangeland, and Forage Pilot Program (March, 2008). In progress. NRCS, FSA and RMA collaborated to establish a process to check potential in NRCS easement stewardship land programs. RMA has the lead for this audit. Final report issued 9/29/2010.

#### GAO Reports – Completed

- GAO 130975 – Employee and Training Programs (November 2009). This audit closed on 1/13/11 with no recommendations for the Natural Resources Conservation Service (NRCS).
- GAO 361216 – Chesapeake Bay Action Plan (August 2010). This audit closed on 9/15/11 with no recommendations for NRCS.
- GAO 450760 – OPM Work Life (March 2010). This audit closed in December 2010 with no recommendations for NRCS.
- OIG 03601-51-TE CRP Soil Rental Rates (February 2010). This audit closed on 4/5/11 with no recommendations for NRCS.
- OIG 10601-1-At Flood Control Dam Rehabilitation (December 2006). Final report issued July 2009. This audit closed on 8/15/11 with no further reporting action to the Office of the Chief Financial Officer (OCFO).
- OIG 10703-2-KC (2) Watershed Protection and Flood Prevention Operations Program (October 2009). Final report issued on 9/30/2010. This audit closed on 8/1/11 with no further reporting action.
- OIG 311242 – OMB’s Oversight of IT Investments (February 2011). Entrance conference was held 3/17/ 2011. OCIO did not copy NRCS on the invitation. This audit was removed due to NRCS having no involvement.

#### GAO Reports – In Progress

- GAO 360644 USDA Funding for EQIP – USDA Conservation Programs Stakeholders Views on Participation and Coordination to Benefit Threatened and Endangered Species and Their Habits (October 2005). (GAO-06-969) final report posted September, 2006. Recommendation 1 has been closed. Recommendation 2 is pending receipt and/or processing of final action documentation.
- GAO 361185 – Renewable Energy Initiative (April 2010). In progress. Exit conference held on 8/11/ 2011. NRCS provided a response to GAO Draft Report GAO-12-260 entitled “Renewable Energy: Federal Agencies Implement Hundreds of Initiatives.” The report contains no recommendations.
- GAO 361318 Federal Farm Program Direct Payment (July, 2011). Exit conference held on 8/11/11. Final report is pending issuance.
- GAO 361251 -Nonpoint Source Water Pollution (November, 2010). Field work still in progress.

- GAO 450909 Protection of Federal Workforce in a Pandemic Influenza (August, 2011). NRCS was advised that this audit will not provide a survey instrument until further notice from GAO. Audit still in progress.
- GAO 440979- Equal Access to Justice Act (EAJA) (May, 2011) In progress. NRCS provided data collection instrument to GAO on July 29, 2011.

## NATURAL RESOURCES CONSERVATION SERVICE

**Available Funds and Staff-Years**  
(Dollars in thousands)

Item	2010 Actual		2011 Actual		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<i>Detailed information for each account can be found in the Project Statements.</i>								
<b>Discretionary Programs:</b>								
Conservation Operations.....	\$888,629	6,191	\$872,247	6,201	\$828,159	5,656	\$827,500	5,495
Healthy Forests Reserve Program.....	-	1	-	-	-	-	-	-
Watershed & Flood Prevention Operation..	30,000	173	-	178	215,900	400	-	51
Recovery Act, Watersheds.....	-	202	-	-	-	-	-	-
Subtotal, Watersheds & Flood.....	30,000	375	-	178	215,900	400	-	51
Watershed Rehabilitation Program.....	40,161	82	18,000	88	15,000	43	-	-
Recovery Act, Rehabilitation.....	-	27	-	-	-	-	-	-
Subtotal, Water Rehabilitation.....	40,161	109	18,000	88	15,000	43	-	-
Resource Conservation & Develop.....	50,730	403	23,730	190	-	-	-	-
<b>Total Appropriation</b>	<b>1,009,520</b>	<b>7,079</b>	<b>913,977</b>	<b>6,657</b>	<b>1,059,059</b>	<b>6,099</b>	<b>827,500</b>	<b>5,546</b>
Recission.....	-	-	-1,780	-	-	-	-	-
Transfers In.....	199	-	183	-	-	-	-	-
Transfers Out.....	-	-	-	-	-	-	-	-
<b>Adjusted Appropriation.....</b>	<b>1,009,719</b>	<b>7,079</b>	<b>912,380</b>	<b>6,657</b>	<b>1,059,059</b>	<b>6,099</b>	<b>827,500</b>	<b>5,546</b>
Balance Available, SOY.....	703,629	-	320,970	-	209,175	-	53,255	-
Unobligated Balance of Approp, Reduced ...	-	-	-13,750	-	-6,565	-	-	-
Other Adjustments (Net).....	75,664	-	38,043	-	-55,438	-	-21,272	-
<b>Total Available.....</b>	<b>1,789,012</b>	<b>7,079</b>	<b>1,257,642</b>	<b>6,657</b>	<b>1,206,231</b>	<b>6,099</b>	<b>859,483</b>	<b>5,546</b>
Lapsing Balances.....	-7,011	-	-4,208	-	-	-	-	-
Balance Available, EOY.....	-320,970	-	-209,174	-	-31,983	-	-483	-
<b>Obligations.....</b>	<b>1,461,031</b>	<b>7,079</b>	<b>1,044,260</b>	<b>6,657</b>	<b>1,174,248</b>	<b>6,099</b>	<b>859,000</b>	<b>5,546</b>
<b>Other Funding:</b>								
General Provision - Water Bank Program....	-	-	-	-	7,500	4	-	-
<b>Total, Other Funding .....</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,500</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Obligations under other USDA appropriations:</b>								
<b>Farm Security &amp; Rural Investment</b>								
Program .....	2,880,153	3,625	3,077,163	3,873	3,466,959	4,247	3,172,140	4,184
<b>Reimbursements for technical services to:</b>								
Emergency Conservation Program (FSA)...	1,237	16	1,109	12	938	7	938	7
Soil Survey (FS).....	302	3	338	3	473	4	473	4
Accelerate Soil Survey.....	603	6	355	4	497	6	497	6
Other Planning & Application (FSA).....	65,964	547	126,205	949	82,247	607	110,247	794
PMC Operations.....	50	1	44	1	43	1	43	1
<b>Reimbursements for other services:</b>								
Facilities: Rent, phone, utilities, etc.....	9,898	-	9,580	-	7,860	-	7,860	-
Miscellaneous.....	280	-	8	-	43	-	43	-
<b>Total, Other USDA.....</b>	<b>2,958,486</b>	<b>4,198</b>	<b>3,214,801</b>	<b>4,842</b>	<b>3,559,061</b>	<b>4,872</b>	<b>3,292,241</b>	<b>4,996</b>
<b>Total, Agriculture Appropriations.....</b>	<b>4,747,498</b>	<b>11,277</b>	<b>4,472,443</b>	<b>11,499</b>	<b>4,772,791</b>	<b>10,975</b>	<b>4,151,724</b>	<b>10,542</b>

## NATURAL RESOURCES CONSERVATION SERVICE

**Available Funds and Staff-Years**  
**(Dollars in thousands)**

Item	2010 Actual		2011 Actual		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b><u>Other Federal Funds:</u></b>								
Reimbursement for technical services for:								
Soil surveys (Interior).....	-	-	-	-	-	-	-	-
Accelerate Soil Survey.....	4,431	39	3,317	25	4,477	37	4,477	37
Other: planning & application.....	16,349	67	21,140	84	8,393	27	8,393	27
Snow Survey & Water Forecast.....	-	-	222	1	150	2	150	2
Plant Materials Center Operations.....	994	11	1,150	13	1,135	13	1,135	13
EPA Great Lakes Restorations Initiative....	13,370	17	12,507	42	26,032	41	26,032	41
Bureau of Land Management.....	332	4	164	2	230	3	230	3
Reimbursement for other services:								
Facilities: Rent, phone, utilities, etc.....	17	-	18	-	15	-	15	-
Cartographic job work.....	-	-	-	-	-	-	-	-
Proceeds of sales.....	-	-	-	-	-	-	-	-
Financial assistance.....	34,505	-	3,075	-	2,595	-	2,595	-
Miscellaneous.....	964	5	831	5	952	5	952	5
<b>Total, Other Federal Funds.....</b>	<b>70,962</b>	<b>143</b>	<b>42,424</b>	<b>172</b>	<b>43,979</b>	<b>128</b>	<b>43,979</b>	<b>128</b>
<b><u>Non-Federal Funds:</u></b>								
Reimbursement for technical services for:								
Planning & application.....	1,088	5	965	10	778	6	778	6
Accelerate Soil Surveys.....	714	5	540	5	757	7	757	7
Snow Survey & Water Forecast.....	-	-	188	-	171	-	171	-
Plant Materials Center Operations.....	169	1	54	-	54	-	54	-
Cartographic job work.....	-	-	-	-	-	-	-	-
A&E Contracting.....	-5	-	-	-	-	-	-	-
Reimbursement for other non-Federal services:								
Facilities: Rent, phone, utilities, etc.....	1,195	-	792	-	680	-	680	-
Proceeds of sales.....	-	-	-	-	-	-	-	-
Financial assistance.....	1,296	-	-1	-	-	-	-	-
Miscellaneous.....	2,684	15	1,490	26	1,268	15	1,268	15
Trust funds.....	712	-	3	-	-	-	-	-
<b>Total, Non Federal Funds.....</b>	<b>7,853</b>	<b>26</b>	<b>4,031</b>	<b>41</b>	<b>3,708</b>	<b>28</b>	<b>3,708</b>	<b>28</b>
<b>Total, NRCS.....</b>	<b>4,826,313</b>	<b>11,446</b>	<b>4,518,898</b>	<b>11,712</b>	<b>4,820,478</b>	<b>11,131</b>	<b>4,199,411</b>	<b>10,698</b>

Note: Based on the 2012 General Provisions, unobligated balances for Forestry Incentives Program and Great Plains Conservation Program are shown as rescinded.

NATURAL RESOURCES CONSERVATION SERVICE  
Permanent Positions by Grade and Staff Year Summary

Item	2010 Actual			2011 Actual			2012 Estimate			2013 Estimate		
	Wash. D.C.	Field <sup>1/</sup>	Total									
SES.....	27	3	30	28	2	30	28	2	30	28	2	30
GS-15.....	124	62	186	90	66	156	83	61	144	79	58	137
GS-14.....	220	177	397	154	173	327	141	159	300	136	153	289
GS-13.....	117	521	638	103	555	658	95	510	605	91	490	581
GS-12.....	83	3,181	3,264	36	3,140	3,176	33	2,884	2,917	32	2,771	2,803
GS-11.....	55	2,524	2,579	24	2,558	2,582	22	2,349	2,371	21	2,258	2,279
GS-10.....	1	106	107	1	39	40	1	36	37	1	34	35
GS-9.....	41	1,658	1,699	65	1,808	1,873	60	1,660	1,720	57	1,596	1,653
GS-8.....	18	516	534	10	495	505	9	455	464	9	437	446
GS-7.....	18	1,559	1,577	43	1,613	1,656	39	1,481	1,519	38	1,424	1,462
GS-6.....	9	392	401	6	380	386	6	349	355	5	335	340
GS-5.....	1	345	346	2	299	301	2	275	277	2	264	266
GS-4.....	4	94	98	-	61	61	-	56	56	-	54	54
GS-3.....	5	18	23	-	9	9	-	8	8	-	8	8
GS-2.....	-	2	2	-	1	1	-	1	1	-	1	1
GS-1.....	-	8	8	-	-	-	-	-	-	-	-	-
Total Perm. Positions.....	723	11,166	11,889	562	11,199	11,761	519	10,286	10,804	499	9,885	10,384
Unfilled, EOY....	321	466	787	151	603	754	-	-	-	-	-	-
Total, Perm. Full-Time Employment, EOY.....	402	10,700	11,102	411	10,596	11,007	519	10,286	10,804	499	9,885	10,384
Staff Year Est....	450	10,996	11,446	685	11,027	11,712	506	10,625	11,131	486	10,212	10,698

<sup>1/</sup> Includes Centers staff.

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 individual transportation 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 (SUVs). NRCS maintains a fleet of vehicles distributed among field, area, and State offices in the 50 States, the Caribbean and the Pacific Basin areas. Some 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 in order 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 (FMR) 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 2011, NRCS had a fleet of 9,516 vehicles, of which 987 were passenger vehicles (sedans and station wagons). Included in the fleet size were 332 GSA-leased vehicles, of which 86 were passenger vehicles. The total vehicles decreased by 1,127 from 2010 to 2011. In 2012, NRCS anticipates a net reduction in fleet inventory of 521 vehicles, as a result of disposing 946 vehicles and acquiring 425 replacements through purchase or lease. The projected 2013 inventory indicates further reductions to a total of 8,885 vehicles.

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 RESOURCE 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 thousands)
	Sedans & Station Wagons	Light Trucks, SUV, Vans		Medium Trucks	Heavy Trucks	Ambulances	Buses	Total Vehicles	
		4X2	4X4						
2010 <sup>2</sup>	1,164	4,511	4,584	348	35	-	1	10,643	\$10,845
Change	-177	-1,124	-243	+419	-2	-	-	-1,127	+2,425
2011	987	3,387	4,341	767	33	-	1	9,516	13,270 <sup>3</sup>
Change	-50	-287	-142	-42	-	-	-	-521	-664
2012	937	3,100	4,199	725	33	-	1	8,995	12,606
Change	-20	-40	-40	-10	-	-	-	-110	-126
2013	917	3,060	4,159	715	33	-	1	8,885	12,480

<sup>1</sup> Vehicles reported are both agency-owned and GSA-leased. Includes 537 vehicles replaced through GSA under the American Recovery and Reinvestment Act (ARRA).

<sup>2</sup> The inventory reported in the 2010 FAST-SF83 Report in the amount of 11,308 vehicles was entered in error. The correct inventory amount was 10,643 vehicles.

<sup>3</sup> The 2011 correct operating costs are \$13,270,000; the FAST entry of \$25,517,000 was in error. The cost increase from 2010 to 2011 is based on increased fuel costs. A majority of the 1,127 vehicles that were removed from the fleet were in operation for 9 to 11 months of 2011; disposals occurred during the final months.



NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

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

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, [~~\$828,159,000~~]\$827,500,000, to remain available until September 30, [2013, of which \$12,500,000 shall be for the Common Computing Environment]2014; *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 non-Federal land, that the right to use such land is obtained as provided in 7 U.S.C. 2250a.

The first change in language proposes deletion of “2013” and insertion of “2014” to provide two year funds availability.

The second change removes specific language for 2012 funding which will continue to be funded as part of the 2013 base funding.

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

Lead-Off Tabular Statement

Appropriation Act, 2012.....	\$828,159,000
Budget Estimate, 2013.....	827,500,000
Change from 2012 Appropriation.....	<u><u>-659,000</u></u>

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

Summary of Increases and Decreases

(On basis of appropriation)

(Dollars in thousands)

	2010 Actual	2011 Change	2012 Change	2013 Change	2013 Estimate
Discretionary Appropriations:					
Conservation Operations:					
Conservation Technical Assistance.....	\$762,707	-\$17,894	-\$15,354	-\$659	\$728,800
Grazing Lands.....	9,930	-	-9,930	-	-
Soil Survey.....	93,939	-188	-13,751	-	80,000
Snow Survey & Water Supply Forecasting.....	10,965	-22	-1,643	-	9,300
Plant Materials Centers.....	11,088	-22	-1,666	-	9,400
Total Appropriation or Change.....	<u>888,629</u>	<u>-18,126</u>	<u>-42,344</u>	<u>-659</u>	<u>827,500</u>

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

Project Statement by Program

(On basis of appropriation)

(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>	<u>2013 Estimate</u>		
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years	
Discretionary Appropriations:										
Conservation Operations:										
1. Technical Assistance.....	\$762,707	5,274	\$744,813	5,341	\$729,459	5,001	-\$659	-142	\$728,800	4,859
2. Grazing Lands.....	9,930	78	9,930	78	-	-	-	-	-	-
3. Soil Survey.....	93,939	676	93,751	634	80,000	534	-	-15	80,000	519
4. Snow Survey.....	10,965	65	10,943	56	9,300	47	-	-2	9,300	45
5. Plant Materials.....	11,088	98	11,066	92	9,400	74	-	-2	9,400	72
Total Adjusted Approp.....	888,629	6,191	870,503	6,201	828,159	5,656	-659	-161	827,500	5,495
Rescissions.....	-	-	1,744	-	-	-	-	-	-	-
Total Appropriation.....	888,629	6,191	872,247	6,201	828,159	5,656	-659 (1)	-161	827,500	5,495
Transfers In:										
Congressional Relations.....	199	-	183	-	-	-	-	-	-	-
Rescission.....	-	-	-1,744	-	-	-	-	-	-	-
Bal. Available, SOY 1/.....	52,923	-	69,691	-	33,936	-	-12,664	-	21,272	-
Recoveries, Other (Net).....	32,482	-	7,545	-	-21,272	-	-	-	-21,272	-
Total Available.....	974,233	6,191	947,922	6,201	840,823	5,656	-13,323	-161	827,500	5,495
Lapsing Balances.....	-4,941	-	-1,142	-	-	-	-	-	-	-
Bal. Available, EOY 1/.....	-69,691	-	-33,936	-	-	-	-	-	-	-
Total Obligations.....	899,601	6,191	912,844	6,201	840,823	5,656	-13,323	-161	827,500	5,495

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

Project Statement by Program

(On basis of obligations)

(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>	<u>2013 Estimate</u>		
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years	
Discretionary Obligations:										
Conservation Operations:										
1. Technical Assistance.....	\$772,080	5,274	\$786,648	5,341	\$737,167	5,001	-\$8,367	-142	\$728,800	4,859
2. Grazing Lands.....	9,930	78	9,930	78	-	-	-	-	-	-
3. Soil Survey.....	95,822	676	93,754	634	83,490	534	-3,490	-15	80,000	519
4. Snow Survey.....	10,016	65	10,998	56	10,380	47	-1,080	-2	9,300	45
5. Plant Materials.....	11,753	98	11,514	92	9,786	74	-386	-2	9,400	72
Total Obligations.....	899,601	6,191	912,844	6,201	840,823	5,656	-13,323	-161	827,500	5,495
Lapsing Balances.....	4,941	-	1,142	-	-	-	-	-	-	-
Bal. Available, EOY 1/.....	69,691	-	33,936	-	-	-	-	-	-	-
Total Available.....	974,233	6,191	947,922	6,201	840,823	5,656	-13,323	-161	827,500	5,495
Transfers In.....	-199	-	-183	-	-	-	-	-	-	-
Rescission.....	-	-	1,744	-	-	-	-	-	-	-
Bal. Available, SOY 1/.....	-52,923	-	-69,691	-	-33,936	-	+12,664	-	-21,272	-
Recoveries, Other (Net).....	-32,482	-	-7,545	-	21,272	-	-	-	21,272	-
Total Appropriation.....	888,629	6,191	872,247	6,201	828,159	5,656	-659	-161	827,500	5,495

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

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

Justification of Increases and Decreases

- (1) A decrease of \$659,000 and 161 staff years for Conservation Operations (\$828,159,000 and 5,656 staff years available in 2012):
- a. An increase of \$1,926,000 for pay costs. The pay cost will be offset as noted in the Conservation Technical Assistance justification.
  - b. A decrease of \$2,585,000 and 142 staff years for Conservation Technical Assistance (\$729,459,000 and 5,001 staff years available in 2012):

In 2013, CTA program funds will continue to provide important technical assistance helping land managers reduce soil loss from erosion; address soil and 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. CTA funding at the President's Budget request level will provide outreach, education, and comprehensive conservation plan development assistance to producers. A well-written plan is the best way to maximize conservation impact for producers who participate in cost-share and easement programs. At the 2013 request level, NRCS will provide technical assistance to improve soil quality on approximately 7.1 million acres, and protect approximately 14.7 million acres of grazing and forest land. Conservation technical assistance by NRCS staff and technical service providers also will address critical and/ or impaired watersheds on approximately 1.6 million acres to improve water quality.

While there will be decreases in staff as a result of attrition, the agency is implementing organizational improvements for improved performance and cost effectiveness. NRCS will continue to fund conservation delivery streamlining efforts and modernizing and upgrading IT infrastructure. The agency will reduce travel, supplies, printing, IT peripherals and other services in order to fund its important conservation work.

- c. No change in funding and a decrease of 15 staff years for the Soil Survey program (\$80,000,000 and 534 staff years available in 2012):

The Soil Survey program will continue to carry out current and consistent map interpretations and data sets of the soil resources of the U.S. Soil survey is an essential tool for regional and local conservation planning that allows people to manage natural resources. 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, wildlife and recreational areas. Program funding in 2013 supports approximately 519 staff years and contracts and agreements that provide the mapping, web and digital soil surveys, information management, technical soil services and carbon sampling and analysis.

- d. No change in funding and a decrease of 2 staff year for Snow Survey and Water Supply Forecasting (SSWSF) program (\$9,300,000 and 47 staff years available in 2012):

In 2013 the SSWSF program will fund 45 staff years and contractors to collect and analyze data that provides estimates of annual water availability, spring runoff and summer stream flows. The water supply forecasts are used by public and private organizations and citizens.

- e. No change in funding and a decrease of 2 staff year for Plant Materials Centers (PMC) (\$9,400,000 and 74 staff years available in 2012):

In 2013, funding will support the operations of the Plant Material Centers. The PMCs will continue to identify, test, evaluate and demonstrate plant and plant technologies to solve natural resource problems. Funding requested in the 2013 budget proposal will allow the existing Plant Materials Centers to determine the suitability of plant technologies for erosion control, cropland soil health and productivity, restoring wetland, improving water quality, improving wildlife habitat (including pollinators), protecting streambank and riparian areas, stabilizing coastal dunes, producing biomass, improving air quality, and addressing other conservation treatment needs. Continued support for plant science technology transfer will be funded and an estimated 250 technical documents will be prepared and transferred to the public via field guides, technical documents and fact sheets.

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

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

State/Territory	2010 Actual		2011 Actual		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Alabama.....	\$11,771	104	\$12,081	94	\$10,634	86	\$10,466	83
Alaska.....	4,446	34	6,076	40	4,447	36	4,377	35
Arizona.....	8,648	78	9,687	76	7,576	69	7,456	67
Arkansas.....	12,847	113	13,376	123	10,887	112	10,714	109
California.....	22,886	159	22,831	182	17,453	166	17,176	161
Colorado.....	17,014	153	16,653	147	15,378	134	15,134	130
Connecticut.....	4,370	24	4,712	29	3,136	26	3,086	26
Delaware.....	2,186	18	2,177	17	1,736	16	1,708	15
Florida.....	10,668	89	10,462	88	8,546	80	8,411	78
Georgia.....	16,716	125	14,463	128	12,636	117	12,436	113
Hawaii.....	9,478	62	7,517	72	6,843	66	6,735	64
Idaho.....	11,207	115	12,307	119	10,007	109	9,848	105
Illinois.....	17,525	162	17,731	170	15,125	155	14,885	151
Indiana.....	12,921	118	12,925	116	11,492	106	11,310	103
Iowa.....	23,130	213	24,188	229	20,552	209	20,226	203
Kansas.....	22,294	205	22,024	196	18,866	179	18,567	174
Kentucky.....	14,190	118	13,588	121	12,511	110	12,313	107
Louisiana.....	10,910	103	11,938	110	8,837	100	8,697	97
Maine.....	5,102	46	5,582	47	4,624	43	4,551	42
Maryland.....	6,979	52	6,465	46	4,671	42	4,597	41
Massachusetts.....	4,381	29	4,843	31	3,141	28	3,091	27
Michigan.....	12,481	112	12,361	110	10,938	100	10,765	97
Minnesota.....	16,891	153	16,387	128	13,923	117	13,702	113
Mississippi.....	16,062	135	13,586	101	12,934	92	12,729	89
Missouri.....	21,389	197	22,799	177	20,742	161	20,413	157
Montana.....	19,692	190	19,713	188	17,410	171	17,134	167
Nebraska.....	18,259	174	18,761	154	16,893	140	16,625	136
Nevada.....	5,338	38	5,135	40	3,929	36	3,867	35
New Hampshire.....	3,368	26	3,877	33	2,554	30	2,514	29
New Jersey.....	5,238	41	5,255	41	4,101	37	4,036	36
New Mexico.....	10,267	98	10,163	90	8,774	82	8,635	80
New York.....	12,727	105	12,689	109	9,231	99	9,085	97
North Carolina.....	11,896	96	12,302	115	9,815	105	9,659	102
North Dakota.....	16,894	149	16,654	147	14,088	134	13,865	130
Ohio.....	13,042	87	14,441	134	10,404	122	10,239	119
Oklahoma.....	15,937	160	17,003	146	15,772	133	15,522	129
Oregon.....	12,870	112	13,483	105	11,151	96	10,974	93
Pennsylvania.....	11,728	94	11,259	110	9,184	100	9,038	97
Puerto Rico.....	4,152	35	4,589	38	3,557	35	3,501	34
Rhode Island.....	2,576	15	3,118	18	1,717	16	1,690	16
South Carolina.....	8,179	79	8,619	75	7,571	68	7,451	66
South Dakota.....	13,857	136	14,211	132	12,802	120	12,599	117
Tennessee.....	13,980	122	13,772	126	12,225	115	12,031	112

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

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

State/Territory	2010 Actual		2011 Actual		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Texas.....	48,365	442	46,019	427	41,155	395	40,503	382
Utah.....	11,015	79	10,138	82	6,846	75	6,738	73
Vermont.....	4,341	32	4,255	34	3,452	31	3,397	30
Virginia.....	10,514	80	10,197	95	9,031	87	8,888	84
Washington.....	12,039	111	12,672	109	10,903	99	10,730	97
West Virginia.....	8,822	84	7,666	67	7,543	61	7,423	59
Wisconsin.....	18,129	140	14,793	130	13,034	119	12,827	115
Wyoming.....	9,451	74	9,578	74	7,738	67	7,615	66
National Hdqtr.....	184,846	242	213,374	262	239,501	239	235,709	232
National Centers.....	63,014	361	51,811	360	51,357	328	50,543	319
Nat. Tech. Sup. Cent.....	12,573	72	10,538	63	11,450	57	11,269	56
Obligations.....	899,601	6,191	912,844	6,201	840,823	5,656	827,500	5,495
Lapsing Balances.....	4,941	-	1,142	-	-	-	-	-
Bal. Available, EOY.....	69,691	-	33,936	-	-	-	-	-
Total, Available.....	974,233	6,191	947,922	6,201	840,823	5,656	827,500	5,495

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

Classification by Objects  
(Dollars in thousands)

	2010	2011	2012	2013
	<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
Personnel Compensation:				
Washington, D.C.....	\$30,442	\$30,721	\$27,633	\$26,430
Field.....	401,865	400,454	360,203	351,138
11 Total personnel compensation.....	432,307	431,175	387,836	377,568
12 Personal benefits.....	143,466	139,839	125,767	123,685
13.0 Benefits for former personnel.....	274	3,140	2,900	2,887
Total, personnel comp. and benefits.....	576,047	574,154	516,503	504,140
Other Objects:				
21.0 Travel and transportation of persons.....	22,767	19,265	18,640	18,500
22.0 Transportation of things.....	4,192	4,215	3,864	3,800
23.2 Rental payments to others.....	19,972	23,108	21,217	21,100
23.3 Communications, utilities, and misc. charges.....	13,853	21,561	19,754	19,500
24.0 Printing and reproduction.....	1,734	1,020	932	900
25.2 Other services.....	211,976	222,836	202,567	202,500
25.2 Construction contracts.....	222	2,743	-	-
26.0 Supplies and materials.....	20,706	18,123	21,500	21,400
31.0 Equipment.....	27,344	24,704	34,826	34,700
32.0 Land and structures.....	153	492	450	400
42.0 Investments and loans.....	535	442	404	400
33.0 Investments and loans.....	100	181	166	160
Total, Other Objects.....	323,554	338,690	324,320	323,360
99.9 Total, new obligations.....	899,601	912,844	840,823	827,500
Position Data:				
Average Salary (dollars), ES Position.....	\$160,117	\$159,842	\$159,842	\$159,842
Average Salary (dollars), GS Position.....	\$64,202	\$64,482	\$64,482	\$64,482
Average Grade, GS Position.....	10.0	10.0	10.0	10.0

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION OPERATIONS

User Fees – Proposed Legislation

Explanation of Proposed Legislation:

This proposal would recover approximately \$22 million in 2013.

The Natural Resources Conservation Services (NRCS) provides technical and financial assistance for the development of conservation plans and establishment of measures to conserve soil and water, including farm irrigation, flood prevention, and agricultural pollution control. The technical assistance provided to agricultural landowners and operators varies depending upon the complexity of the soil or water conservation resource concern. This proposal would initiate user fees for this service. Because these plans benefit landowners by providing them with individualized site-specific inventories and evaluations of soil, water, and other resources on their land, as well as design, layout and evaluation of over 167 potential conservation practices, USDA is proposing a fee based on the level of service provided.

This proposal recommends amending Section 590c of the Soil Conservation and Domestic Allotment Act of 1935 to authorize the charging of fees for particular technical assistance services. This proposal would authorize NRCS to prescribe and collect fees to cover some of the costs of providing technical assistance for completing a conservation plan for a producer or landowner. The language would provide the Secretary with the authority to waive fees for assistance provided to members of historically underserved groups such as beginning farmers or ranchers, limited resource farmers or ranchers, and socially disadvantaged farmers or ranchers. Fees also could be waived by the Secretary for assistance provided to USDA program participants seeking to maintain payment eligibility under Section 1212 of the Food Security Act of 1985, or to comply with local, state, or federal regulatory requirements. The legislation establishes a special fund in the Treasury for collection of user fees, which would be authorized to be appropriated and available until expended. Receipts in 2013 are estimated at \$22 million.



**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, (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.** 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 2011, the agency identified key outcome-based performance measures that are based on available conservation science and reflect the effects of conservation practices applied by individual private landowners and managers. These measures were selected to be compliant with the Government Performance and Results Modernization Act of 2010 (GPRA), and provide a transparent link between budgetary investment, outputs, and outcomes. During 2012, a small team of experts will develop baselines, targets and business rules for these measures. The existing performance measures will continue to be used for reporting during this development period.

## CONSERVATION TECHNICAL ASSISTANCE

### Current Activities.

**Program Objectives.** The Conservation Technical Assistance (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 translate science, professional judgment, and sensitivity 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—a diagnosis—of the resource concerns and opportunities on farms and ranches and in watersheds. NRCS professionals then develop the prescription—providing 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. The prescription—or conservation plan—is turned into treatment as producers and NRCS work together to use the information gleaned from the planning process to make decisions, implement plans, and put practices in place.

Ideally, technical assistance does not stop with implementation, but includes an annual checkup or reassessment to determine the effectiveness of the plan for the land manager and the environment. The checkup could lead to an adjustment to the treatment program. Technical assistance is an ongoing process of science-based assessment, action, reassessment, and adjusted action—a process sometimes referred to as adaptive management. In its broadest and best sense, science-based technical assistance is about helping producers understand how their operations affect the environment and how they can manage their operations to both make a profit and improve the environment. It connects what happens on one farm with what happens on neighboring farms so that real and 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 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.

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 concern. 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 has a full array of processes to focus CTA Program resources on national and State priorities and initiatives. These processes include, but are not limited to:

- Strategically positioning staff to address natural resource needs;
- Locating program funds to address natural resource needs;
- Establishing short-term and long-term performance measures and goals;
- Establishing and implementing agreements and contracts;
- Formulating, enhancing, and expanding partnerships;
- Developing and transferring new and innovative technologies;
- Delivering conservation planning and other technical assistance to help decision makers meet eligibility requirements for USDA programs and other Federal, State, and local conservation programs;
- Conducting technical and program evaluations and assessments;
- Conducting resource inventories and assessments;
- Developing and delivering training;

- Expanding technical capacity, including the use of Technical Service Providers (TSP); and
- Developing public information and outreach strategies.

### **2011 Activities.**

In 2011 CTA Program activities included:

- New technologies and conservation practices addressed emerging challenges and opportunities, such as organic production systems, renewable energy and biofuels, climatic adaptation, and enhancement of pollinator populations;
- Addressed a growing number of niche enterprises that includes aquaculture, specialty crops, sustainable and organic farming;
- Engaged producers who were new to production agriculture and had 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;
- Technical assistance for land evaluation/site assessments, and conservation planning was provided for conservation easement programs such as the Farm and Ranchland Protection Program, Wetlands Reserve Program, and the Grassland Reserve Program;
- Entered into agreements with conservation partnerships in order to leverage local funds and provide additional technical assistance;
- Accelerated technical assistance provided to initiatives such as the Great Lakes, Chesapeake Bay, and Mississippi River Basin;
- Addressed growing demand for pre-program conservation planning support for the Emergency Watershed Protection Program and Farm Bill programs such as the Environmental Quality Incentives Program, Agricultural Water Enhancement Program, Conservation Stewardship Program, and the Wildlife Habitat Incentives Program; and
- Natural resource conservation systems were designed to reduce the risk of loss from climatic events such as drought, fire and flood, and to mitigate their effects.

To meet the growing demand for technical assistance, the agency has continued to manage and invest in human capital to ensure the right skills are in the right location to deliver high quality products and services; improve and streamline internal business processes in order to accelerate service delivery; expand the conservation partnership and build new alliances for cooperative approaches that conserve and protect natural resources; develop and use electronically based technology to provide a more customer-focused service; and strengthen our ability to develop innovative technology addressing new and emerging conservation challenges.

**Get Conservation on the Ground.** Through the CTA Program, NRCS's field staff provides technical assistance to customers in planning and application of science-based conservation practices and systems on non-Federal land. This technical assistance provides public benefits through soil and water quality improvements, water conservation, healthier grazing and forest land ecosystems, and wildlife habitat improvement. The 2011 examples of CTA Program results are:

Maintain productive working farms and ranches. NRCS helps ensure the health of 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 2011, NRCS assisted in developing conservation plans on 40 million acres. In accordance with those plans, conservation practices and systems designed to improve soil quality were applied to eight million acres of cropland.
- NRCS helped the owners and managers of grazing and forest land apply conservation to improve the resource base on 16 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 24 million acres of agricultural land had conservation practices applied as designed by NRCS scientists to improve off-site water quality.
- Comprehensive Nutrient Management Plans (CNMPs) were developed and implemented with livestock producers to ensure significant reductions in released nutrients. In 2011, over 1,300 CNMPs were written and more than 1,250 were applied.
- Over 700,000 acres of conservation practices were applied to improve 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 candidate and threatened and endangered 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.

- Eleven 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 81,000 acres.

**Grazing Lands Conservation.** Grazing lands comprise an economic resource base in all 50 states by providing food, fiber, clean air and water, wildlife habitat, and open space. According to the NRCS, National Resource Inventory, privately owned range and pasture lands makes 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 forestland (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.

NRCS participates in the Grazing Lands Conservation Initiative (GLCI), 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. The GLCI has spurred major increases in the knowledge and skills of NRCS conservationists and the planning and application of conservation of grazing land management for the greater good of America. In 2011 alone, over 33 million acres of grazing land had conservation practices applied.

NRCS led the expansion of the National Resources Inventory of non-forested Bureau of Land Management (BLM) lands in order to provide a statistically-based sample design that is common to both agencies. BLM is providing NRCS \$12.5 million over five years for the service, and data collection was ongoing for 2011. 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 also developed the Ecological Site Information System (ESIS), providing the capability to produce automated ecological site descriptions from the data stored in its database. Joint policy between BLM, NRCS, and USDA Forest Service efficiently pools the agencies’ technical resources behind development and use of ecological site descriptions to describe site characteristics, plant communities, and use interpretations for grazing land and forestland. Ecological site description (ESD) development training is ongoing and all three agencies provide staff for this important advent. This new technology improves land management planning capabilities for agencies and the public by providing consistency between the agencies classification, technology development, planning and accomplishment reporting.

**Clean Water Activities.** NRCS addresses key water quality issues such as the potential environmental risks posed by animal feeding operations and the impairment of water resources from nutrients, sediments, and pesticides. The agency also provides the leadership needed to enhance coordination with the Environmental Protection Agency in areas of mutual interest. Specific areas in which NRCS provides this 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 conservation; and conservation assistance to reduce hypoxia and improve water quality across the landscape.

On July 19, 2010, the President issued Executive Order (E.O.) 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes, which adopted the Final Recommendations of the Interagency Ocean Policy Task Force (Final Recommendations), and directed Federal agencies to implement the recommendations under the guidance of a new National Ocean Council. In 2011, as a member of the National Ocean Council and a department that played a significant role in the conservation of our Nation's private lands, NRCS provides technical and financial planning and assistance to begin realizing the President's vision to ensure that our oceans, coasts, and Great Lakes are healthy and resilient, safe and productive, and understood and treasured. Many of the President's nine priority objectives for implementation of the new Ocean Policy align well with USDA goals and activities. USDA will play a significant role in assisting in the interagency effort to develop the national Strategic Action Plan for the priority objective Water Quality and Sustainable Practices on the Land, as outlined in the Final Recommendations. A broad range of existing USDA activities supports the new National Policy and the Final Recommendations, including the following actions:

- Conservation Initiatives which strategically target watersheds to improve coastal, ocean, and the Great Lakes resource conditions (e.g., water quality, water quantity, climate change adaptation and resiliency, and coral reef conservation). In 2011, NRCS continued with four previously established initiatives designed to improve coastal, ocean and Great Lakes conditions: Chesapeake Bay Watershed Initiative, Coral Reef Task Force Partnership Initiative, Great Lakes Restoration Initiative, and the Mississippi River Basin Healthy Watershed Initiative.
- Targeted conservation activities which are directed towards coastal, ocean, and Great Lakes ecosystems that support sustainable aquaculture and aquatic resource conservation. USDA implemented numerous conservation practices on private lands to improve water quality and quantity, restore wetlands and flood plains, improve wildlife habitat, restore fish passage and other coastal aquatic habitats, and provide other ecosystem benefits to improve coastal, ocean, and Great Lakes ecosystems.

Nutrient Management Plans. Since 2004, technical assistance for waste utilization has been delivered to over two million acres, nutrient management to over 29 million acres, and irrigation water management to over eight million acres. Since 2005, technical assistance for feed management has been delivered to over 73,000 acres. 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 Comprehensive Nutrient Management Plans (CNMP) are perhaps the most effective tool for addressing these water quality problems associated with agriculture. An average CNMP takes nearly 150 hours of staff time to develop. Since 2002, over 45,000 CNMPs have been developed, and NRCS employees, conservation partners and Technical Service Providers have spent over 6.7 million hours on the development of CNMPs for our Nation's farmers and ranchers. In 2010 and 2011, NRCS, conservation partners, and Technical Service Providers assisted over 5,600 livestock and poultry producers in developing new CNMPs. Considering that 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 rate of success.

Pathogens and Dead Animals. In 2009, NRCS, in partnership with the University of California, addressed the issue of conservation and pathogens in food safety and disease control through revising its waterborne pathogen publication to reflect current science and the development of a web-based training course for NRCS personnel. In 2010, the final draft of the updated publication was completed by the university and underwent technical review by NRCS technical personnel, personnel from other agencies, and experts from outside the Federal government. The publication was made available on the NRCS website in 2011 and a web-based training course for NRCS employees and Technical Service Providers was provided on USDA's AgLearn, an on-line training tool.

Hypoxia. USDA participated on the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force (Task Force) in 2011. NRCS served as the USDA point of contact on the Task Force Coordinating Committee. NRCS also participated on four task force sub-committees 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.

Water Quality Leadership. During 2011, NRCS led in the development, advancement, and demonstration of new and innovative approaches to improving water quality. The following activities highlight some of these advances:

- NRCS revised the National Nutrient Management Policy (NNMP) guidance and its conservation practice standard to help growers improve site specific nutrient management to better protect local water quality.
- NRCS completed Conservation Effects Assessment Project (CEAP) studies in the Upper Mississippi, Chesapeake Bay and Great Lakes regions to evaluate the benefits of conservation practices and identify additional improvements needed for reducing the non-point source contribution of nutrients from farmlands.
- NRCS collaborated with the EPA Office of Water on the National Pollutant Discharge Elimination System (NPDES) permit regulation under the Clean Water Act (CWA) to gather information on individual concentrated animal feeding operations. NRCS reviewed the proposed rule that EPA released in mid-October, and provided EPA with several pages of comments pointing out weaknesses with the proposed rule and alternatives that might yield the same results.

NRCS collaborated with agricultural groups and States to gather agricultural data for use in meeting EPA's requirements for watershed implementation plans as a result of the Chesapeake Bay Total Maximum Daily Load (TMDL). NRCS and EPA have collaborated on evaluation of the Chesapeake Bay Model and how it might be improved.

National Resources Inventory (NRI) and Conservation Effects Assessment Project (CEAP). NRCS acquires, analyzes, interprets, and delivers data and information on natural resources through the NRI and CEAP. The NRI is authorized by several pieces of legislation, 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 FCEA, P.L. 110-246, 122 Stat. 1651) [16 U.S.C. 2001-2009].

The NRI supports knowledge-based natural resource planning and decision-making through the compilation of natural resources data and information, conservation program data, and data from other Federal and non-Federal sources. 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. Data and analyses from the NRI provide the scientific basis for appropriate and effective conservation programs, sound agricultural policy, realistic strategic and performance plans, and national farm policy discussion through the Farm Bill process

The NRI data are collected every year for a scientifically selected subset of the 800,000 NRI sample sites nationwide. The NRI is not a census, but rather a statistical survey that inventories scientifically selected sample sites located in every county across the United States as well as in the Caribbean area and Pacific Basin. The NRI data is collected on an annual basis which provides the flexibility to gather scientific information on emerging natural resource issues. The long-term trending capability of the NRI is useful in evaluating the impacts of conservation programs and policies. The NRI is performed in cooperation with the Iowa State University Center for Survey Statistics and Methodology. The 2011 NRI activities included:

- Alaska NRI. For the first time, Alaska was included in NRI; data collection and processing were performed in 2010 and 2011. Data are in the final stages of review and should be available before the end of the calendar year. Alaska has presented many data collection challenges; procurement of suitable imagery is complicated and many resource issues are unique to the State. The new data will provide stakeholders and partners, including native Alaskan groups, with credible and useful natural resource information. Also nearing completion are updated NRI data for Hawaii and the Caribbean.
- NRI Conservation Tillage and Nutrient Management Survey. NRCS is partnering with the National Agricultural Statistics Service (NASS) to obtain updated National Resources Inventory-Conservation Effects Assessment Project survey data in order to develop a revised assessment of the environmental effects of conservation programs and practices implemented within the Chesapeake Bay Watershed. This work will update results released in the USDA News Release on March 15, 2011, USDA Release No. 0121.11; those results were based upon data collected from 2003 to 2006. NASS has begun development of a farmer survey to provide farm-field level land management and conservation practice data for cropland fields associated with selected NRI sample sites throughout the region. NASS enumerators (data collectors) will also need to work with NRCS State/field staff to obtain supplemental information regarding conservation plans and practices. Training of NASS data collectors began early in 2012.

- On-site data collection on Bureau of Land Management lands. NRCS has signed an interagency agreement with the U.S. Bureau of Land Management (BLM) on a landscape monitoring project. BLM is partnering with NRCS 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 initial period of the agreement is 2011-2015. Funding from BLM is being used to develop a survey system that regularly provides scientifically credible information on the status of non-forested BLM lands. The sample has been selected for this project and a core set of indicators and protocols has been approved. About 1,000 sample points in 13 Western and Midwestern States will be examined in the initial year of the agreement. The BLM views the data as crucial to its Sage Grouse and Great Basin initiatives and to helping it establish an ongoing monitoring program. Adoption of NRI protocols on BLM-managed landscapes enhances NRCS's leadership on grazing lands.
- Digital Imagery Measurement Study. NRCS conducted a small pilot study in 2009, to assess the feasibility of acquiring NRI imagery from digital sensors mounted on aircraft. The results showed that it is technically possible to acquire direct digital multiple-band high-resolution imagery suitable for use in the NRI. A subsequent study, broader in scope, was performed in 2011 to assess how this direct digital imagery might impact NRI data collection. Data were collected on 2,000 area segments using a design of multiple treatments and replicates. The data are still being analyzed but should provide information about the relative suitability of using direct digital products for remote sensing for the NRI.
- Remote Sensing Pilot on Stewardship Lands (Easements). The Resource Inventory Division's Remote Sensing Laboratories (RSL), the Easement Programs Division (EPD), and the National Geospatial Management Center (NGMC) collaborated to develop a research pilot to evaluate a Web-based geographic information system (GIS) tool modified for the purpose of conducting remote sensing of stewardship lands. This Web-based tool, called GeoObserver, displays multiple years of high-resolution imagery along with stewardship land boundaries. Users of GeoObserver can readily detect changes on the landscape that may be a violation of the terms of the easement program. The pilot study is testing how well GeoObserver functions as a tool for remote sensing and is evaluating the advantages and disadvantages of four stewardship lands remote monitoring models. The models assess different combinations of State and RSL collection of baseline features and change detection. EPD is finalizing the summary report and briefing NRCS leadership on the results.

CEAP is a multi-agency effort 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. Upon completion, project findings will be used to guide USDA conservation policy and program development and help conservationists, farmers, and ranchers make more informed conservation decisions.

Assessments in CEAP 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 and assess the potential for USDA conservation programs by running a series of "what-if" scenarios in various models to meet the Nation's environmental and conservation goals. Watershed assessment studies provide more detailed, in-depth assessments at a smaller scale. The value of CEAP to estimate ecosystem outcomes utilizing available sound science was recently recognized when CEAP was honored on March 15, 2011, by the American Association for the Advancement of Science as an "Exemplary Collaborative Case Study" as part of the Agriculture, Food, Nutrition, and Natural Resources R&D Round Table.

The 2011 CEAP activities included:

- **Cropland Assessment**. The third report in the nationwide series of CEAP-Cropland assessment reports, on the Great Lakes Region, was released for review by senior USDA leadership in 2011. Formal release of this report occurred on October 13, 2011. The Ohio-Tennessee River Basin study, the fourth CEAP-Cropland assessment report, was in review at the end of the year. A comparison of findings from the first four studies found that the use of conservation practices reduced:
  - Edge-of-field sediment losses by 47 to 61 percent,
  - Nitrogen losses with surface runoff by 35 to 45 percent,
  - Nitrogen losses through subsurface pathways by nine to 31 percent, and
  - Total phosphorus losses by 33 to 44 percent.

In addition, analyses of the environmental effects of such practices as drainage water management and precision agriculture coupled with information on the economic costs of applying conservation practices have provided agency leadership with vital information for decision making that optimizes the use of available conservation resources while increasing ecosystem benefits and minimizing the risk of agricultural yield losses.

- **Wetlands Assessment.** The CEAP-Wetlands literature synthesis was published in the April 2011 supplemental issue of the peer-reviewed journal *Ecological Applications*. The ten papers in the supplement document the scientific literature summarizing the known or potential effects of conservation practices and programs on agricultural wetlands in seven geographic regions of the United States. In addition, the CEAP-Wetlands regional project in California's Central Valley (CCV)/Oregon's Upper Klamath River Basin has focused on restoring freshwater wetlands that have seasonal or semi-permanent water regimes. The study found the following:
  - Overall declines in soil loss were very low even under high rates of soil erosion.
  - Actively managed WRP wetlands support more waterfowl than sites under low or intermediate management.
  - Average carbon storage on WRP sites was found to be higher than that of California crops in general, but lower than that of perennial crops.
  - The WRP easements in the CCV provide a range of approximately 24,000 to 130,000 acre-feet (3,000 to 16,000 hectare-meters) of floodwater protection.
- **Wildlife Assessment.** CEAP-Wildlife regional assessments completed in 2011, include:
  - Assessment of migrating shorebird use of WRP wetlands in California,
  - The contribution of WRP to meeting energy requirements of migrating waterfowl in southern Oregon and northern California,
  - Bobwhite response to conservation practices and landscape conditions in the Mid-Atlantic region, and
  - The contribution of early successional conservation practices to shrubland bird conservation in New England.

Assessments initiated include the effects of conservation practices on Lesser Prairie-Chickens associated with the NRCS Lesser Prairie-Chicken Initiative, waterbird response to the Migratory Bird Habitat Initiative using Doppler surveillance weather radar data, and development of biological endpoints (aquatic biota) to CEAP-Cropland modeling efforts.

- **Grazing Lands Assessment.** Version 1 of the Rangeland Hydrology and Erosion Model (RHEM) is now available for use by NRCS and other land management entities. RHEM is a newly conceptualized, process-based erosion prediction model for rangeland and is based on fundamentals of infiltration, hydrology, plant science, hydraulics, and erosion mechanics. In addition, a wind erosion model (WEMO) for rangeland is being adapted to take advantage of NRI rangeland data. Both models are being used to assess rangeland at the national, regional, and vegetation type scales. In addition, five papers related to the CEAP-Grazing Lands component were published in scientific journals in 2011.
- **Watershed Assessment Studies.** Forty-two individual watershed case studies, led by the Agricultural Research Service and National Institute of Food and Agriculture as well as NRCS, are providing in-depth, detailed landscape assessments at the watershed scale. During 2011, the National Oceanic and Atmospheric Administration, which is working cooperatively with NRCS, released its report on the Jobos Bay Watershed, Puerto Rico. Other CEAP watershed study reports have been submitted and are currently being analyzed. NRCS is cooperating with Colorado State University on the development of the eRAMS (Environmental Risk Assessment and Management System) tool, a comprehensive support system that facilitates the assessment, planning, and implementation of conservation practices for landscape management across spatial scales from farm to watershed. The system is fully operational for the Raccoon River Basin, Iowa. Existing functionalities include:
  - Automatic watershed delineation
  - Automatic data extraction (soils, land use/land cover, terrain, hydrography, and climate)
  - OMS3/RUSLE2 sheet erosion estimation

- Computation of distance from farms to ephemeral streams along elevation contours
- SWAT model runoff, erosion, and nutrient loading estimates
- Multi-criteria analysis for ranking alternatives (fields) for conservation planning
- Digitization and inventory of conservation practices in the watershed
- Conservation scenario creation and analysis at the watershed scale.

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

CEAP continues to provide assessments of the conservation efforts in various NRCS Initiatives: the Mississippi River Basin Healthy Watershed Initiative (MRBI), the Chesapeake Bay Watershed Initiative and related Executive Order, the Great Lakes Restoration Initiative (GLRI), the Sage Grouse Initiative (SGI), and the Migratory Bird Habitat Initiative.

In addition, NRCS has formed a CEAP Implementation Team involving the agency's Science and Education and Programs areas of responsibility. This team is integrating CEAP findings into NRCS technical standards, the Agency Field Office Technical Guide, and program enhancements. NRCS Nutrient Management Standard (Practice Standard 590), for example, is being updated in view of CEAP findings, and this update will lead to more comprehensive suites of practices that will help farmers reduce losses of nutrients, especially nitrogen and phosphorus, to the environment.

NRCS developed the Vulnerability Assessment and Program Performance Tool (VAPPT) to address regional-level planning support for special agency initiatives. VAPPT integrates geospatially referenced data on farming activities, conservation program activities, natural resource information, and other science-based information into a single dynamic environment for regional-level analysis. An interagency group led by NRCS and including the Environmental Protection Agency and U.S. Geological Survey used the VAPPT application to identify locations best suited for MRBI water quality monitoring activities. Similarly, a VAPPT application was developed for use in a NRCS pilot project in Missouri, as part of the CEAP Implementation Plan, to use CEAP-based information to identify potential conservation benefits at the field level. For this pilot, the CEAP matrix approach to conservation treatment needs was adapted to agency field level practice information and CEAP soil vulnerability information at the Planning Unit Level to see which resource management strategies were already in place in which locations. Priorities were assigned at the field level based on the level of vulnerability and the level of observed conservation.

**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 resource assessment, conservation planning, conservation system installation, and program delivery. In 2011, numerous new or revised conservation technology tools, techniques, and standards were released and are described below.

- A Technical Note compilation of current knowledge of planting and managing Giant Miscanthus as a biomass energy crop.
- The Adaptive Nutrient Management Process used to reduce production cost to the environment by improving nutrient use efficiency.
- Information for field staff to increase awareness of the Brown Marmorated Stink Bug (*Halyomorpha halys*) problem and what is being done to address the program.
- Revised National Environmental Policy Handbook to update information and guidance use by State and field offices.
- Official Series Description and Soil Classification Maintenance Tool release converted to a Web-based application for editing the soils data.
- The Survey Engineering Tool, Waterway Design Tool, and Terrace Design Tool to improve State and field office design capacity.
- Revised National Agronomy Manual to reflect the current agronomic technologies for use by State and field staffs.
- Revised Endangered Species Act policy to clarify when field office staffs need to terminate technical and financial assistance related to candidate species and the protocol NRCS staff is to follow.
- Agricultural Waste Management Field Handbook chapters on Planning Considerations and Waste Management Equipment to improve State and field staff practice designs.

- The “Economics of Conservation Planning” course was conducted in 2011 to insure NRCS employees consider the farmers or ranchers financial situation when recommending conservation practices.
- Oregon Tilth partnership which increased organic technical assistance, organic training, outreach efforts to the organic community, and assisting States with the selection of stands and development of payment schedules for the NRCS Organic Initiative.
- A library of technical training resource materials is readily available to the NRCS employees from one centralized SharePoint site. Training materials are available as recorded Webinars, scripted PowerPoint presentations, and workshop materials needed to conduct facilitated training sessions.
- An enhanced and expanded new version of the official USDA online carbon sequestration and greenhouse gas estimation tool, officially known as COMET-VR 2.0, for use by NRCS employees and the general public. The new version provides estimates of carbon storage changes as well as nitrous oxide emissions, resulting from land management changes.
- A “Drip, Micro, and Center Pivot Irrigation Design” training course with hands-on activities and demonstrations with pumps, sprinklers, and drip equipment provided NRCS employees practical experience in designing the latest irrigation systems.
- A collaborative training workshop with New Mexico Environment Department on “Streambank Stabilization and Principles in Fluvial Geomorphology” included both field work site visits and formal lectures. Plant measurement protocols for collecting plant architectural data to fill critical voids in databases used in Revised Universal Soil Loss Equation, Version 2 (RUSLE2) and Wind Erosion Prediction System (WEPS), and to improve the responsiveness of these models for conservation planning. The plant collection protocols guide Plant Materials Centers (PMC) in measuring plant architecture of several warm season perennial grass species used in NRCS conservation practices and as a biofuel feedstock.
- Review and update of 27 percent (161) Conservation practice standards to ensure the completeness and relevance of the standards to local agricultural, forestry, and natural resource needs including specialty crops, native and managed pollinators, bioenergy crop production, and forestry. These new and updated standards reflect evidence-based science, and help producers address critical issues.
- Update of 29 of the conservation practice standards to include reduction of energy use or development of renewable energy systems as a purpose or one of the purposes. The internal review ensures that the standards provide for the optimal balance between meeting site-specific conservation needs and minimizing risks of design failure and associated costs of construction and installation.

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. In 2010, NRCS began planning for the migration of ProTracts and Fund Manager interfaces to the new Departmental financial system, FMFI. In addition, numerous revisions were implemented as noted below.

- Implemented nationally standardized roles in zRoles with standardizing permissions in ProTracts and Fund Manager for all States.
- Provided software updates and direct support to NHQ to deliver Conservation Stewardship Program signup 2011-1.
- Successfully enabled payments and appropriate payment limitation controls to make first year Stewardship payments.
- Implemented controls so that the DUNS number is supplied prior to obligations to meet transparency act requirements and created search queries and participant notices to support this requirement.
- Implemented partial land transfers for Conservation Stewardship Program contracts.
- Implemented reports to track fund obligation statuses on the NRCS Chiefs programmatic and landscape initiatives.
- Improved the complex internal processes that track Fund Manager and enforce payment limitations in ProTracts payment processes.

**Highly Erodible Land and Conservation Compliance (HEL).** Highly Erodible Land is made up of soils that have a high vulnerability to increased erosion through 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, by complying with HEL regulations found in the provisions of 16 U.S.C. §§ 3801; 3811-3814. USDA participants accomplish this by implementing a conservation system that provides for either a substantial reduction in soil erosion, or when breaking out native vegetation, a system that results in no substantial increase in soil erosion. NRCS classifies about 101.1 million acres of America's cropland as HEL, approximately 27 percent of the Nation's cropland.

**Wetlands Conservation Compliance (WC).** Title XII of the Food Security Act of 1985, 16 U.S.C. §§ 3801; 3821-3824, defines NRCS's responsibilities for wetlands conservation compliance. NRCS responsibilities include making wetland determinations, processing and resolving appeals, developing mitigation and restoration plans, determining minimal effect exemptions, and implementing scope and effect evaluations for installation of new drainage systems and maintenance of existing systems. Compliance 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 Wetlands Conservation (WC) provisions, or both. 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. 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 NRCS to 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, 2011 final review data will be available in February 2012. Results of 2010 reviews show that a high percentage of program participants are following NRCS approved conservation plans and are, therefore, in compliance with HEL requirements. In 2010, compliance reviews were conducted on 18,704 tracts (approximately three million acres of cropland). Approximately 1.8 percent of the tracts were found to be in non-compliance: 167 tracts had HEL and WC violations and 177 tracts had WC violations. This is considered to be a low rate of non-compliance and speaks well for the conservation planning done by NRCS. Of the remaining 98.2 percent, (18,360 tracts) that were in compliance, four percent (732 tracts) 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. The data from the past four years confirms 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>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Total Tracts Reviewed	20,134	22,755	20,474	18,704
Tracts Out of Compliance	276	333	277	344
Percent out of Compliance	1.4%	1.5%	1.4%	1.8%
# of States Recording Non-Compliance	33	34	30	28

CTA Program Funds Customer Assistance. NRCS provided technical assistance to over 660,000 customers, and comprehensive CTA-funded planning assistance to over 87,000 customers in 2011.

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 2011, the CTA resulted in:

- 40 million acres of conservation plans written;
- 24 million acres of conservation applied to improve water quality;
- 16 million acres of grazing land conservation;
- 11 million acres of wildlife habitat improvement; and
- 8 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. These non-Federal partners contributed an estimated \$180 million of in-kind goods and services along with over \$320 million in financial assistance toward addressing local resource concerns that coincide with the Strategic goal to "Get Conservation on the Ground", during 2011. 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. To accomplish this, NRCS identifies the need and best way to solve the problem, creates a partnership agreement, and delivers mutual benefit, while creating local and, non-Federal jobs.

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, 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 Technical Service Provider 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 certification category. This ensures that technical assistance is provided in accordance with the NRCS statement of work associated with each conservation practice. All certification categories and criteria are reviewed and updated annually. A specially designed Web site, <http://techreg.usda.gov>, maintains certification criteria, and a registry of TSPs. NRCS has a new

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 2011, NRCS renewed or created new memoranda of understandings with 11 recommending organizations that provide TSP certification. NRCS signed agreements or contracts with individuals and other organizations resulting in nearly \$69 million in obligations for service. NRCS conservation programs accounting for the majority of TSP obligations including the Environmental Quality Incentives Program (41 percent), Wetlands Reserve Program (14 percent), Conservation Technical Assistance Program (14 percent), Conservation Reserve Program (12 percent), Conservation Stewardship Program (4 percent), and the Wildlife Habitat Incentives Program (3 percent). The remaining (11 percent) of TSP obligations were distributed among other conservation programs. Over 1,530 certified TSPs are available to help program participants apply conservation.

In 2011, TSPs played a key role in the implementation of Conservation Activity Plans (CAP). NRCS offered 16 approved CAPs. To adopt a CAP, a producer was required to work with a certified TSP. For EQIP, a total of 3,956 CAPs were written in 2011 covering 13 resource areas: nutrient management, forest management, grazing management, comprehensive nutrient management plan, agriculture energy management plan, landscape agriculture energy management plan, integrated pest management, irrigation water management, transition to organic, fish and wildlife management, pollinator habitat enhancement, integrated pest management herbicide resistance weed control, and spill prevention, control and countermeasure plan.

International Assistance. NRCS's international assistance program provides both short and long term technical assistance and leadership 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, as well as 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 2011 the agency provided soil taxonomy, rangeland management, and conservation planning training to specialists in Mexico. The goal of the training was to help solve problems along the border region that affect both countries. Funding was obtained from the United States Agency for International Development.

In 2011, NRCS hosted the Watershed Rehabilitation and Irrigation Technologies Working Group Study Tour for the Afghanistan-Pakistan-United States Trilateral Agricultural Initiative. The tour consisted of farm visits in Oklahoma to view watershed management and irrigation practices on the land and how they could be adapted in Afghanistan and Pakistan. NRCS conducted two pre-deployment training sessions for National Guard Agribusiness Development Teams (ADT's) scheduled for deployment to Afghanistan. The training was focused on small-scale community conservation projects. One training session was conducted with teams currently deployed in Afghanistan. NRCS provided technical assistance to Afghanistan and Pakistan to develop and secure funding for training and on-farm demonstration project proposals.

NRCS Scholarship Programs. In 2011 NRCS participated in two scholarship programs, the USDA 1890 National Scholars Program and the 1994 Tribal Scholars Program. The programs are intended to increase the number of students studying agriculture, food, natural resource sciences, and other related disciplines at participating institutions and provide NRCS with highly qualified, diverse staff to fill career positions. In 2011 NRCS obligated \$235,210 for students enrolled in these programs.

The USDA/1890 National Scholars Program is a partnership between of the United States Department of Agriculture (USDA) and 1890 Historically Black Land-Grant Universities. The program awards scholarships to students who will attend one of 1890 Historically Black Land-Grant Universities. Only students who will be

starting their bachelor level work may apply, currently enrolled bachelor-level students in these institutions are not eligible to apply. Students are committed to work during the summers as an intern, completing a minimum of 640 hours of work, pursue a career in agriculture related to the mission of the agency, maintain a 3.0 GPA and upon graduation, work one year for every one year of tuition paid.

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 1994 Tribal Colleges and Universities. In addition, due to the fact that many of the Tribal Colleges 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 as well as to provide USDA/NRCS with highly qualified, diverse staff to fill career positions.

Litigation Scholarships Funding (BASU). In 2011 NRCS provided \$63,000 to continue funding the Asian American Scholar Program. This program was established based on a 2008 USDA lawsuit. The last student entered the program in 2010 and all students are expected to complete the program by 2013.

NRCS Outreach Partnerships. NRCS collaborates with selected 1890 Land Grant Colleges and Universities to broaden the transfer of technologies through the 1890 Centers of Excellence Initiative. The Centers of Excellence, supported by NRCS, focuses on Air and Water Quality (Florida A&M University), Grasslands (Langston University), Geographic Information System and Remote Sensing (Lincoln University), Savannah River Environmental Sciences (South Carolina State University), and Plant and Water Quality (Virginia State University). The agency continues to achieve results as the initiatives meet unique conservation needs and challenges while implementing new site-specific technology and developing comprehensive resource plans. In 2011, NRCS provided \$250,000 to support the Centers of Excellence.

NRCS has partnered with 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 and training opportunities in an effort to increase the adoption of conservation planning, measures, and systems on their operations. This work was done with Hispanic, African American and Asian farmers in a number of States, including Alabama, Arkansas, California, Florida, Georgia, Maryland, Massachusetts, Mississippi, New Mexico, North Carolina, Texas and Washington.

Small, Limited Resource, and Beginning Farmers and Ranchers. NRCS assists small, limited resource, beginning and socially disadvantaged farmer and ranchers through multiple possibilities 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.

NRCS advances its efforts towards viable economic conditions in Rural America through conservation products, initiatives and services. In 2011, NRCS successfully completed statewide pilots in Arkansas, Georgia and Mississippi through the USDA StrikeForce Initiative. This initiative focused primarily on farming and community development concerns in persistent poverty communities with socially disadvantaged farmers. The success of the StrikeForce Initiative was the result of the local staff's collaborative efforts with farmers and landowners, community based organizations and land grant colleges and universities. Furthermore, this effort aligns with the objectives of the White House Rural Council and NRCS's strategic objective of expanding opportunities to new and underserved customers.

Assistance to American Indians and Alaskan Natives (AIAN). In 2011, NRCS continued to increase tribal participation among 565 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; to consult to the greatest extent practicable, and permitted by law, with Indian tribal governments before taking action that affect Federally recognized Indian Tribes; to assess the impact of agency activities on tribal trust resources and assure that tribal interests are considered before the activities are undertaken;

and to remove procedural impediments to working directly with tribal governments on conservation activities that affect trust property or government rights of the tribes; and to work cooperatively with other agencies.

Any of the 565 Federally-recognized tribes work with NRCS to receive financial assistance and/or technical assistance. Through agency outreach efforts, tribal governments are offered assistance in conservation planning, partnerships, grants, cost-share programs, and training. Within NRCS, employees are trained in tribal culture and protocol. NRCS has 50 offices located on or near tribal lands that is divided into 42 full-time offices and eight part-time offices. There are approximately 195 tribal liaisons assisting the 565 Federally-recognized tribes.

The Conservation Implementation and Environmental Benefits include: Native American communities hold four percent of the U.S. land and constitute the second-largest interest after the Federal government. 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, environmental and conservation quality—such as conservation of crop, pasture, and rangelands; rural landscape services; wildlife habitat; wetlands; and improved water and air quality — along with food, fiber and timber production.

- **Program Activities/Participation:** NRCS provides funds to tribal governments across the nation. In 2011 NRCS awarded 588 Environmental Quality Incentive Program (EQIP) contracts to tribes in the amount of \$25.6 million, 46 Wildlife Habitat Incentives Program (WHIP) contracts to tribes in the amount of \$4.4 million, and six Agricultural Water Enhancement Program (AWEP) contracts in the amount of \$194,682. In the Conservation Stewardship Program (CSP), NRCS awarded 158 contracts to tribal governments totaling \$7.3 million. NRCS awarded six Agricultural Management Assistance (AMA) contracts to tribal governments in the amount of \$141,986. One tribe received a Conservation Innovative Grants (CIG) in the amount of \$1.2 million. Two tribes have been awarded Cooperative Conservation Partnership Initiative funds in the amount of \$210,647.
- **Regional tribal Conservation Advisory Councils (RTCAC):** To strengthen working relationships with tribes NRCS developed a process to establish RTCACs. The agency will establish regular and meaningful consultation and collaboration with tribal representatives and officials in the development of Federal policy that has tribal implications. The councils will meet twice a year and can be instrumental in assisting the Chief, Regional Conservationists and State Conservationist in strengthening government-to-government relationships and clarifying lines of communication and consultation with American Indian Tribes. The goal is for the councils to have their initial meetings by July 2012.
- **Tribal Technical Service Providers (TSP) Pilot:** A cooperative agreement was established between NRCS and the College of the Menominee Nation to certify Tribal Technical Service Providers who can provide assistance in implementing Farm Bill programs to tribal producers. This pilot project established a process that can be adapted throughout the nation. The intent of this project is to build capacity of tribal colleges in professional, continuing education training, and certification and to strengthen the capacity of tribes in conservation and resource management.
- **National Agreements with Inter-Tribal Agriculture Council (IAC):** NRCS has an agreement with the Inter-Tribal Agriculture Council to coordinate workshops for Easement Programs and the Conservation Stewardship Program in 13 States that will reach over 50 tribes. These two categories of NRCS Farm Bill programs currently have low tribal participation. NRCS also has an ongoing contribution agreement with the IAC to provide seven basic tax instruction and educational workshops to address tax implication of NRCS programs, ownership issues and appropriate responses to Form 1099G.
- **2011 Tribal Nations-NRCS Progress Report:** NRCS is required to develop an annual Tribal Nations Progress Report on tribal consultation activities, collaboration events, meetings and funding. A survey of States, territories and area results had a 100 percent response rate and showed that financial assistance to the tribes increased 85 percent for the same period in 2010 as compared to 2011. The total funding in 2011 for EQIP, CSP, WHIP, AWEP, AMA and CIG was just over \$50 million.
- **USDA Tribal Webinars:** An agreement with the USDA Office of Tribal Relations which provided financial support to migrate four on-line tribal training webinars into AgLearn for all USDA employees to use.
- **USDA and the Bureau of Indian (BIA) Land Working Group:** NRCS participates on a working committee coordinated by the USDA Office of Tribal Relations to discuss tribal issues, agency policies and procedures; to standardize working procedures of the BIA and USDA when working with Farm Bill programs on tribal trust

lands. The group has met for nine months and has made some progress in a few areas such as unraveling the complexities of private ownership, trust lands, Federal lands, and reservation lands.

- National Outreach Share Point: A Web site was designed 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 District: (TCD). NRCS facilitated the execution of a new TCD mutual agreement between the Secretary of Agriculture and the Picayune Rancheria of the Chukchansi Indians and the Picayune Rancheria Tribal Resource Conservation District of California. The mutual agreement formed the 35th TCD recognized by the Secretary. Currently two new TCDs are pending, a second one for the state of California and a third TCD in Alaska.

Accountability and Management Improvements. The agency has continued to work on transparency and accountability by taking the following steps in 2011:

- Developing and deploying the data-driven tool for management, ConservationSTAT (ConStat). ConStat has completed its second full year pilot and is on track to be automated and expanded for continued accountability. This tool tracks the short-term outputs that tie directly to the agency's long-term performance outcomes.
- Development of five outcome-based performance measures to meet requirements of the Government Performance and Results Modernization Act (GPRA) of 2010.
- Conducted five national and five regional and/or State oversight and evaluation reviews and ten civil rights reviews to ensure compliance is monitored throughout the agency on a consistent basis. Due to an increase in the responsibilities of NRCS, there are more risks in data and information collection, fiscal reporting, program implementation, and operation. By conducting these reviews, the agency has the opportunity to mitigate these risks in a timely manner. NRCS's priority is to improve the agency's quality assurance and quality controls by reforming financial processes, streamlining business processes, enhancing the workforce, and increasing information quality.
- Conducted Highly Erodible Land Conservation and Wetlands Conservation Compliance Reviews on 18,704 tracts.
- Of the 31 open audit issues NRCS had at the beginning of 2011, seven were closed. Of those seven audits closed, five had no recommendations for NRCS. There were 84 open recommendations in 2011, of which 50 were closed.
- Continued to upgrade agency accountability software applications and hardware security to correctly safeguard all private and sensitive information, including Personally Identifiable Information (PII), in order to remain in compliance with the Federal Information Security Management Act (FISMA) and National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53.
- Implemented a process for the field to prepare a national conservation needs assessment called State Resource Assessments. The goal of this approach is to better align NRCS Program resources with actual needs in the field and on the ground in order to address State identified resource priorities. The assessments will ensure investments are targeted to agency priorities.

## 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, 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 which 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 perfecting a National Soil Survey Information System (NASIS), 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, and the Soil Data Mart is used to distribute data to the public. Web Soil Survey is the primary way of distributing published soil surveys, making it easier to keep soil information current with continual public access.

**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 (i.e., 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 Forest Service, United States Military, United States Fish and Wildlife Service, Bureau of Land Management 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.
- **Rapid Assessment of Soil Carbon for Conservation Planning.** Sampling for soil carbon and bulk density analysis was 98 percent completed in 2011. Sample analysis and initial data analysis will be completed in 2012 for the conterminous United States. The agency projects that soil sampling for carbon analysis will be implemented for soils in Alaska, the Pacific Islands Area, and Puerto Rico in 2012 with completion of sample and data analysis expected in 2013. The goal of this project is to provide data on carbon stocks for the United States by soil groupings, land use and management.
- **Information Management.** The National Soil Information System (NASIS), a part of the NCSS information system, is where soil scientists develop, manage, and deliver soil information to 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. NRCS delivers these data via the Internet.
- **Web Soil Survey.** Web Soil Survey (WSS) provides soil data and information produced by the NCSS. WSS is operated by NRCS and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for more than 96 percent of the Nation's privately owned land, and more than 92 percent of all lands. The site is updated and maintained online as the single authoritative source of soil survey information. WSS continues to be a popular tool for people needing soils information in the United States. The number of site visits increased by about six percent and the number of online printable reports created by customers also increased by about six percent in 2011.
- **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.

- United States General Soil Map (STATSGO) is used primarily for multi-county, State, river basin planning and resource management and monitoring.
- Technical Soil Services: Technical soil services provide 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. The Conservation Delivery Streamlining Initiative (CDSI) was initiated by NRCS in 2009 to implement a more effective, efficient, and sustainable business model for delivering conservation assistance across the Nation. The initiative's overarching objectives are to simplify conservation delivery, streamline business processes, and ensure science-based assistance. In 2011, information and ideas were developed for the incorporation of existing soil survey information, soil interpretations, and on-site soils data into all business processes: area-wide assessments, conservation planning and contract development, plan implementation, and other contract management. Future work will include the development of better defined soil properties and soil interpretations to be used with other resource data to identify resource concerns, appropriate practices, best practice design, and environmental effects.

### **2011 Activities.**

- **Acres Mapped.** Soil surveys have been prepared on over 2.1 billion acres. During 2011, NRCS soil scientists mapped or updated 34.7 million acres and another 41,000 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.
- **Soil Survey accomplishments on American Indian and Alaska Native lands.** NRCS invested one million dollars in 2011, to accelerate soil survey mapping on American Indian and Alaska Native lands, resulting in over one million acres mapped or updated.
- **Soil Surveys Used Interactively Online.** In 2011, the Web Soil Survey website logged over 1.8 million user visits and over 552 million hits. The user visits per day averaged over 4,900.
- **Technical Analysis and Tool Development.** The Soil Survey Laboratory (SSL) of the National Soil Survey Center provides analytical support which includes research and methods development and testing, as well as analyses to support on-going soil survey activities around the Nation. In 2010, SSL performed over 190,000 analyses and continued its efforts to provide timely data delivery. The SSL developed visible and near-infrared diffuse reflective spectroscopy (VNIR) methods and implemented measuring the reflectance spectra for incoming laboratory samples. Mid-infrared spectroscopy methods for sample analysis will be developed and implemented during 2012 and 2013. Use of mid-infra red and VNIR techniques will increase field and laboratory analytical efficiency for selected soil properties including organic carbon. The NSSC awarded seven competitive research grants to NCSS cooperators to investigate problems pertinent to soil survey update and enhancement. The SSL Information Manual was published in 2011.
- **Utilizing Soil Survey data to Support America's Longleaf Pine Initiative.** Longleaf pine once covered 60 to 90 million acres throughout the southeastern United States from West Virginia to Texas. Today, only three to five million acres of this vital habitat remain. In Louisiana, only a fraction of the original six million acres still exists. Longleaf pine forest provides habitat for as many as 300 different species of groundcover plants and approximately 60 percent of the amphibian and reptile species found in the southeastern part of the United States. Additionally, these forests are home to at least 122 endangered or threatened plant and animal species including the fox squirrel, northern bobwhite, red-cockaded woodpecker and gopher tortoise. To help sustain, enhance, and restore longleaf pine forests, the USDA NRCS Longleaf Pine Initiative offers assistance through the Wildlife Habitat Incentives Program to help private landowners restore and manage longleaf pine forests. In support of the Longleaf Pine Initiative, Louisiana NRCS utilized the SSURGO database to identify soils suitable for establishment and restoration of longleaf pine ecosystems. The SSURGO database was used to develop potential project area maps to identify suitable restoration areas within the historic range.
- **Research in Soil Geography.** National Soil Survey Center and 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 NCSS, university partners, and related institutions.

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

Soil Survey Smartphone App Developed. Web-based delivery mechanisms that can simplify the interpretation and delivery of soils data are evolving at a rapid pace. The disadvantage of Web-based soil survey formats is that user access is limited to a computer terminal with an Internet connection. To overcome this problem, Dr. Dylan Beaudette, NRCS soil scientist developed a Smartphone application that provides on-demand access to soil survey information. GPS-based, the SoilWeb app provides real-time access to NRCS's soil survey data, formatted for mobile devices. Working in conjunction with Google Earth, the application retrieves graphical summaries of soil types associated with the user's current geographic location. Images are linked to detailed information on the named soils. The app is available for free download for iPhone, iPad and iPod touch devices (iPhone App Store) and Android operating system phones (Android Market Place). The app works with the GPS receiver of Smartphone's to interact with online soil survey to identify soil properties anywhere in the lower 48 States where there is cell phone coverage. Enhancements to the app and Web Soil Survey are planned, in collaboration between NRCS and the University of California, Davis.

Connecticut Partners Create New Soil Survey Products. Connecticut Environmental Conditions Online (CTECO) is a Web site that provides access to the latest online maps and tools for viewing Connecticut's environmental and natural resource information. It is collaboration between the Connecticut Department of Energy and Environmental Protection (DEEP), the University of Connecticut's Center for Land Use Education and Research (CLEAR), NRCS, and other partners. CTECO's mission is to encourage, support, and promote informed land use and development decisions in Connecticut by providing local, State and Federal agencies, and the general public with convenient access to the most up-to-date and complete natural resource information available statewide. Soils information is an integral part of the data sets available through the Web site. Data initially included the most commonly requested interpretations. Interpretations are added as needed to meet emerging needs, such as storm water management, and documentation to the site. While soils information is available through USDA NRCS websites, this site allows users to view the soil data with other natural resource themes. With NRCS participation, access to the most updated soil survey data is ensured. Visit the site at [www.cteco.uconn.edu](http://www.cteco.uconn.edu).

"Soil Stories" Video Series Developed. South Carolina NRCS soil scientists worked with Dr. Buz Kloot of the University of South Carolina-Earth Sciences and Resources Institute to produce a video series which connects the soil survey mission and the use of soil information in everyday life. In "Soil Stories," the leading character, Francine, embarks on a journey of discovery that begins with her realization that soil is alive and that without soil, life as we know it would not exist. In her journey of discovery she meets with NRCS soil scientists who help her "see" beneath the surface of the soil and help her understand how diverse yet ordered soil bodies are in the landscape and how much work has been done in soil survey. Later, Francine looks at some physical and biological attributes of soils without which they would not function. Upon the release of the video the collaborators were intrigued by the overwhelming response. Not only were conservationists and land stewards across the country watching and commenting on the video, but a large audience of backyard gardeners and even school children and their teachers were affected by the content of the video. "I had no idea that soil was so important to everything upon which we depend!" explained one viewer [http://soils.usda.gov/education/resources/videos/soil\\_stories.html](http://soils.usda.gov/education/resources/videos/soil_stories.html).

Makah Indian Reservation Soil Survey, Washington Completed. The Makah Indian Reservation occupies the most northwestern point in the contiguous United States. The area is bordered to the west by the Pacific Ocean and to the north by the Strait of Juan de Fuca. Sitka spruce and western hemlock dominate the steep, rugged forests and provide habitat for wildlife common to the Olympic Peninsula including black bear, elk, cougar, and the reintroduced Olympic fisher. In addition, the area supports productive commercial forestland and provides critical watershed for salmon habitat. Timber management and fishing are not only sources of income for the Makah Tribe, but are an important part of their cultural heritage. Interest in creating a modern soil survey by NRCS for the Makah Indian Reservation stemmed from the desire to understand and conserve the valuable soil resources that provide so much to the Makah People. NRCS soil scientists and the Makah Cultural and Research Center cooperated to identify culturally significant areas and treat them with the utmost care and sensitivity. The new soil survey will supply the Makah with vital knowledge about their soil resources and aid the NRCS in implementation of conservation programs on the Makah Indian Reservation. The soil survey manuscript was delivered in August 2011, and represents a successful, collaborative effort between NRCS and Native Americans. In addition to assistance provided to the Makah tribe, the NRCS has targeted soil survey assistance to several other Tribal Nations across the country.

## 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 data and water supply forecasts. NRCS field staff collects and analyzes data on snow depth, snow water equivalent, and other climate parameters at over 1,800 mountain sites. 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 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, provides leadership and technology support to the States, and directly provides water supply forecasts.

The SSWSF Program has been operated by NRCS (previously SCS) 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 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 2011 water year, partners and cooperators contributed over \$300,000 and over 9,000 hours of in-kind services towards the collection of snow and related climate data. The SSWSF Program consists of a network of 978 manually measured snow courses and 829 automated SNOTEL sites. The economic and societal value of the program is illustrated in the NRCS released report “A Measure of Snow”, which is available on the NWCC Web page and provides numerous examples of the applications and economic benefits of the SSWSF Program to users throughout the Western United States. With an estimated 50-80 percent of the water supply in the West arriving each year in the form of snow, the SSWSF Program provides critical information 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 uses, 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. In citing the importance of reliable water information to facilitate water management decisions, the Western Governors Association notes that one of the sources that Western States depend on is the USDA-NRCS’s SSWSF Program which operates Snow Telemetry (SNOTEL) sites and manual snow courses.

Climate change projections and climate variability increase the uncertainty of the yearly water supply. A study by the Rocky Mountain Climate Change Organization finds that “...no other effect of climate disruption is as significant as how it affects snowpack and water supply.” As exhibited by the unusually cold and wet spring of the 2011 water year, the potential impacts caused by climate variability could be significant. Extremes in the snowpack could result in less reservoir storage in warm, dry years and complicate reservoir regulation in cold, wet years. Earlier snowmelt, caused by warming conditions, increases the length of time between peak flows and summer water user needs, whereas a delayed snowmelt, caused by cool weather, shortens the melting season and produces potentially disastrous flooding.

### **2011 Activities.**

**SNOTEL.** The effort to convert manual snow measurement sites, called snow courses, to automated SNOTEL sites continues to be a program priority. In 2011, sites were added to the network, increasing the total to 829 sites. Thirty-one of these new sites were installed to replace existing snow courses. SNOTEL collects the vast majority of the critical, high-elevation snowpack and climate data used to estimate water yields in the mountainous West. It plays a key role in forecasting flooding and other life- and property-threatening snow-related events by providing hourly precipitation, temperature, and snowpack depletion information. Snowpack information enables emergency

management agencies to effectively anticipate and mitigate flood damage months in advance of the spring snowmelt. These data also are useful in the anticipation and mitigation of the effects of drought.

SNOTEL and Soil Climate Analysis Network (SCAN) Frequency Change. In 2009, NRCS purchased three meteor burst master stations in the Central and Eastern portions of the United States from a commercial operator. With the acquisition of these additional master stations, NRCS now has complete coverage for both SNOTEL and SCAN networks, along with a text capability from any remote station. All of the data from the remote weather stations are sent to the central computer facilities at NWCC, where the data are released hourly to the public via the Internet.

As part of overall frequency management for NRCS's SNOTEL and SCAN networks, NWCC secured a new pair of frequencies to use for the meteor burst communication network in 2008. The old pair of frequencies belonged to the U.S. Coast Guard and Homeland Security; NRCS was at risk of having to vacate those frequencies. Over the next several years, plans were put in place to change the operating frequencies for the SNOTEL and SCAN networks. All three master stations and all of the remote data sites were successfully converted over to the new frequencies by June 2011. When all of the remote stations and field crews were ready, remote commands were given to the remote stations to begin transmitting on the new frequencies. Only a few stations required field crews to visit the remote sites to change to the new frequencies. All remote stations and both master stations now are operating on the new frequencies that belong to USDA. This was accomplished with a minimum of downtime from remote stations and the data continued to flow into the hands of the farmers, ranchers, and other users who depend upon the weather and soil moisture and temperature information provided by the NRCS data networks.

Iridium Data Communication Technology. The Alaska SNOTEL data transmission conversion process began on October 13, 2010, when the first iridium data modem (Globalmodem) was installed at the Point MacKenzie SNOTEL site. This was the first of six prototype modems that were installed prior to December 15, 2010. These sites performed very well through the winter. The decision was made to convert the NRCS Alaska SNOTEL sites to the Globalmodem as quickly as possible. At present, 50 Alaska SNOTEL sites are utilizing the Globalmodem iridium technology to transmit remote climate data. There are 66 polar-orbiting iridium satellites supporting Alaska's data transmission process.

The Utah Data Collection Office (UTDCO) also is in the process of converting 15 aerial markers to utilize the iridium satellite technology. An aerial marker is a manual snow measurement site that is measured via air transport and gives only an estimate of the depth of snow at that location. These converted sites have a very small environmental footprint, allow the UTDCO to eliminate the cost of the aerial surveys, and prevent exposure of NRCS personnel to the potential dangers associated with air transport. The monetary savings will pay for the site conversions in a very short period of time.

Water Supply Forecasts. Water supply forecasts are produced from mid-December through June each year in partnership with the National Weather Service. During the 2011 forecast season, the SSWSF Program issued 13,074 water supply forecasts at 705 streamflow forecast points. In addition, SSWSF hydrologists have developed 176 daily water supply forecast models that run automatically using daily SNOTEL data to track climatic trends throughout the forecast season. From December through June, these forecast models augment the official forecasts, and produce over 37,000 additional trend forecasts to aid water resource users and managers. Major users of NRCS water supply forecast products include: individual farmers and ranchers; water resource managers; Federal, State, and local government agencies; municipal and private water and hydropower providers; irrigation districts; Tribal Nations; and the countries of Canada and Mexico. More specifically, water supply forecasts are used:

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

Water Supply Forecasting Technology Development. Work is continuing on the NWCC effort to implement the Precipitation Runoff Modeling System (PRMS) hydrologic model into forecasting operations. An operation model for the Teton River in southeast Idaho was executed in forecast mode for the 2011 water year to demonstrate its effectiveness against the official statistical forecast model. It was demonstrated that the model, when properly calibrated, will perform as well as the statistical models that are currently used. Plus, the model will be able to utilize daily SNOTEL data to produce streamflow simulations that can be used to define peak flow timing and magnitude, as well as threshold streamflow limits that can be used for water resource planning and conservation practices. NWCC initiated a contract with Colorado State University to improve the Object Modeling System/PRMS interface for ease of operations.

Geospatial Data Products. Crop insurance, a major industry in the U.S., is sold and delivered by private insurance companies in collaboration with the USDA Risk Management Agency (RMA). Currently, Federal crop insurance programs cover about \$90 billion in crop value. These programs help farmers insure primarily against natural disasters and weather events, such as drought, excessive moisture, heat, cold, and hail, which can partially or totally destroy crops. In an effort to expedite the claims process and save taxpayer money, the RMA has partnered with Oregon State University to provide high-quality spatial weather and climate data for use in substantiating weather events and producer claims. These datasets also will help the RMA determine risk levels more accurately and improve their underwriting capability.

With RMA support, the Parameter-elevation Regressions on Independent Slopes Model (PRISM) now is being operated on a daily basis to produce grids of precipitation and minimum, maximum, and mean temperature for the conterminous United States at 800 meters resolution. For each variable, an initial map is generated within 24 hours. The daily map is updated approximately four days later, then monthly for the next six months, as additional station data are added and quality control is performed. At the same time, an historical time-series of daily grids is being developed to allow long-term climatologies to be constructed. Monthly time-step products also are being developed, and are the initial focus for drought and excessive moisture claims. Historical data will provide an important long-term context, such as estimating the likelihood of a condition occurring and assessing whether it is truly unusual, or well within the expected range of events. This is done by ranking the value of a variable for a given time period, (e.g., a day or month) within the 30-year normal period, or within the most recent ten years. A plain-English interpretation of the ranking is assigned, such as “typical,” “dry,” “unusually dry,” or “unusually wet.” A prototype, Web-based spatial weather and climate portal is now online, and currently accessible by RMA personnel. The portal is designed to provide a simple, intuitive access point for these complex datasets. The user can view an assessment of current conditions or data for an historical time period, and determine how these conditions relate to long-term, climatic distributions. The user also can ask for a dynamically-produced report with text, tables, and figures describing conditions during a selected period of time; the initial reporting focus is on claims of prevented planting due to excessive moisture.

NWCC is working to identify products that can be derived from the RMA-Oregon State University relationship and used in other NRCS projects. For example, NRCS is funding work on the PRISM precipitation normally needed for carbon sequestration modeling and NWCC is working to place the 1960-2006 daily PRISM Tmax, Tmin, and precipitation 4-km grids in the USDA Data Mart.

Surface Water Supply Index (SWSI). The Surface Water Supply Index (SWSI) now is being calculated for the Upper Colorado River Basin at the National Water and Climate Center. Maps and values were provided for the 2011 water year for incorporation into drought planning. These included maps for display at drought meetings and shape files for incorporation into the Upper Colorado River National Integrated Drought Information System (NIDIS) operations. These calculations will be expanded to other basins in Colorado for future use. SWSI is now calculated from reservoir storage and streamflow during months that do not have a water supply forecast and uses only water supply forecasts during the months those forecasts are issued. Currently, SWSI values are calculated in each State, but will be migrated to a centralized dynamic calculation to provide SWSI values for each State participating in the Snow Survey and Water Supply Forecasting Program.

Information Systems. The database and forecast system maintained by NWCC, the 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 Web sites containing snow survey data, water supply forecasts, soil moisture data, and other products recorded 17.5 million visits. The views and downloads of the information from State NRCS Web sites are similar to the information from other sites such as the National Weather Service Web site which utilizes SSWSF Program data. NWCC has developed and is implementing a failover plan, which includes migration to USDA hosting, for all data collection and product development activities. 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 Guides, and Conservation Delivery Streamlining Initiative interfaces.

## **PLANT MATERIALS CENTERS**

### **Current Activities.**

**Program Objectives.** As part of the Plant Materials Program, NRCS operates or supports a network of 27 Plant Materials Centers (PMCs) that service all areas of the United States and its territories. Through its PMCs and plant materials specialists, the Plant Materials Program addresses natural resource concerns identified locally and nationally. PMC activities focus on both “core” resource concerns such as soil stabilization, soil health and productivity, and water quality, and on emerging national priorities such as biofeedstock production for energy production, enhancement of pollinator habitat to support agricultural production, and development of information and alternate procedures to assist producers involved in organic production.

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

**Program Operations.** NRCS Field Office Technical Guide (FOTG) delivers Plant Materials Program information directly to NRCS field staff and partners in conservation planning efforts. Plant Materials staff tailor vegetative information in the FOTG to the unique conditions found in their service areas. Plant Materials staff also provide extensive training to field staff and partners on the appropriate 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 both private and public lands. On private lands, program information supports the successful implementation of Farm Bill programs such as the Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program (WHIP), Conservation Stewardship Program (CSP), and the Conservation Reserve Program (CRP).

The Plant Materials Program uses a multi-disciplinary approach to solving natural resource problems, utilizing expertise in biology, agronomy, forestry, soils, and horticulture. Plant Materials activities are coordinated with various NRCS technical specialties and with other governmental agencies, nongovernment organizations, and industry. The program most often coordinates activities with the USDA Agricultural Research Service, the U.S. Forest Service, and the United States Department of Interior Bureau of Land Management, as well as with State and local agencies such as departments of transportation, wildlife, and conservation. Nongovernmental organizations include native plant societies, wildlife organizations, and industry partners include commercial seed and plant growers. These partnerships expand the efforts by PMCs to accomplish work that would not be possible by PMCs acting alone as well as to disseminate technical information developed by PMCs.

The network of PMCs is the only national organization of its kind positioned to find and test vegetation to address our Nation’s natural resource challenges. Of the 27 Centers, NRCS directly operates 25, and provides limited funding to other entities in Alaska and Colorado to develop plant materials products needed by NRCS. Each PMC service area is defined by ecological boundaries. The Centers address high-priority conservation concerns within their service areas. When coordinating across service areas, PMCs evaluate vegetative technology and solutions that impact large regions of the United States.

### **2011 Activities.**

The Plant Materials Program has a long and successful history of selecting and testing plant materials for resource conservation. PMCs have, in large part, met the mission of increasing the availability of conservation plants to the public. In 2011, a process was initiated to examine the role and structure of Plant Materials Centers. This process focuses on the function of PMCs to ensure that there is still a priority mission for conservation, and on the locations of PMCs to ensure that NRCS has the appropriate number and locations of PMCs to meet the refocused mission. The mission of PMCs is expected to increase focus on the utilization of plants for specific objectives and purposes, such as soil health, soil stabilization, and pollinator/wildlife habitat, on the collection of data to improve conservation planning efforts, and on the validation of plant materials for use in NRCS vegetative conservation practices. Specific 2011 activities include:

**Technology Development and Transfer.** Plant Materials staff prepared, as the results of studies at PMCs, over 300 new technical documents which were added to the 2,000 documents already on the Plant Materials Web site. Altogether, these documents were utilized more than 1.4 million times by 294,000 visitors in 2011. Plant Materials staff conducted 140 training sessions for 3,360 field staff and conservation partners on seed and plant identification, selection, and establishment and on topics such as soil bioengineering, range plantings, and pollinator habitat.

**Improving Cropland Soil Health and Productivity.** Cover crops are an important part of cropping systems to improve soil health, reduce soil erosion, retain nutrients on-site, and suppress weeds. PMCs have actively worked with cover crops for several decades, and that work continues in many locations. In southeast Arizona, the Tucson, Arizona PMC, in partnership with the University of Arizona, is evaluating six plant species for use as winter cover crops between cotton production to enhance cotton yields, improve soil sustainability (organic matter and nutrients), and reduce winter wind erosion. The Big Flats, New York PMC continues to study the establishment of interseeding cover crops with corn in the Northeast United States, and in 2011 highlighted this work in a field day drawing in over 100 participants. The Alderson, West Virginia PMC is partnering with West Virginia University to determine proper roll-down time of different small grains and legumes to utilize cover crops in vegetable production systems. The Fallon, Nevada PMC has for the last two years evaluated small grains and forage soybeans as cover crops to suppress weeds.

**Improving Wildlife Habitat and Biodiversity.** Adequate biodiversity (having a wide range of species in an area) is an important indicator of ecosystem health. NRCS conservation activities can promote plant species which will help improve biodiversity and help support a range of wildlife. PMCs play an important role in providing information to support good conservation planning by field staff. In 2011, information from multiple PMCs was compiled into a habitat guide for Lesser Prairie-Chicken an at-risk species found in Kansas, Oklahoma, Colorado, New Mexico, and Texas ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1045377.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045377.pdf)). This document describes appropriate plant materials, and establishment and management methods, to improve Lesser Prairie-Chicken habitat, and is a tool field offices and landowners can use to support NRCS's Lesser-Prairie-Chicken Initiative. The Americus, Georgia PMC prepared a guide for the establishment of grass and wildflower understory plants in Long Leaf Pine plantings. The establishment of understory plantings is important to support pollinator and wildlife habitat and to restore functionality of Long Leaf Pine ecosystems. A multi-PMC effort involving the Brooksville, Florida, Los Lunas, New Mexico, and Fallon, Nevada PMCs, in collaboration with the Xerces Society, was initiated in 2011 to collect, propagate, and increase collections of milkweed (*Asclepias*) species to support Monarch Butterfly habitat, in particular along southern U.S. migration routes. This project seeks to develop commercially available milkweed seed sources and promote the use of milkweed seed in NRCS conservation plantings.

**Invasive Plant Species.** Invasive plant species continue to be a menace to agricultural land productivity and a threat to the biodiversity of natural areas. The Aberdeen, Idaho PMC is evaluating the effectiveness of desirable grasses to suppress Cheatgrass and to restore rangeland productivity and species diversity in cheatgrass-infested ecosystem in the Intermountain West. In New Mexico, the Los Lunas PMC is developing improved methods for planting riparian areas with a diverse number of plant species after eradication of Salt Cedar (Tamarisk) to restore wildlife habitat corridors and the effectiveness of these buffers to improve water quality. The Pullman, Washington PMC is working on control and managements methods for Ventenata, an introduced grass, which is becoming an increasing threat to Pacific Northwest hay and pasture fields, natural areas such as CRP plantings, and along roadsides. The Elsberry, Missouri PMC is partnering with Lincoln University (Jefferson City, MO) to study the effectiveness of utilizing goats as biocontrol agents for invasive Bush Honeysuckle and Buckthorn shrubs in natural areas.

Plant Growth Data Collection. The Plant Materials Program continues to advance efforts to uniformly collect plant growth data to improve the effectiveness of NRCS models and tools used for conservation planning or to predict the effects of conservation activities. The Booneville, Arkansas PMC is collecting plant growth and residue data of native warm-season grasses grown for biomass production for grazing, hay, and biofuel. The East Lansing, MI PMC, partnering with Michigan State University, is collecting plant growth and residue data for several species of *Brassica* being evaluated for cover crops to improve soil quality and reduce erosion on cropland. Plant data from both of these studies will be incorporated into RUSLE2 (a soil erosion prediction model) to help NRCS field staff determine the effects of planting these crops on potential soil loss, and the incorporation of appropriate measures needed in conservation plans provided to landowners.

New Conservation Plants. PMCs released four new native conservation plants to commercial growers to provide locally adapted plants for soil stabilization, range seeding, and wildlife habitat. These joined over 550 other conservation plants released by NRCS already available commercially for landowners and land managers to use in protecting and improving natural resources. The release of plants by PMCs to the private sector helps to stimulate the national economy and to increase the seed and plants necessary to implement Farm Bill conservation programs. Commercially produced conservation plants released by NRCS to the public over the past 70 years are estimated at over \$100 million a year in private sector sales. PMC conservation plants are used by private landowners as well as Federal and State land managing agencies.

Working in Partnership. PMCs nationwide are engaged in cooperative activities with partners to extend the capabilities of the Plant Materials Program. The Aberdeen, Idaho PMC is collaborating with the USDA Agricultural Research Service (ARS) Forage and Range Research Laboratory in Logan, Utah, to expand the capacity of both units to evaluate and select plants, such as Basin Wildrye and Lewis' Flax, for rangeland restoration efforts in the Intermountain West and Great Basin.

The Big Flats, New York PMC is collaborating with Cornell University and other entities for the evaluation of improved biofuel crops, such as Switchgrass and Big Bluestem. PMCs across the country are working with the Xerces Society to develop information and guidelines and deliver educational programs to assist NRCS field staff and conservation partners with incorporating high quality pollinator habitat into conservation programs, such as the enrollment of over 22,000 acres of pollinator habitat in the most recent CRP sign-up. The results of these efforts help support both native pollinator and managed bee populations to assist agricultural producers with pollination services and to enhance the overall health of ecosystems.

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

The focus on energy, and in particular energy from plants, crosses many different areas of USDA. In 2011, PMCs assisted with efforts to utilize Giant Miscanthus in the Biomass Crop Assistance Program (BCAP). NRCS and the Farm Services Agency (FSA) worked together to define guidelines for using Giant Miscanthus, a controversial introduced grass species. The Plant Materials Program, using information gained from PMC field studies along with information from ARS and university scientists, quickly prepared a comprehensive national technical note detailing how to establish and manage Giant Miscanthus as an energy crop while addressing potential environment issues. Technical note "Planting and Managing Giant Miscanthus as a Biomass Energy Crop" (<http://plant-materials.nrcs.usda.gov/pubs/NPMtechnotes/npmptn4.pdf>) has been downloaded from the Plant Materials Program website over 500 times since it was issued in July 2011. Additional work currently underway by the Elsberry, Missouri PMC includes collecting plant growth and residue data for Giant Miscanthus to incorporate into the RUSLE2 tool to determine potential soil loss when using this biomass crop. The Elsberry PMC has also been instrumental in collecting biomass weathering data to look at proper harvesting times to improve the combustion quality and efficiency of Giant Miscanthus grass. The activities conducted by PMCs have assisted NRCS field staff and enhanced conservation planning efforts to help make Giant Miscanthus plantings a success while still protecting natural resources. Over 16,000 acres of Giant Miscanthus were planted under BCAP in 2011, and there is the potential for over 200,000 additional acres to be planted in seven States over the next few years.



NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED AND FLOOD PREVENTION OPERATIONS

Lead-Off Tabular Statement

Appropriations Act, 2012.....	\$215,900,000
Budget Estimate, 2013.....	<u>-</u>
Change from 2012 Appropriation.....	<u><u>-215,900,000</u></u>

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED AND FLOOD PREVENTION OPERATIONS

Summary of Increases and Decreases

(On basis of appropriations)

(Dollars in thousands)

	2010 Actual	2011 Change	2012 Change	2013 Change	2013 Estimate
Discretionary Appropriations:					
Watershed and Flood Prevention Operations:					
1. Watershed Operations Authorized by P.L. 78-534.....	\$5,146	-\$5,146	-	-	-
2. Small Watersheds Authorized by P.L. 83-566.....	24,854	-24,854	-	-	-
3. Emergency Watershed Protection Programs.....	-	-	+\$215,900	-\$215,900	-
Total Appropriations or Change.....	<u>30,000</u>	<u>-30,000</u>	<u>215,900</u>	<u>-215,900</u>	<u>-</u>

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED AND FLOOD PREVENTION OPERATIONS

Project Statement by Program

(On basis of appropriation)

(Dollars in thousands)

Program	2010 Actual		2011 Actual		2012 Estimate		Change	2013 Estimate		
	Staff Amount	Staff Years	Staff Amount	Staff Years	Staff Amount	Staff Years		Staff Amount	Staff Years	
Discretionary appropriations:										
Watershed & Flood Prevention - Regular Appropriations:										
1. Watershed Operations										
Authorized by P.L. 78-534:										
(a) Technical Assistance.....	\$1,030	5	-	2	-	12	-	-12	-	-
(b) Financial Assistance.....	4,116	-	-	-	-	-	-	-	-	-
Subtotal, P.L. 78-534.....	5,146	5	-	2	-	12	-	-12	-	-
2. Small Watersheds										
Authorized by P.L. 83-566:										
(a) Technical Assistance.....	7,032	28	-	35	-	34	-	-34	-	-
(b) Financial Assistance.....	17,822	-	-	-	-	-	-	-	-	-
Subtotal, P.L. 83-566.....	24,854	28	-	35	-	34	-	-34	-	-
Total Appropriation.....	30,000	33	-	37	-	46	-	-46	-	-
Bal. Available, SOY 1/.....	84,937	-	\$81,737	-	\$66,110	-	-\$66,110	-	-	-
Recoveries, Other (Net).....	-9,393	-	-5,729	-	-34,085	-	+34,085	-	-	-
Total Available.....	105,544	33	76,008	37	32,025	46	-32,025	-46	-	-
Bal. Available, EOY 1/.....	-81,737	-	-66,110	-	-	-	-	-	-	-
Total Obligations.....	23,807	33	9,898	37	32,025	46	-32,025	-46	-	-

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

NATURAL RESOURCES CONSERVATION SERVICE  
EMERGENCY WATERSHED PROTECTION PROGRAM

Project Statement by Program

(On basis of appropriation)

(Dollars in thousands)

Program	2010 Actual		2011 Actual		2012 Estimate		Change	2013 Estimate		
	Staff Amount	Staff Years	Staff Amount	Staff Years	Staff Amount	Staff Years		Staff Amount	Staff Years	
Discretionary appropriations:										
Watershed & Flood Prevention - Supplemental Appropriations:										
1. Emergency Watershed										
Protection Program:										
(a) Technical Assistance.....	-	140	-	141	\$43,180	354	-\$43,180	-303	-	51
(b) Financial Assistance.....	-	-	-	-	172,720	-	-172,720	-	-	-
Total Appropriation.....	-	140	-	141	215,900	354	-215,900 (1)	-303	-	51
Bal. Available, SOY 1/.....	\$328,400	-	\$133,348	-	88,596	-	-57,096	-	\$31,500	-
Recoveries, Other (Net).....	29,820	-	28,233	-	-	-	-	-	-	-
Total Available.....	358,220	140	161,581	141	304,496	354	-272,996	-303	31,500	51
Bal. Available, EOY 1/.....	-133,348	-	-88,596	-	-31,500	-	+31,500	-	-	-
Total Obligations.....	224,872	140	72,985	141	272,996	354	-241,496	-303	31,500	51

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

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED AND FLOOD PREVENTION OPERATIONS

Project Statement by Program

(On basis of obligations)

(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>		<u>2013 Estimate</u>	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Discretionary obligations:										
Watershed & Flood Prevention - Regular Obligations:										
1. Watershed Operations										
Authorized by P.L. 78-534:										
(a) Technical Assistance.....	\$552	5	\$229	2	\$1,477	12	-\$1,477	-12	-	-
(b) Financial Assistance.....	997	-	-	-	11,012	-	-11,012	-	-	-
Subtotal, P.L. 78-534.....	1,549	5	229	2	12,489	12	-12,489	-12	-	-
2. Small Watersheds										
Authorized by P.L. 83-566:										
(a) Technical Assistance.....	6,456	28	5,054	35	4,989	34	-4,989	(-34)	-	-
(b) Financial Assistance.....	15,802	-	4,615	-	14,547	-	-14,547	-	-	-
Subtotal, P.L. 83-566.....	22,258	28	9,669	35	19,536	34	-19,536	(-34)	-	-
Total Obligations.....	23,807	33	9,898	37	32,025	46	-32,025	-46	-	-
Bal. Available, EOY 1/.....	81,737	-	66,110	-	-	-	-	-	-	-
Total Available.....	105,544	33	76,008	37	32,025	46	-32,025	-46	-	-
Bal. Available, SOY 1/.....	-84,937	-	-81,737	-	-66,110	-	+32,025	-	-\$34,085	-
Recoveries, Other (Net).....	9,393	-	5,729	-	34,085	-	-	-	+34,085	-
Total Appropriation.....	30,000	33	-	37	-	46	-	-46	-	-

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

NATURAL RESOURCES CONSERVATION SERVICE  
EMERGENCY WATERSHED PROTECTION PROGRAM

Project Statement by Program

(On basis of obligations)

(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimated</u>		<u>Change</u>		<u>2013 Estimated</u>	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Discretionary obligations:										
Watershed & Flood Prevention - Supplemental Obligations:										
1. Emergency Watershed										
Protection Program:										
(a) Technical Assistance.....	\$24,745	140	\$16,967	141	\$58,182	354	-\$51,882	-303	\$6,300	51
(b) Financial Assistance.....	200,127	-	56,018	-	214,814	-	-189,614	-	25,200	-
Total Obligations.....	224,872	140	72,985	141	272,996	354	-241,496	-303	31,500	51
Bal. Available, EOY 1/.....	133,348	-	88,596	-	31,500	-	-31,500	-	-	-
Total Available.....	358,220	140	161,581	141	304,496	354	-272,996	-303	31,500	51
Bal. Available, SOY 1/.....	-328,400	-	-133,348	-	-88,596	-	+57,096	-	-31,500	-
Recoveries, Other (Net).....	-29,820	-	-28,233	-	-	-	-	-	-	-
Total Appropriation.....	-	140	-	141	215,900	354	-215,900	-303	-	51

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

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED AND FLOOD PREVENTION OPERATIONS

Justification of Increases and Decreases

- (1) A decrease of \$215,900,000 and 303 staff years for the Emergency Watershed Protection Program (\$215,900,000 and 354 staff years available in 2012):

In 2012, the Emergency Watershed Protection Program was funded at \$215.9 million for expenses resulting from major disasters declared pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq). State agencies including environmental, natural resource, and fish and game agencies participate in planning and coordinating emergency work. 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

Status of Watershed Projects

Status of P.L. 78-534 watershed projects:

<u>Status of Operational Projects</u>	<u>2011</u>	<u>2012</u>
Active sub-watersheds.....	69	65
Projects continuing post-installation assistance.....	206	206
Total operational sub-watersheds.....	275	271
Inactive projects.....	91	89
De-authorized projects.....	25	25
Total sub-watersheds.....	391	385

Status of P.L. 83-566 watershed projects:

<u>Status of Operational Projects</u>	<u>2011</u>	<u>2012</u>
Land treatment projects.....	103	101
Structural projects.....	153	147
Land treatment and structural.....	63	58
Subtotal active projects.....	319	306
Projects in post-installation assistance.....	1,074	1,064
Inactive Projects.....	197	195
Project Life Completed.....	42	45
De-authorized projects.....	158	158
Total operational projects.....	1,790	1,768
New projects approved during the year.....	1	-

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED AND FLOOD PREVENTION OPERATIONS

Geographic Breakdown of Obligations and Staff Years

(Dollars in thousands)

State/Territory	2010 Actual		2011 Actual		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Alabama.....	\$3,798	2	\$279	1	\$9,620	13	-	-
Alaska.....	7,349	1	3,587	2	8,307	11	-	-
Arizona.....	7,140	1	1,121	3	5,384	7	-	-
Arkansas.....	3,150	7	1,159	3	5,389	7	-	-
California.....	2,599	6	3,723	4	2,316	3	-	-
Colorado.....	50	-	1,472	4	609	1	-	-
Connecticut.....	500	-	58	-	602	1	-	-
Florida.....	20,767	9	5,006	5	123	-	-	-
Georgia.....	1,804	2	3,346	4	500	1	-	-
Hawaii.....	9,662	6	2,182	7	364	-	-	-
Idaho.....	10	-	-	-	600	1	-	-
Illinois.....	1,174	1	-	-	600	1	-	-
Indiana.....	450	1	97	-	1,516	2	-	-
Iowa.....	48,178	10	3,306	7	980	1	-	-
Kansas.....	516	1	28	-	37	-	-	-
Kentucky.....	14,912	21	7,520	14	5,912	8	-	-
Louisiana.....	5,399	6	44	-	600	1	-	-
Maine.....	361	-	12	-	370	-	-	-
Massachusetts.....	364	-	2,495	1	3,432	5	-	-
Michigan.....	18	-	-	-	-	-	-	-
Minnesota.....	559	1	1,204	2	1,000	1	-	-
Mississippi.....	15,865	18	2,929	13	4,509	6	-	-
Missouri.....	26,163	30	7,418	31	40,398	54	-	-
Montana.....	356	-	2,874	3	3,510	5	-	-
Nebraska.....	137	-	135	5	1,676	2	-	-
Nevada.....	1	-	-	-	-	-	-	-
New Hampshire.....	6	-	81	-	403	1	-	-
New Jersey.....	-	-	-	-	1,323	2	-	-
New Mexico.....	176	1	482	1	118	-	-	-
New York.....	4,699	2	1,520	1	37,811	50	-	-
North Carolina.....	1,306	1	89	1	603	1	-	-
North Dakota.....	3,515	2	135	1	1,460	2	-	-
Ohio.....	195	2	180	-	3,139	4	-	-
Oklahoma.....	3,649	7	2,223	7	4,450	6	-	-
Oregon.....	568	-	32	-	-	-	-	-

State/Territory	2010 Actual		2011 Actual		2012 Estimate		2013 Estimate	
	Staff		Staff		Staff		Staff	
	Amount	Years	Amount	Years	Amount	Years	Amount	Years
Pennsylvania.....	620	-	177	1	12,080	16	-	-
Puerto Rico.....	-	-	-	-	1,900	3	-	-
Rhode Island.....	2,184	1	1,213	1	6,472	9	-	-
South Carolina.....	1,077	-	83	1	250	-	-	-
South Dakota.....	-	-	209	-	84	-	-	-
Tennessee.....	8,240	5	11,251	16	6,968	9	-	-
Texas.....	7,746	14	4,470	11	7,098	9	-	-
Utah.....	37,022	7	6,675	6	60,229	80	-	-
Vermont.....	49	-	140	-	6,422	9	-	-
Virginia.....	277	-	278	9	853	1	-	-
Washington.....	18	2	-	-	-	-	-	-
West Virginia.....	4,382	4	2,255	9	15,757	21	-	-
Wisconsin.....	145	1	243	1	-	-	-	-
Wyoming.....	870	1	527	-	203	-	-	-
American Samoa.....	-	-	-	-	-	-	-	-
National Hdqtr.....	619	-	623	3	8,094	11	-	-
National Centers.....	34	-	2	-	-	-	-	-
Undistributed.....	-	-	-	-	30,951	35	\$31,500	51
Obligations.....	248,679	173	82,883	178	305,021	400	31,500	51
Bal. Available, EOY.....	215,087	-	151,630	-	31,500	-	-	-
Total, Available.....	463,765	173	234,515	178	336,521	400	31,500	51

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED AND FLOOD PREVENTION OPERATIONS

Classification by Objects

(Dollars in thousands)

		2010	2011	2012	2013
		Actual	Actual	Estimate	Estimate
Personnel Compensation:					
	Washington, D.C.....	\$170	\$306	\$684	\$91
	Field.....	12,518	12,722	28,437	3,786
11	Total personnel compensation.....	12,688	13,028	29,121	3,877
12	Personal benefits.....	3,557	4,147	8,863	1,140
	Total, personnel comp. and benefits.....	16,245	17,175	37,984	5,017
Other Objects:					
21.0	Travel and transportation of persons.....	477	534	1,254	191
22.0	Transportation of things.....	42	15	38	6
23.2	Rental payments to others.....	265	146	369	60
23.3	Communications, utilities, and misc. charges.....	271	154	161	2
24.0	Printing and reproduction.....	10	-	-	-
25	Other contractual services.....	2,067	7,533	29,667	2,947
25.1	Advisory and assistance services.....	10,285	12	20,323	909
25.2	Other services from non-Federal sources.....	77,458	25,025	101,630	9,790
26.0	Supplies and materials.....	95	138	328	50
31.0	Equipment.....	1,820	365	603	65
32.0	Land and structures.....	41,677	3,215	-	-
41.0	Grants.....	97,951	28,569	112,660	12,463
43.0	Interest and dividends.....	16	2	4	-
	Total, Other Objects.....	232,434	65,708	267,037	26,483
99.9	Total, new obligations.....	248,679	82,883	305,021	31,500



## NATURAL RESOURCES CONSERVATION SERVICE WATERSHED AND FLOOD PREVENTION OPERATIONS

### STATUS OF PROGRAM

#### Current Activities.

**Background.** Watershed and Flood Prevention Operations (Watershed Operations) includes Flood Prevention Operations Program authorized by the Flood Control Act of 1944 (P.L. 78-534) and the Watershed Protection and Flood Prevention Program (P.L. 83-566; 16 U.S.C 1001-1008). Watershed Operations authorizes the Secretary of Agriculture 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 11 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, NRCS prepares detailed sub-watershed plans that outline soil and water management problems and proposals to alleviate the problems, including 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.

#### 2011 Activities.

One new watershed project was authorized from carryover funding from prior years. No 2011 funds were appropriated for Watershed Protection P.L. 83-566 or Flood Prevention P.L. 78- 534 programs. 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.

The 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 2011 (Reported Benefits are from projects currently entered into the NRCS Programs Operations Information Tracking System).

#### Monetary Benefits

- Agricultural benefits not related to flood prevention: \$415 million. Benefits are associated with erosion control, animal waste management, water conservation, water quality improvement, irrigation efficiency, change in land use, etc.
- Non-agricultural benefits not related to flood prevention: \$908 million. Benefits are associated with recreation, fish and wildlife, rural water supply, water quality, municipal and industrial water supply, and incidental recreation uses, etc.
- Agricultural flood prevention benefits: \$327 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: \$438 million. Non-agricultural flood damage prevention measures protected roads, bridges, homes, and other structures that exist in the floodplain.

#### Environmental Benefits

- Acres of nutrient management: 674,283
- Tons of animal waste properly disposed: 4,801,640
- Tons of soil saved from erosion: 90,187,341
- Miles of streams and corridors enhanced or protected: 47,507
- 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 impacted: 48,318,080
- Number of farms and ranches: 181,521
- Number of bridges: 61,694
- Number of public facilities: 3,662
- Number of businesses: 46,586
- Number of homes: 611,055
- Number of domestic water supplies: 27,874

**Status of Flood Prevention Projects Authorized by the Flood Control Act.** Because the 11 authorized flood prevention projects include relatively large areas, work plans were developed on a sub-watershed basis. As of September 30, 2011, the total planning job was about 99 percent completed, with work in 439 plans covering approximately 30 million acres fully concluded. 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 9/30/11	
	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
<b>TOTAL</b>	<b>37,870,243</b>	<b>442</b>	<b>31,125,739</b>	<b>439</b>	<b>30,104,667</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.

<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 2011 are listed in the table below:

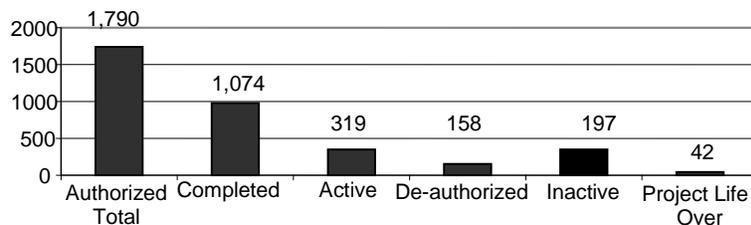
<b>Flood Prevention Project</b>	<b>Estimated Total Federal Cost</b>	<b>Obligations (cumulative \$)</b>
Buffalo Creek Watershed, NY (Complete) <sup>a/</sup>	\$ 7,827,746	\$ 6,287,347
Middle Colorado River Watershed, TX	71,111,062	63,062,555
Coosa River Watershed, GA and TN (Complete) <sup>a/</sup>	18,999,247	18,264,485
Little Sioux River Watershed, IA	98,581,921	94,333,424
Little Tallahatchie River Watershed, MS	69,501,448	76,322,835
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	149,510,025
Santa Ynez River Watershed, CA	41,386,536	40,786,536
Trinity River Watershed, TX	331,241,632	211,172,298
Washita River Watershed, OK and TX	202,491,055	192,918,416
Yazoo River Watershed, MS	252,957,352	251,468,563
<b>TOTAL</b>	<b>1,355,922,974</b>	<b>1,164,423,501</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. The plans are 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 2011, of the 1,790 projects authorized by the Watershed Protection and Flood Prevention Act, 1,074 have been completed, 319 remain active, with the others de-authorized or inactive, as shown in the table below.

**2011 P.L.83-566 Watersheds Project Status**



**New Watershed Projects Authorized for Funding.** One new project was authorized in 2011 for funding under the Watershed Protection and Flood Prevention Act within available funds, as no funds were appropriated for this program.

State	Project Name	Federal Share	Local Share	Total Cost
Minnesota	Spring Brook Watershed Project	\$ 1,039,500	\$ 353,100	\$ 1,392,600
Total		1,039,500	353,100	1,392,600

**Unfunded Authorized Projects** (Total Backlog of Projects). A “backlog “is the unfunded authorized project or funding needed to install the remaining measures in the 300 active watershed projects. The current backlog is \$921 million. 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 9/30/2011**

State	P.L. 83-566 Watershed Protection And Flood Prevention \$	P.L. 78-534 Flood Control Act	Total
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	\$7,300,000	36,515,000	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	38,094,100	7,000,000	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	3,357,100	122,910,000	126,267,100
Oregon	-	430,000	430,000
Pennsylvania	-	8,135,000	8,135,000
Tennessee	-	19,152,326	19,152,326
Texas	139,200,000	105,854,000	245,054,000
Virginia	-	9,552,146	9,552,146
Washington	-	-	-
West Virginia	26,089,541	17,025,000	43,114,541
Wyoming	-	850,800	850,800
Pacific Basin	-	2,150,000	2,150,000
<b>Total</b>	<b>214,040,741</b>	<b>707,038,338</b>	<b>921,079,079</b>

**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 2011, 48 borrowers held loans with an unpaid principal amount of \$10.1 million. Over the life of the program, 495 loans have been made at a value of almost \$176 million. Congress did not appropriate funds in 2011 to provide new loans under this program.

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

**Pennsylvania: Improving Water Quality in Tulpehocken Creek.** This watershed project is a locally sponsored and locally led effort to improve the water quality and to restore aquatic habitat in Tulpehocken Creek and Blue Marsh Lake. Partners include: Berks County Conservation District, Lebanon County Conservation District, Berks County Conservancy, Borough of Myerstown, Schuylkill River Action Network, Stroud Water Research Center, Pennsylvania Game Commission, Pheasants Forever, and Trout Unlimited. The project supports and complements the ongoing efforts of the Schuylkill River Action Network, Delaware River Basin Commission, and Partnership for the Delaware Estuary Program. This project will protect 19 miles of stream from soil erosion and sedimentation and provide a system to properly manage animal waste. The funds provided to implement the Tulpehocken Creek land project will create or save jobs in the local area. In addition, the project will generate revenue for privately-owned businesses through increased sales of farm supplies, construction materials, equipment, parts, and services. The total input to the local economy is estimated at nearly \$1.8 million. The dominant agriculture operation in the watershed is dairy, and Pennsylvania currently ranks fifth nationally in milk production. Approximately, 36,000 residents will benefit from the project.

**Missouri: East Locust Creek Watershed.** The original East Locust Creek Watershed Project was signed in 1987. Since then, 72 small, floodwater-retarding structures have been installed within the watershed. The original project is being replaced with a revised watershed plan that NRCS helped develop on behalf of the project sponsors. The sponsors revised the project primarily to add a multiple-purpose reservoir that will provide seven million gallons of water per day for public consumption. The reservoir will provide water for 54,000 residents in 10 north central Missouri counties: Adair, Chariton, Grundy, Linn, Livingston, Macon, Mercer, Putnam, Schuyler, and Sullivan. The multiple-purpose reservoir and 22 small, floodwater-retarding structures will reduce flood damages to cropland, pasture, roads, and bridges by an additional 22 percent. Project cost include: Construction of Multiple-Purpose Reservoir \$25,140,900; Construction of 22 Small FWR Structures \$1,434,200; Real Property (Acquisition, Easements, Infrastructure) \$16,650,500; Engineering Services \$6,428,900; and Project Administration \$2,816,000 for a total Estimated Project Cost of \$52,470,500.

## **NATURAL RESOURCES CONSERVATION SERVICE EMERGENCY WATERSHED PROTECTION PROGRAM**

### **STATUS OF PROGRAM**

#### **Current Activities.**

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

**Program Objectives.** EWP was established to respond to emergencies created by natural disasters. The program work reduces threats to life and property caused by floods, fires, windstorms, and other natural occurrences. At the same time, it must be economically, environmentally, and socially defensible and technically sound. EWP 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.** Except for the purchase of floodplain easements, EWP projects must be sponsored by a legal subdivision of the State, including any city, county, general improvement district, conservation district, or Native American Tribe or tribal organization as defined in section four 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, as well as for getting the work installed. NRCS may provide up to 75 percent of the construction cost of emergency measures (90 percent within limited resource areas as identified by United States Department of Commerce Census data). The remaining 25 percent (10 percent within limited resource areas) must come from local sources as cash or in-kind services. Work can be done through either Federal or local contracts. EWP work is not limited to a particular set of prescribed measures but is determined by NRCS on a case-by-case basis.

In 2008, NRCS received \$490,464,000 from discretionary funding provided by a supplemental appropriation. The EWP program received no additional funding in 2009-2011.

**EWP Floodplain Easements.** NRCS may purchase EWP easements on any floodplain lands that have been impaired within the last 12 months or that have a history of repeated flooding (i.e., flooded at least twice during the past ten years). Under the floodplain easement option, a landowner voluntarily offers to sell a permanent conservation easement that provides NRCS with the full authority to restore and enhance the floodplain. Most easement transactions are on agricultural lands though a small component of the program involves rural land with residences or other structures. These types of easement transactions are only offered where the easement acquisition is part of a broader watershed effort to minimize future flood damage and a local sponsor will acquire fee title to the land encumbered by the easement.

NRCS may pay up to 100 percent of the restoration costs of the easement. Restoration efforts include both structural and non-structural practices. To the extent practicable, NRCS actively restores the natural features and characteristics of the floodplain by re-creating the topographic diversity and re-establishing native vegetation.

The landowner has the opportunity to participate in the restoration efforts. 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. At any time, a landowner may obtain authorization from NRCS to engage in other activities provided the Agency determines the activities will further the protection and enhancement of the floodplain easements.

**Data Adjustments.** In 2010, the National Easement Staging Tool (NEST) database was deployed. NEST is the official data tracking tool for easement programs data; however it does not serve as a substitute for the Foundation Financial Information System (FFIS), which is the official NRCS financial tracking system. Easement program data in NEST is undergoing an intense quality assurance review process in order to improve the overall quality and accuracy of data. During the review process, data will continually be updated to ensure completeness.

<b>Cumulative Program Activity (Through End of 2011)</b>	
<b>Enrolled Easements (Permanent)</b>	<b>Cumulative</b>
Number of Easements	1,402
Number of Acres	184,675
<b>Closed Easements (Permanent)</b>	<b>Cumulative</b>
Number of Easements	1,344
Number of Acres	179,457

### **2011 Activities.**

In 2011, NRCS closed 164 enrolled easements, which encompass approximately 18,011 acres. Also during 2011, 24 perpetual easements were enrolled into the program. These 2011 active agreements encompass approximately 1,351 acres. EWPP provided \$32,105,357 in funding for 18 projects in 18 disaster events as the data shows below. The economic benefit from those projects is \$347,029,969, providing a benefit to cost ratio of 1.0/12.0.

<b>General</b>	
No. of disaster events funded	18
No. of disaster events unfunded	65
No. of projects completed	18
<b>Costs</b>	
Technical assistance	\$ 5,003,389
Financial assistance	21,093,146
Local contribution	6,008,822
Total costs	32,105,357
<b>Benefits</b>	
Public buildings protected (no.)	51
Private buildings protected (no.)	1441
Roads protected (miles)	781
Utilities protected (no.)	864
Value of property protected	\$389,898,451
Debris removed (feet)	797,276
Streambank stabilized (feet)	2,906,437
Land protected (acres)	314,667
No. of 8(a) contracts	18
Value of 8(a) contracts	\$2,092,841
Total economic benefit	\$347,029,969
<b>Benefit/Cost Ratio</b>	
	1.0/12.0
<b>No. of Persons Benefited</b>	
Minority	277,166
Other	185,912
Total	463,078

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

California Santa Barbara County. Santa Barbara County residents vividly remember the first warning signs of the impending Jesusita Fire on the afternoon of May 5, 2009. The sky above the foothills of the Santa Ynez Mountains became dark with smoke and temperatures increased more than 10 degrees in mere hours. The wildfire was approaching quickly and the evacuation orders for nearly 15,000 residents happened hours after first sighting of the smoke. When the wildfire was finally contained a week later, it had burned 8,733 acres, destroyed 80 homes and injured 28 residents. Total damage was estimated at \$20 million and clean-up would take months to overcome.

For the California State Office, its work began after the fire crews had left. Fears over loosened topsoil, rocks, and debris posed an even greater threat if a major rain event hit the County that winter. The potential for heavy movement of debris down the burned and barren foothills could damage approximately 2,000 homes, and even worse, threaten lives. The weather forecast for that winter showed higher than normal precipitation and the State of California determined that an exigency classification should be assigned to the work needed to prevent potential debris flows. Through EWPP, NRCS was provided the authority to take immediate action. The emergency measures included multiple debris racks, K-rails, sand bags, more than 10 miles of channel clearing, expansion of three debris basins. In addition, 1,150 acres of aerial hydro mulch was applied onto hillsides to protect property at risk from mud and debris flows from the burned areas. Emergency measures protected approximately 2,000 homes, worth more than \$800 million, at risk. Completing this exigency work in Santa Barbara County, in a short time frame, prior to the winter rain season, required extensive communication and cooperation by the sponsor and permitting agencies.



NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED REHABILITATION PROGRAM

The estimates include appropriations 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, \$15,000,000 is provided.]

The change in the 2013 Budget includes no funding for this program.

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED REHABILITATION

Lead-Off Tabular Statement

Appropriations Act, 2012.....	\$15,000,000
Budget Estimate, 2013.....	-
Change from 2012 Appropriation.....	<u><u>-15,000,000</u></u>

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED REHABILITATION

Summary of Increases and Decreases

(On basis of appropriation)

(Dollars in thousands)

	2010 Actual	2011 Change	2012 Change	2013 Change	2013 Estimate
Discretionary Appropriations:					
Watershed Rehabilitation:					
1. Technical Assistance.....	\$17,200	-\$2,829	-\$6,871	-\$7,500	-
2. Financial Assistance.....	22,961	-19,368	+3,907	-7,500	-
Total Appropriation or Change.....	<u><u>40,161</u></u>	<u><u>-22,197</u></u>	<u><u>-2,964</u></u>	<u><u>-15,000</u></u>	<u><u>-</u></u>

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED REHABILITATION

Project Statement by Program

(On basis of appropriations)

(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>	<u>2013 Estimate</u>		
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years	
Discretionary Appropriations:										
Watershed Rehabilitation Appropriations:										
1. Technical Assistance.....	\$17,200	82	\$14,371	88	\$7,500	43	-\$7,500	-43	-	-
2. Financial Assistance.....	22,961	-	3,593	-	7,500	-	-7,500	-	-	-
Total, Available or Est.....	40,161	82	17,964	88	15,000	43	-15,000	-43	-	-
Rescission.....	-	-	36	-	-	-	-	-	-	-
Total, Appropriation.....	40,161	82	18,000	88	15,000	43	-15,000 (1)	-43	-	-
Rescission.....	-	-	-36	-	-	-	-	-	-	-
Bal. Available, SOY 1/.....	9,946	-	11,431	-	12,377	-	-12,377	-	-	-
Recoveries, Other (Net).....	9,443	-	7,886	-	-8	-	8	-	-	-
Total Available.....	59,550	82	37,281	88	27,369	43	-27,369	-43	-	-
Bal. Available, EOY 1/.....	-11,431	-	-12,377	-	-	-	-	-	-	-
Total Obligations.....	48,119	82	24,904	88	27,369	43	-27,369	-43	-	-

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

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED REHABILITATION

Project Statement by Program

(On basis of obligations)

(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>	<u>2013 Estimate</u>		
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years	
Discretionary Obligations:										
Watershed Rehabilitation Obligations:										
Technical Assistance.....	\$19,176	82	\$15,242	88	\$13,685	43	-\$13,685	-43	-	-
Financial Assistance.....	28,943	-	9,662	-	13,684	-	-13,684	-	-	-
Total Obligations.....	48,119	82	24,904	88	27,369	43	-27,369	-43	-	-
Bal. Available, EOY 1/.....	11,431	-	12,377	-	-	-	-	-	-	-
Total Available.....	59,550	82	37,281	88	27,369	43	-27,369	-43	-	-
Rescission.....	-	-	36	-	-	-	-	-	-	-
Bal. Available, SOY 1/.....	-9,946	-	-11,431	-	-12,377	-	12,377	-	-	-
Recoveries, Other (Net).....	-9,443	-	-7,886	-	8	-	-8	-	-	-
Total, Appropriation.....	40,161	82	18,000	88	15,000	43	-15,000	-43	-	-

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

Justification of Increases and Decreases

(1) A decrease of \$15,000,000 and 43 staff years for Watershed Rehabilitation (\$15,000,000 and 43 staff years available in 2012):

- a. No funding is requested in the 2013 Budget, reflecting the Administration's position that the maintenance, repair, and operation of these dams are the responsibility of local project sponsors.

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED REHABILITATION

Geographic Breakdown of Obligations and Staff Years

(Dollars in thousands)

State/Territory	2010 Actual		2011 Actual		2012 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Alabama.....	\$6	-	-	-	-	-
Arizona.....	17,072	5	\$6,542	5	\$1,050	2
Arkansas.....	60	1	51	-	-	-
Colorado.....	348	3	276	1	-	-
Connecticut.....	20	-	-	-	-	-
Georgia.....	345	3	370	4	50	-
Iowa.....	5	-	-	-	-	-
Kansas.....	140	-	2,241	2	803	1
Kentucky.....	288	-	42	-	-	-
Massachusetts.....	537	1	636	1	987	2
Mississippi.....	2,027	5	141	2	105	-
Missouri.....	138	1	132	1	200	-
Nebraska.....	785	2	2,106	5	1,150	2
Nevada.....	84	-	-	-	-	-
New Jersey.....	90	1	133	1	-	-
New Mexico.....	619	2	150	1	675	1
New York.....	56	-	268	2	200	-
North Carolina.....	351	-	-	-	-	-
North Dakota.....	2,147	5	653	5	7,055	11
Ohio.....	345	2	236	2	15	-
Oklahoma.....	12,328	20	3,137	23	905	2
Oregon.....	40	-	-	-	-	-
Pennsylvania.....	571	2	781	2	105	-
South Carolina.....	8	-	1	-	-	-
Tennessee.....	204	1	79	1	-	-
Texas.....	1,121	8	2,257	9	796	1
Utah.....	654	1	778	1	150	-
Virginia.....	1,326	5	518	5	2,400	4
Washington.....	-	-	101	1	-	-
West Virginia.....	2,078	3	661	5	650	1
Wisconsin.....	257	1	43	-	-	-
Wyoming.....	119	1	226	1	134	-
National Hdqtr.....	3,558	8	1,909	5	1,917	3
National Centers.....	392	1	436	3	1,330	2
Undistributed.....	-	-	-	-	6,692	11
Obligations.....	48,119	82	24,904	88	27,369	43
Bal. Available, EOY.....	11,431	-	12,377	-	-	-
Total, Available.....	59,550	82	37,281	88	27,369	43

NATURAL RESOURCES CONSERVATION SERVICE  
WATERSHED REHABILITATION PROGRAM

Classification by Objects

(Dollars in thousands)

		2010	2011	2012
		Actual	Actual	Estimate
Personnel Compensation:				
	Washington, D.C.....	\$1,428	\$517	\$264
	Field.....	5,018	6,248	3,042
11	Total personnel compensation.....	6,446	6,765	3,306
12	Personal benefits.....	1,611	1,878	918
13.0	Benefits for former personnel.....	4	2	1
	Total, personnel comp. and benefits.....	8,061	8,645	4,225
Other Objects:				
21.0	Travel and transportation of persons.....	365	280	141
22.0	Transportation of things.....	34	6	3
23.2	Rental payments to others.....	398	81	41
23.3	Communications, utilities, and misc. charges.....	327	83	42
24.0	Printing and reproduction.....	28	8	4
25	Other contractual services.....	5,033	4,313	6,044
25.1	Advisory and assistance services.....	18,130	5,228	7,326
25.2	Other services from non-Federal sources.....	3,967	1,354	1,897
26.0	Supplies and materials.....	380	138	70
31.0	Equipment.....	575	326	164
41.0	Grants.....	10,813	4,433	7,407
42.0	Insurance and loans.....	5	4	2
43.0	Interest and dividends.....	3	5	3
	Total, Other Objects.....	40,058	16,259	23,144
99.9	Total, new obligations.....	48,119	24,904	27,369



## NATURAL RESOURCES CONSERVATION SERVICE WATERSHED REHABILITATION PROGRAM

### STATUS OF PROGRAM

#### Current Activities.

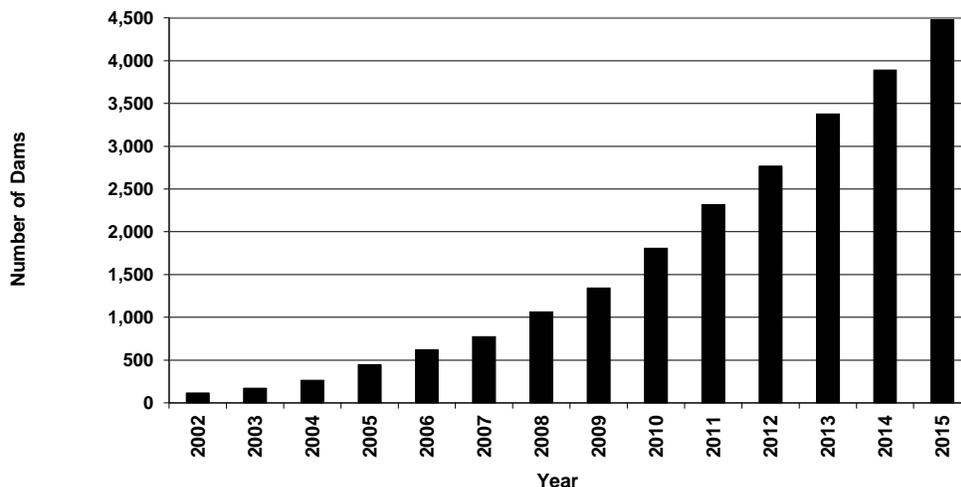
**Background.** In November 2000, the Watershed Protection and Flood Prevention Act (P.L. 83-566) was amended by The Watershed Rehabilitation Amendments of 2000 (Section 313 of P.L. 106-472), which authorized NRCS to assist communities to address public health and safety concerns and environmental impacts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

**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 11,700 watershed dams with assistance from NRCS. Local sponsors provided leadership in the program and secured land rights and easements needed for construction; and NRCS provided technical assistance and cost sharing for construction. Local sponsors assumed responsibilities 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. In 2011, 2,317 watershed dams had reached the end of their designed life-span. By 2015, this number will be 4,480, as the table below shows. Time has taken its toll on many dams: spillway pipes have deteriorated and reservoirs have filled with sediment. More significantly, subdivisions and businesses have been built in areas that were once agricultural land the dams protected from flooding. A dam failure would 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 would have serious adverse environmental impacts on the ecosystem.

**Cumulative Number of Watershed Dams Reaching the End of Their Design Life by 2015**



**Program Operations.** The Watershed Rehabilitation Program's highest priority is to rehabilitate dams that pose the greatest risk to public safety, that is, the dams 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. NRCS has a current portfolio of over 650 high hazard dams where local communities have requested Watershed Rehabilitation Program assistance to evaluate the condition and safety of their dams.

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, defined as including 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 require requests from a local public sponsor: 1) Conduct dam assessments to evaluate the condition of dams including safety hazards, and to provide preliminary alternatives for rehabilitation; 2) prepare project plans for implementation; and 3) implement dam rehabilitation.

Partnerships among local communities, State governments, and NRCS leverage services and funds and 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. As a result NRCS has a 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.
- **Financial assistance.** Sponsors have used many innovative strategies 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.

All applications for annual funding for rehabilitation planning and construction are prioritized. Priorities are based on a numerical factor associated with the overall condition of a dam and the population at risk should a dam fail.

### **2011 Activities.**

In 2011, project sponsors submitted requests for Federal assistance totaling \$34.9 million for the rehabilitation of 110 high priority dams in 23 States. The dams funded in 2011 contributed to the number of dams listed in the table below. Additionally, NRCS funded and completed 654 assessments of high hazard dams that provided communities with technical information about the condition of their dams and alternatives to rehabilitation for dams that do not meet Federal dam safety standards.

**Summary of Watershed Rehabilitation Projects and Allocations  
as of September 30, 2011**

<b>State</b>	<b>Total Number Of Funded Dam Rehabilitations Projects 2000 – 2011</b>	<b>Number of Dams Rehabilitated</b>	<b>2011 Federal Allocations<sup>a/</sup></b>
Alabama	1	1	-
Arizona	11	2	\$ 1,367,164
Arkansas	6	1	51,859
California	1	-	-
Colorado	3	-	382,297
Georgia	12	9	363,189
Iowa	4	4	-
Kansas	3	-	365,263
Kentucky	4	1	42,447
Massachusetts	7	-	715,020
Mississippi	24	16	143,025
Missouri	5	2	374,370
Montana	2	-	-
Nebraska	14	6	1,608,888
New Jersey	1	-	133,128
New Mexico	11	3	194,955
New York	6	-	281,863
North Dakota	3	-	589,644
Ohio	9	8	233,183
Oklahoma	49	23	2,444,052
Pennsylvania	4	1	782,463
Tennessee	3	2	82,522
Texas	20	13	1,389,288
Utah	3	-	781,095
Virginia	10	7	662,094
West Virginia	3	-	683,635
Wisconsin	14	11	45,951
Wyoming	1	-	359,911
NHQ	-	-	3,327,548
<b>Total</b>	<b>234</b>	<b>110</b>	<b>17,404,854</b>

<sup>a/</sup> Allocations include project planning and implementation. Carryover funds and prior year recoveries are included in the allocation.

Activities in 2011 continued two major initiatives to improve program delivery to the public. During the year, NRCS continued to monitor the number of Memorandum of Understandings (MOUs) that were established with State dam safety agencies. The MOUs formalize the Federal and State partnership to coordinate efforts in dam safety. One additional MOU agreement was executed this year bringing the total of States partnerships MOUs to 31.

**Project Status and Benefits.** By September 30, 2011, the rehabilitation of 234 dams was authorized in 28 States, and the rehabilitation of 110 dams was completed. Implementation of the remaining 125 rehabilitation projects subject to funding priorities. The following table summarizes the benefits for both agricultural and non-agricultural lands provided by the 110 completed projects:

Average annual floodwater damage reduction benefits (\$):	\$6,429,855
Average annual non-floodwater damage reduction benefits (\$):	\$6,537,388
Number of people with reduced risk downstream from the dams :	11,621
Number of people who benefit from project action:	262,558

Number of homes and businesses benefiting from project action:	7,660
Number of farms and ranches benefiting from project action:	652
Number of bridges benefiting from project action:	277

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

Oklahoma: Cobb Creek Watershed Dam No. 1, Caddo County. Cobb Creek Watershed Dam No. 1 was built in 1958. This 89 foot high dam created a 135 acre lake which became known as Crowder Lake. The lake is a favorite fishing location for local residents and has been designated a Trophy Bass Lake by the Oklahoma Department of Wildlife Conservation. The lake and surrounding land is used extensively for conducting courses in wilderness first aid, sailing, canoeing, hiking and climbing.

Cobb Creek Watershed Dam No. 1 was originally designed and built as a low hazard dam, and was reclassified as a high hazard dam in 2006 because of downstream development. Through the actions of the Deer Creek Conservation District, the Oklahoma Conservation Commission, and with assistance from NRCS, this dam was rehabilitated in 2011, three years after reaching its 50 year designed life. This rehabilitation brings the Cobb Creek Watershed Dam No. 1 up to current dam safety criteria and extends its life for another 100 years. Benefits of the rehabilitated dam includes protection of 37 people from potential loss of life, reduced flood and sedimentation damages, recreational benefits, sustained land values, and protection of several roads and bridges.

Tennessee: Mary's Creek Watershed Site 7, Shelby County. Built in 1959, Mary's Creek Site number 7 had reached the end of its planned 50 year lifespan. This dam originally built for flood protection in a rural setting as a low hazard structure, had witnessed urbanization with approximately 21 properties constructed in the Spring Manor Subdivision.

In 2011, through the partnership of the Shelby County Soil Conservation District and the USDA Natural Resources Conservation Service (NRCS) the rehabilitation of Mary's Creek Watershed Site 7 was completed to provide an additional 100 years of flood protection to the Citizens of Shelby County Tennessee and surrounding areas. The project was built to meet current design standards. The rehabilitation of this structure provides direct benefits to over 100 people who risked loss of life if the dam had failed. Other benefits are the reduction of potential flooding to four roads, including the North-South corridor of State Highway 205, a major commuting route and primary thoroughfare out of the Spring Manor Subdivision. Landowners and county government will be able to count on protection of land values on protected areas downstream of the dam and the protection of livestock. This project will provide average annual benefits of approximately \$25,000.

Oklahoma: Sallisaw Creek Watershed Site 18M, Adair County. Between 1938 and 1957, there were 26 major floods and 144 smaller floods in Adair County, Oklahoma. In 1965, the City of Stilwell, the Adair County Conservation District, and the Oklahoma Conservation Commission with the assistance of NRCS constructed a 68 foot-high dam, which created a 188 surface acre lake to provide flood protection and a water supply to the City of Stilwell and rural water districts. During Site 18M construction, the City of Stilwell paid for adding 3,000 additional acre-feet of water storage for municipal water supply.

In 2010, this dam was five years away from the end of the planned designed life and in need of rehabilitation. In 2011, the dam rehabilitation was completed for this structure, bringing it up to current dam safety standards and extending its life for another 100 years. The rehabilitation of the dam will reduce the potential for loss of life, provide flood damage reduction benefits and water supply to 24 homes, one church, one municipal water facility, three bridges, reduce damage to roads, 12 farms, and reduce sedimentation of streams and rivers. Rehabilitation of the dam will result in \$20.7 million in benefits over its extended 100-year life.

NATURAL RESOURCES CONSERVATION SERVICE  
 RESOURCE CONSERVATION AND DEVELOPMENT

Summary of Increases and Decreases  
 (On basis of appropriation)  
 (Dollars in thousands)

	2010 Actual	2011 Change 1/	2012 Change	2013 Change	2013 Estimate
Resource Conservation and Development.....	\$50,730	-\$27,000	-\$23,730	-	-
Total, Appropriation or Change.....	<u>50,730</u>	<u>-27,000</u>	<u>-23,730</u>	<u>-</u>	<u>-</u>

<sup>1/</sup> Funding reflects amount apportioned in 2011 to close out the program.

NATURAL RESOURCES CONSERVATION SERVICE  
RESOURCE CONSERVATION AND DEVELOPMENT

Project Statement by Program  
(On basis of appropriations)  
(Dollars in thousands)

Program	2010 Actual		2011 Actual <sup>1/</sup>		2012 Estimate		Change	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Discretionary Appropriations: Resource Conservation and Development								
Technical Assistance.....	\$50,730	403	\$23,730	190	-	-	-	-
Total Appropriation.....	50,730	403	23,730	190	-	-	-	-
Bal. Available, SOY.....	3,229	-	3,128	-	\$1,104	-	-\$1,104	-
Recoveries, Other (Net).....	186	-	76	-	-72	-	72	-
Total Available.....	54,145	403	26,934	190	1,032	-	-1,032	-
Lapsing Balances.....	-254	-	-3,066	-	-	-	-	-
Bal. Available, EOY.....	-3,128	-	-1,104	-	-	-	-	-
Total Obligations.....	50,763	403	22,764	190	1,032	-	-1,032	-

<sup>1/</sup> Funding reflects amount apportioned in 2011 to close out the program.

NATURAL RESOURCES CONSERVATION SERVICE  
RESOURCE CONSERVATION AND DEVELOPMENT

Project Statement by Program  
(On basis of obligations)  
(Dollars in thousands)

Program	2010 Actual		2011 Actual <sup>1/</sup>		2012 Estimate		Change	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Discretionary Obligations: and Development								
Technical Assistance.....	\$50,763	403	\$22,764	190	\$1,032	-	-\$1,032	-
Total Obligations.....	50,763	403	22,764	190	1,032	-	-1,032	-
Lapsing Balances.....	254	-	3,066	-	-	-	-	-
Bal. Available, EOY.....	3,128	-	1,104	-	-	-	-	-
Total Available.....	54,145	403	26,934	190	1,032	-	-1,032	-
Recoveries, Other (Net).....	-186	-	-76	-	72	-	-72	-
Bal. Available, SOY.....	-3,229	-	-3,128	-	-1,104	-	+1,104	-
Total Appropriation.....	50,730	403	23,730	190	-	-	-	-

<sup>1/</sup> Funding reflects amount apportioned in 2011 to close out the program.

NATURAL RESOURCES CONSERVATION SERVICE  
RESOURCE CONSERVATION AND DEVELOPMENT

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

State/Territory	2010 Actual		2011 Actual		2012 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Alabama.....	\$1,116	9	\$573	5	-	-
Alaska.....	1,169	8	430	3	-	-
Arizona.....	767	7	344	3	-	-
Arkansas.....	919	7	350	3	-	-
California.....	1,623	12	641	5	-	-
Colorado.....	959	8	389	3	-	-
Connecticut.....	284	2	147	1	-	-
Delaware.....	143	1	65	1	-	-
Florida.....	909	6	412	4	-	-
Georgia.....	1,384	10	558	4	-	-
Hawaii.....	932	9	396	4	-	-
Idaho.....	994	8	454	4	-	-
Illinois.....	1,263	11	565	5	-	-
Indiana.....	1,139	11	519	5	-	-
Iowa.....	1,928	16	846	7	-	-
Kansas.....	1,134	8	509	4	-	-
Kentucky.....	1,762	15	756	7	-	-
Louisiana.....	919	7	433	3	-	-
Maine.....	652	6	317	3	-	-
Maryland.....	385	4	176	2	-	-
Massachusetts.....	449	3	183	2	-	-
Michigan.....	886	7	438	4	-	-
Minnesota.....	1,001	11	356	4	-	-
Mississippi.....	869	9	381	4	-	-
Missouri.....	999	8	449	4	-	-
Montana.....	950	8	419	4	-	-
Nebraska.....	1,439	11	745	6	-	-
Nevada.....	410	3	197	2	-	-
New Hampshire.....	296	2	124	1	-	-
New Jersey.....	286	3	116	1	-	-
New Mexico.....	984	8	450	4	-	-
New York.....	1,058	11	511	4	-	-
North Carolina.....	1,236	11	599	5	-	-
North Dakota.....	954	8	481	4	-	-
Ohio.....	1,160	10	495	4	-	-
Oklahoma.....	1,135	8	483	4	-	-
Oregon.....	630	5	300	2	-	-
Pennsylvania.....	1,109	10	583	6	-	-
Rhode Island.....	125	1	45	-	-	-
South Carolina.....	825	8	300	3	-	-
South Dakota.....	799	7	346	4	-	-
Tennessee.....	1,285	11	485	5	-	-
Texas.....	2,777	22	1,177	10	-	-

NATURAL RESOURCES CONSERVATION SERVICE  
 RESOURCE CONSERVATION AND DEVELOPMENT

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

State/Territory	2010 Actual		2011 Actual		2012 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Utah.....	834	7	395	4	-	-
Vermont.....	280	2	124	1	-	-
Virginia.....	878	9	355	4	-	-
Washington.....	807	7	359	4	-	-
West Virginia.....	718	7	335	4	-	-
Wisconsin.....	888	7	413	4	-	-
Wyoming.....	606	5	329	3	-	-
National Hdqtr.....	3,284	5	1,713	1	-	-
Puerto Rico.....	425	4	198	2	-	-
Undistributed.....	-	-	-	-	\$1,032	-
Obligations.....	50,763	403	22,764	190	1,032	-
Lapsing Balances.....	254	-	-	-	-	-
Bal. Available, EOY.	3,128	-	1,104	-	-	-
Total, Available.....	54,145	403	23,868	190	1,032	-

NATURAL RESOURCES CONSERVATION SERVICE  
RESOURCE CONSERVATION AND DEVELOPMENT

Classification by Objects

(Dollars in thousands)

		2010	2011	2012
		<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>
Personnel Compensation:				
	Washington, D.C.....	\$1,236	\$636	-
	Field.....	30,406	14,725	-
11	Total personnel compensation.....	31,642	15,361	-
12	Personnel benefits.....	8,715	4,240	-
	Total, personnel comp. and benefits.....	40,357	19,601	-
Other Objects:				
21.0	Travel and transportation of persons.....	944	136	-
22.0	Transportation of things.....	114	9	-
23.2	Rental payments to others.....	1,521	281	-
23.3	Communications, utilities, and misc. charges.....	981	1,279	-
24.0	Printing and reproduction.....	33	-	-
25.2	Other services from non-Federal sources.....	5,153	1,402	\$1,032
26.0	Supplies and materials.....	892	44	-
31.0	Equipment.....	762	12	-
42.0	Insurance and loans.....	6	-	-
	Total, Other Objects.....	10,406	3,163	1,032
99.9	Total, new obligations.....	50,763	22,764	1,032



**NATURAL RESOURCES CONSERVATION SERVICE  
RESOURCE CONSERVATION AND DEVELOPMENT PROGRAM**

**STATUS OF PROGRAM**

**Current Activities.**

**Background.** The Resource Conservation and Development (RC&D) Program was initiated under the Soil Conservation and Domestic Allotment Act, (16 U.S.C. 590a-590f), the Bankhead-Jones Farm Tenant Act, (16 U.S.C. 1010 and 1011), and the Food and Agriculture Act of 1962, and is authorized under subtitle H, title XV of the Agriculture and Food Act of 1981, (16 U.S.C. 3451-3461), as amended. The Food Security and Rural Investment Act of 2002 (2002 Act) permanently authorized the program. The Natural Resources Conservation Service (NRCS) administered the program until April 2011. The program did not receive appropriated funding in 2011 or 2012.

**Program Objectives.** The RC&D Program encourages and improves the capability of State and local units of government and non-profit organizations in rural areas to plan, develop, and implement programs for resource conservation and development. NRCS provided program administration and assistance to RC&D areas through volunteer non-profit RC&D Councils. Other USDA agencies provide technical and limited financial assistance to RC&D Councils. The Councils also obtain assistance from State, local, and Federal agencies, private organizations, and foundations to carry out specific projects.

**2011 Activities.**

In 2011, RC&D councils and their partners helped create 79 new businesses, expand 382 businesses, retain 773 businesses, and assist 396 businesses financially with carryover funds, thus supporting the Administration's emphasis on rebuilding the economy. Nationally, an estimated 2,274 jobs were created and 1,417 jobs retained through area projects. In addition, RC&D Councils assisted 117 farm and ranch operations with agri-tourism activities and 124 farms and ranches with direct marketing from the field to the consumer via community supported agriculture groups, restaurants, commercial stores, and public access farmers markets thus helping the rural sector.

Through more than 520 workshops, tours, and seminars nationwide on agriculture, aquaculture, forestry, and wildlife, and over 2,253 training sessions on leadership development, grant writing, business development, non-profit management, and environmental education, RC&D leveraged resources to help nearly 41,361 people develop new skills. RC&D councils also obtained over \$49,326,000 in external grant funds.

In 2011 RC&D efforts were also instrumental in benefiting natural resources, RC&D projects created, protected or improved about 44,327 acres of wildlife habitat, 7,400 acres of lakes and other water bodies, and 357 miles of streams. RC&D Councils assisted over 729 animal agricultural operations with water quality projects; assisted with the construction or rehabilitation of three flood control structures; and preserved or protected over 213,746 acres of agricultural land. RC&D Councils in two States implemented renewable energy projects.

**Get Conservation on the Ground.**

**Colorado: Community Energy Audits.** The East Central Colorado RC& D provided funding through an energy audit equipment grant to provide a low-cost energy audit services for rural citizens in the East Central Colorado region. Grant funds provided for the purchase of equipment to conduct home/small business energy audits. The council provided training funds for a local community energy coordinator (CEC). As a result, rural residents have reliable, local, low-cost access to energy auditing services. Working locally, residents are more easily able to participate in "Recharge Colorado" activities, a local initiative that encourages energy efficiency projects, and receive rebates provided through the Colorado Governor's Energy Office.

**Nebraska: Community Garden.** The Prairie Land RC&D assisted a local church in the development of a community garden intended to support community involvement, to manage natural resources and urban green space, and to promote healthy eating. The Columbus Community Garden project gave 27 gardeners and their families the opportunity to produce and enjoy their own locally grown vegetables. The gardeners represent a cross section of Columbus' ethnically diverse community.



NATURAL RESOURCES CONSERVATION SERVICE  
HEALTHY FORESTS RESERVE PROGRAM

Project Statement  
(On basis of obligations)  
(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>	
	Staff		Staff		Staff		Staff	
	Amount	Years	Amount	Years	Amount	Years	Amount	Years
Discretionary Obligations:								
Healthy Forest Reserve Program								
Technical Assistance.....	\$78	1	\$32	-	-	-	-	-
Financial Assistance.....	251	-	833	-	\$3	-	-\$3	-
Total Obligations.....	329	1	865	-	3	-	-3	-
Bal. Available, EOY.....	866	-	4	-	-	-	-	-
Total Available.....	1,195	1	869	-	3	-	-3	-
Bal. Available, SOY.....	-1,195	-	-866	-	-4	-	4	-
Recoveries, Other (Net).....	-	-	-3	-	1	-	-1	-
Total Appropriation.....	-	-	-	-	-	-	-	-

Note: The 2008 Farm Bill provides \$9,750,000 in 2011 and \$9,750,000 in 2012 in mandatory funds. For this program see the Farm Bill Project Statement. Funds available in this account are from Title V of the Healthy Forests Restoration Act of 2003 (Public Law 108-148) authorized the establishment of the Healthy Forests Reserve Program(HFRP), amended by the Food, Conservation and Energy Act of 2008 (The 2008 Act), Public Law, 110-246.

NATURAL RESOURCES CONSERVATION SERVICE  
HEALTHY FORESTS RESERVE PROGRAM

Geographic Breakdown of Obligations and Staff Years  
(On basis of obligations)  
(Dollars in thousands)

State/Territory	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>	
	Staff		Staff		Staff		Staff	
	Amount	Years	Amount	Years	Amount	Years	Amount	Years
California.....	\$25	-	-	-	-	-	-	-
Indiana.....	8	-	-	-	-	-	-	-
Kentucky.....	25	1	-	-	-	-	-	-
Maine.....	6	-	\$4	-	-	-	-	-
Michigan.....	2	-	5	-	-	-	-	-
Minnesota.....	1	-	-	-	-	-	-	-
Ohio.....	8	-	4	-	-	-	-	-
Oregon.....	250	-	833	-	-	-	-	-
Pennsylvania.....	4	-	19	-	-	-	-	-
Undistributed.....	-	-	-	-	\$3	-	-\$3	-
Obligations.....	329	1	865	-	3	-	-3	-
Bal. Available, EOY.....	866	-	4	-	-	-	-	-
Total, Available.....	1,195	1	869	-	3	-	-3	-

NATURAL RESOURCES CONSERVATION SERVICE  
HEALTHY FORESTS RESERVE PROGRAM

Classification by Objects

(Dollars in thousands)

		2010	2011	2012
		<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>
Personnel Compensation:				
	Field.....	\$55	\$19	-
11	Total personnel compensation.....	55	19	-
12	Personal benefits.....	15	7	-
	Total, personnel comp. and benefits.....	70	26	-
Other Objects:				
21.0	Travel and transportation of persons.....	1	-	-
23.2	Rental payments to others.....	-	3	-
25.4	Operation and maintenance of facilities.....	-	3	-
26.0	Supplies and materials.....	2	-	-
31.0	Equipment.....	5	-	-
32.0	Land and structures.....	251	833	\$3
	Total, Other Objects.....	259	839	3
99.9	Total, new obligations.....	329	865	3

NATURAL RESOURCES CONSERVATION SERVICE  
 WATER BANK PROGRAM  
Lead-Off Tabular Statement

Appropriations Act, 2012.....	\$7,500,000
Budget Estimate, 2013.....	-
Change from 2012 Appropriation.....	<u><u>-7,500,000</u></u>

Note: 2012 funds were provided through General Provision 748 of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act 2012.

Summary of Increases and Decreases  
 (On basis of appropriation)  
 (Dollars in thousands)

	2010 Actual	2011 Change	2012 Change	2013 Change	2013 Estimate
Discretionary Appropriations:					
Water Bank.....	-	-	+ \$7,500	-\$7,500	-
Total Available.....	-	-	+ 7,500	-7,500	-

NATURAL RESOURCES CONSERVATION SERVICE  
WATER BANK PROGRAM

Project Statement by Program  
(On basis of appropriations)  
(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>		<u>2013 Estimate</u>	
	Staff		Staff		Staff		Staff		Staff	
	Amount	Years	Amount	Years	Amount	Years	Amount	Years	Amount	Years
Discretionary Appropriations:										
Water Bank Program:										
Technical Assistance.....	-	-	-	-	\$525	4	-\$525	-4	-	-
Financial Assistance.....	-	-	-	-	6,975	-	-6,975	-	-	-
Total Appropriation.....	-	-	-	-	7,500	4	-7,500 (1)	-4	-	-
Total Available.....	-	-	-	-	7,500	4	-7,500	-4	-	-
Total Obligations.....	-	-	-	-	7,500	4	-7,500	-4	-	-

NATURAL RESOURCES CONSERVATION SERVICE  
WATER BANK PROGRAM

Project Statement by Program  
(On basis of obligations)  
(Dollars in thousands)

Program	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>		<u>2013 Estimate</u>	
	Staff		Staff		Staff		Staff		Staff	
	Amount	Years	Amount	Years	Amount	Years	Amount	Years	Amount	Years
Discretionary Obligations:										
Water Bank Program:										
Technical Assistance.....	-	-	-	-	\$525	4	-\$525	-4	-	-
Financial Assistance.....	-	-	-	-	6,975	-	-6,975	-	-	-
Total Obligations.....	-	-	-	-	7,500	4	-7,500	-4	-	-
Total Available.....	-	-	-	-	7,500	4	-7,500	-4	-	-
Total Appropriation.....	-	-	-	-	7,500	4	-7,500	-4	-	-

NATURAL RESOURCES CONSERVATION SERVICE  
WATER BANK PROGRAM

**Justification of Increases and Decreases**

(1) A decrease of \$7,500,000 and 4 staff years for the Water Bank Program (\$7,500,000 and 4 staff years available in 2012):

- a. The 2013 Budget proposes no funding for this program.

NATURAL RESOURCES CONSERVATION SERVICE  
WATER BANK PROGRAM

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

State/Territory	2010 Actual		2011 Actual		2012 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Undistributed.....	-	-	-	-	\$7,500	4
Obligations.....	-	-	-	-	7,500	4
Total, Available.....	-	-	-	-	7,500	4

NATURAL RESOURCES CONSERVATION SERVICE  
WATER BANK PROGRAM

Classification by Objects  
(Dollars in thousands)

	2010 Actual	2011 Actual	2012 Estimate
Personnel Compensation:			
Field.....	-	-	\$250
11 Total personnel compensation.....	-	-	250
12 Personal benefits.....	-	-	84
Total, personnel comp. and benefits..			334
Other Objects:			
25.2 Other services .....	-	-	191
32.0 Land and structures.....	-	-	6,975
Total, Other Objects.....	-	-	7,166
99.9 Total, new obligations.....	-	-	7,500

NATURAL RESOURCES CONSERVATION SERVICE  
FARM SECURITY AND RURAL INVESTMENT PROGRAMS

Current Estimate, Food, Conservation, and Energy Act for 2012.....	\$3,546,959,178
Budget Estimate, 2013.....	<u>3,280,140,000</u>
Change.....	<u>-266,819,178</u>

Conservation programs included in this account are listed in the project statement below. The Food, Conservation and Energy Act of 2008, (P.L. 110-246) program funding authorization will continue from the Commodity Credit Corporation.

**Project Statement - Current Law**  
**(On basis of authorized level)**  
**(Dollars in thousands)**

Program	2010 Actual		2011 Actual		2012 Estimate		Increase or Decrease	2013 Estimate c/	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
Wetlands Reserve Program.....	\$630,139	217	\$569,014	269	\$707,117	431	-\$482,810	\$224,307	311
Environmental Quality									
Incentives Program .....	1,174,039	2,407	1,230,878	2,598	1,400,000	2,913	+3,000	1,403,000	2,845
Agricultural Water									
Enhancement Program.....	72,160	65	73,391	79	60,000	66	-	60,000	64
Wildlife Habitat									
Incentives Program .....	82,926	126	83,472	147	50,000	88	+23,000	73,000	126
Farm and Ranch Lands									
Protection Program.....	149,896	29	168,714	26	150,000	24	+50,000	200,000	31
Conservation Security									
Program.....	222,169	154	198,871	134	197,085	128	-14,465	182,620	119
Conservation Stewardship									
Program.....	389,813	496	577,804	470	768,500	486	+203,598	972,098	603
Grasslands Reserve Program....	100,108	28	77,945	28	66,737	24	-62,122	4,615	16
Agricultural Management									
Assistance a/.....	7,250	12	7,469	11	2,500	4	-	2,500	4
Chesapeake Bay									
Watershed Program b/.....	44,036	85	72,560	97	51,676	68	-1,676	50,000	65
Healthy Forests									
Reserve Program b/.....	7,617	6	17,046	14	13,344	15	-13,344	-	-
Conservation Reserve									
Program.....	59,563	529	122,847	937	80,000	602	+28,000	108,000	789
Subtotal, Food, Conservation									
And Energy Program.....	2,939,716	4,154	3,200,010	4,810	3,546,959	4,849	-266,819	3,280,140	4,973
Reimbursable.....	12,926	6	17,211	16	19,588	21	-	19,588	21
Total, Food, Conservation									
And Energy Program .....	2,952,642	4,160	3,217,221	4,826	3,566,547	4,870	-266,819	3,299,728	4,994

a/ The Food, Conservation and Energy Act of 2008 authorizes \$15 million in Agricultural Management Assistance for 2012. The Act authorizes half of that funding for NRCS, or \$7.5 million. This funding was reauthorized in the Agriculture, Rural Development, Food and Drug Administration and Related Appropriations Act of 2012. A proposed savings of \$5 million in 2013 reduces the total authorized level to \$10 million and NRCS' portion to \$2.5 million, as the entire savings is applied to NRCS.

b/ Includes carryover.

c/ Subject to reauthorization.

NATURAL RESOURCES CONSERVATION SERVICE  
FARM SECURITY AND RURAL INVESTMENT PROGRAMS

Statement of Program

Output Metrics	Performance Targets			
	2010 Actual	2011 Estimate	2012 Target	2013 Target
<b>Wetlands Reserve Program</b>				
Wetlands Created, restored or enhanced, thousand acres	129.1	131.8	175	75
<b>Environmental Quality Incentives Program</b>				
Cropland with conservation applied to improve soil quality, million acres	4.8	4.6	4.8	4.8
<b>Wildlife Habitat Incentives Program</b>				
Non-Federal land with conservation applied to improve fish and wildlife habitat quality, millions of acres	0.9	1.3	0.7	1.1
<b>Farm and Ranch Lands Protection Program</b>				
Prime, unique, and important farmland protected from conversion to nonagricultural uses by conservation easements, thousand acres	53.9	51.5	45	60

NATURAL RESOURCES CONSERVATION SERVICE  
**FARM SECURITY AND RURAL INVESTMENT PROGRAMS**  
 Geographic Breakdown of Obligations  
 2011 Actual  
 (Dollars in thousands)

	<u>WRP</u>	<u>CRP</u>	<u>EQIP</u>	<u>CSP</u>	<u>WHIP</u>	<u>FRPP</u>	<u>Cons. Sec. Program</u>	<u>AWEP</u>	<u>GRP</u>	<u>CBWP</u>	<u>HFRP</u>	<u>AMA a/</u>
ALABAMA.....	\$10,716	\$1,996	\$20,086	\$6,062	\$4,517	\$129	\$1,377	\$970	\$76	-	-	-
ALASKA.....	57	58	10,127	1,593	3,657	5	51	-	8	-	-	-
ARIZONA.....	80	-	22,730	6,297	976	22	260	-	56	-	-	-
ARKANSAS.....	12,663	796	34,807	23,351	1,145	7	3,894	2,046	65	-	\$9	-
CALIFORNIA.....	36,829	358	90,103	7,970	4,378	3,280	3,131	21,269	154	-	707	-
COLORADO.....	1,732	3,663	35,162	21,566	688	8,584	3,131	1,209	168	-	-	-
CONNECTICUT.....	101	2	7,790	161	1,418	6,551	63	-	148	-	-	\$58
DELAWARE.....	419	96	6,667	616	144	5,068	481	-	12	\$4,228	-	72
FLORIDA.....	101,096	238	24,230	2,191	1,071	5,195	109	1,067	537	-	-	-
GEORGIA.....	9,744	1,148	19,776	21,244	7,460	831	2,556	1,739	69	-	2,539	-
HAWAII.....	140	128	9,444	220	147	653	363	-	118	-	-	151
IDAHO.....	2,709	1,145	18,059	5,750	721	1,221	11,171	5,045	4,628	-	-	-
ILLINOIS.....	7,497	10,064	16,389	13,524	385	12	6,904	37	103	-	-	-
INDIANA.....	15,381	6,882	24,135	6,505	823	9	5,860	1,356	67	-	1,595	-
IOWA.....	37,383	7,154	33,630	33,662	536	1	17,577	163	383	-	-	-
KANSAS.....	4,973	6,536	30,648	32,536	1,952	424	7,103	5,034	230	-	-	-
KENTUCKY.....	8,649	2,087	15,612	2,240	1,000	2,203	342	-	164	-	1,497	-
LOUISIANA.....	43,567	439	21,283	14,408	2,595	-	251	-	71	-	-	-
MAINE.....	514	138	14,228	777	3,017	2,167	601	-	16	-	12	2,349
MARYLAND.....	7,204	722	9,452	1,250	313	2,531	2,453	-	18	14,546	-	149
MASSACHUSETTS.....	3,846	53	8,531	143	1,587	5,681	62	-	15	-	-	476
MICHIGAN.....	3,842	1,398	21,631	7,151	741	2,123	5,305	3,519	90	-	174	-
MINNESOTA.....	28,164	7,986	33,296	41,251	595	1,208	5,064	1,167	15	-	-	-
MISSISSIPPI.....	22,880	4,538	33,707	15,261	2,001	-	319	3,267	116	-	93	-
MISSOURI.....	17,218	7,332	37,002	26,225	722	146	23,033	-	244	-	-	-
MONTANA.....	2,095	1,640	26,262	26,853	385	6,516	8,661	538	143	-	-	-
NEBRASKA.....	14,381	3,460	30,210	36,655	674	1,518	8,922	5,415	95	-	-	-
NEVADA.....	3,533	3	10,264	591	779	31	236	-	51	-	-	124
NEW HAMPSHIRE.....	3,172	-	5,181	101	1,252	2,539	25	-	53	-	-	43
NEW JERSEY.....	1,206	162	6,807	170	497	8,371	120	177	14	-	-	409
NEW MEXICO.....	1,596	602	28,185	12,807	1,008	814	1,077	219	136	-	-	-
NEW YORK.....	4,719	348	17,380	4,206	1,141	5,781	830	438	181	3,779	-	795
N CAROLINA.....	8,042	1,097	21,329	2,206	1,543	2,511	868	125	11	-	-	-
N DAKOTA.....	34,200	3,037	23,083	34,107	1,176	11	7,320	2,944	124	-	-	-
OHIO.....	7,390	2,794	16,723	4,444	399	12,115	12,674	-	161	-	125	-
OKLAHOMA.....	8,896	2,722	30,124	29,744	420	63	3,943	1,243	225	-	3,734	-
OREGON.....	4,894	1,147	20,184	12,733	1,286	7	20,127	3,025	61	-	5,126	-
PENNSYLVANIA.....	8,891	1,280	19,481	5,468	927	4,345	1,272	-	89	22,846	94	917

	<u>WRP</u>	<u>CRP</u>	<u>EOIP</u>	<u>CSIP</u>	<u>WHIP</u>	<u>FRPP</u>	<u>Program</u>	<u>AWEP</u>	<u>GRP</u>	<u>CBWP</u>	<u>HRFP</u>	<u>AMA a/</u>
PUERTO RICO.....	-	-	6,432	65	131	-	85	-	-	-	-	-
RHODE ISLAND.....	196	-	4,335	114	600	4,299	39	-	21	-	-	71
S CAROLINA.....	7,949	791	11,499	4,955	3,315	2,727	1,972	-	52	-	1,207	-
S DAKOTA.....	20,573	3,428	21,138	29,310	1,049	1	2,431	283	607	-	-	-
TENNESSEE.....	18,974	1,046	15,077	3,383	1,727	5	1,097	-	123	-	-	-
TEXAS.....	16,994	6,290	106,202	21,347	11,835	2,963	1,309	6,046	1,460	-	-	-
UTAH.....	1,617	1,109	22,258	2,548	557	1,007	2,451	-	228	-	-	311
VERMONT.....	583	88	12,922	88	1,527	3,201	75	-	23	-	-	314
VIRGINIA.....	1,205	837	15,386	4,849	984	963	803	-	197	19,246	-	-
WASHINGTON.....	1,352	1,396	17,730	12,275	545	1,767	5,252	832	59	-	-	-
WEST VIRGINIA.....	773	109	10,158	2,195	1,273	2,587	281	-	80	5,899	-	441
WISCONSIN.....	9,019	2,846	22,339	12,494	495	822	4,259	-	89	-	-	-
WYOMING.....	1,510	656	18,778	7,545	834	53,365	1,890	834	1,164	-	-	788
NATIONAL HDQTR.....	7,159	19,163	81,643	12,377	3,872	2,332	5,616	2,975	64,930	1,692	130	-
CENTERS.....	693	1,839	11,244	2,219	651	-	1,010	406	-	323	4	-
FY 2011 Total	569,014	122,847	1,230,878	577,804	83,472	168,714	198,871	73,391	77,945	72,560	17,046	7,469
Obligations.....												

a/ AMA actuals include only those AMA obligations made by NRCS.

NATURAL RESOURCES CONSERVATION SERVICE  
FARM SECURITY AND RURAL INVESTMENT PROGRAMS

Summary of Increases and Decreases – Proposed Legislation  
(Dollars in thousands)

<u>Item of Change</u>	2013		
	<u>Current Estimate</u>	<u>Program Changes</u>	<u>President's Request</u>
Farm Security and Rural Investment Programs <sup>a/</sup> ....	\$3,172,140	-\$100,000	\$3,072,140

Explanation of Proposed legislation:

The 2013 budget reflects the President's Plan for Economic Growth and Deficit Reduction. The Administration remains committed to a strong safety net for farmers and will continue its efforts to strengthen aspects of the safety net such as crop insurance and disaster assistance. The President's plan reduces the deficit by \$32 million over ten years by eliminating direct farm payments, decreasing subsidies to crop insurance companies, and better targeting conservation funding to high priority areas. To reduce the deficit, the budget proposes to reduce conservation funding by roughly \$2 billion in budget authority over 10 years by better targeting conservation funding to the most cost-effective and environmentally beneficial programs and practices, while preserving the most important agricultural conservation programs. The President's plan would impact the Environmental Quality Incentives Program: part of these overall savings is achieved by reducing annual expenditures by \$100 million per year from currently authorized levels. This proposal is expected to save about \$1 billion in budget authority over 10 years.

<sup>a/</sup> Does not include Conservation Reserve Program funding or Agricultural Management Assistance Funding authorized for other agencies.

**COMMODITY CREDIT CORPORATION  
FOOD, CONSERVATION, AND ENERGY ACT OF 2008**

**WETLANDS RESERVE PROGRAM  
STATUS OF 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 by the Food, Agriculture, Conservation and Trade Act of 1990 (P.L. 101-624), 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 (P.L. 110-246), to assist owners in restoring and protecting wetlands. WRP is funded by the Commodity Credit Corporation (CCC) and administered by the Natural Resources Conservation Service (NRCS).

WRP is a voluntary program that provides 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 addresses 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 achieves 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 offers landowners an opportunity to establish, at minimal cost, long-term conservation and wildlife habitat enhancement practices and protection.

The goal of WRP 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. Wetlands provide a variety of important environmental services that are increasingly valued by society. These include 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.

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, WRP focuses on: enrolling marginal lands that have a history of crop failures or low production yields; restoring and protecting wetland values on degraded wetlands; maximizing wildlife benefits; achieving cost-effective restoration with a priority on benefits to migratory birds; protecting and improving water quality; reducing the impact of flood events; increasing ecosystem resilience; and promoting scientific and educational uses of WRP projects.

Under WRP, at least 70 percent of the wetlands and associated habitats are restored to their original condition to the extent practicable; the remaining 30 percent of the project area may 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 allows NRCS to implement projects that meet landowner objectives, address specific species or habitat needs, and maximize wildlife and environmental benefits.

**Eligibility.** WRP is available in all 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands of the United States, 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 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 duration of less than 30 years.

**Financial Assistance.** WRP provides landowners four methods to enroll acreage:

- **Permanent easement:** Easement duration is in perpetuity. Participants are provided an easement payment after the easement is filed. The payment is for 100 percent of the value of the land, with compensation determined as the lowest of: 1) the value determined through an appraisal or area-wide market survey, 2) a geographic cap, or 3) landowner offer. In addition, NRCS pays up to 100 percent of the eligible restoration costs.
- **30-year easement:** Easement duration is 30 years. Landowners receive an easement payment after the easement is filed that is equivalent to 75 percent of the value for a permanent easement; landowners also receive up to 75 percent of the eligible restoration costs.
- **Restoration cost-share agreement:** Restoration cost-share agreements are made available to participating landowners as an alternative mechanism to restore wetlands without requiring the landowner to enroll the land as an easement. Agreements are generally for a 10-year period, although longer agreement periods may be required for unique projects that are funded at a higher level. There is no easement payment; however, NRCS pays up to 75 percent of the eligible restoration costs.
- **30-year contract:** Acreage owned by Indian Tribes can also be enrolled through the use of a 30-year contract that is equivalent in value to a 30-year easement.

**Technical Assistance.** 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 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 dependant wildlife or other desired ecosystem services.

**Data Adjustments.** In 2010, the new National Easement Staging Tool (NEST) database was deployed. NEST is the official data tracking tool for easement programs data; however, it does not serve as a substitute for the Foundation Financial Information System (FFIS), which is the official NRCS financial tracking system. Easement program data in NEST is undergoing an intense quality assurance review process in order to improve the overall quality and accuracy of data. During the review process, data will continually be updated to ensure completeness.

**WRP Partnership Activities.** In 2011, NRCS significantly expanded partnership efforts with conservation entities and agencies. NRCS entered into more than 130 cooperative and contribution agreements with a focus on completing the restoration and monitoring of existing WRP easements. Through these agreements, federal funds are being leveraged with conservation partners providing an average of 25 percent matching funds. The partners include an array of conservation organizations including non-governmental organizations such as Ducks Unlimited, California Waterfowl Association, The Nature Conservancy, Wisconsin Waterfowl Association, Mississippi Fish and Wildlife Foundation, the California Waterfowl Association, Mississippi River Trust, and the Audubon Society; along with numerous local and State wildlife agencies, the Department of the Interior's Fish and Wildlife Service, and other conservation partners. Others contributing technical expertise to the delivery of WRP include the National Association of Conservation Districts, State associations of conservation districts, U.S. Forest Service, local conservation districts, and technical service providers. These agreements will supplement NRCS's capacity to expedite restoration implementation and to ensure annual monitoring is conducted. Both of these activities help guarantee the public and natural resource benefits of WRP are fully realized and maintained.

#### **2011 Activities.**

**WRP Acreage.** Enrolled acres are the specific controlling factor for WRP. 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 or in the case of restoration cost-share agreements, when both the landowner and

NRCS execute the restoration contract documents. Funds are obligated for the easement or contract. Funds needed for enrollment of new acres in a given year are determined by projecting the number of acres by enrollment option (i.e. permanent easements, 30-year easements, 30-year contracts, cost share agreements) and the geographic rate cap for the location of the acres to be enrolled.

In 2011, NRCS enrolled a total of 200,186 acres in 1,139 new WRP enrollments. The majority were in easements (139,904 acres in 708 permanent easements and 59,230 acres in 414 30-year easements). The average project size was 176 acres, compared with 193 acres in 2010. Also during 2011, NRCS created, restored, and enhanced 131,793 acres of wetlands.

<b>Agreement Type</b>	<b>2011 Agreements</b>	<b>2011 Acres Enrolled</b>
30-year agreement (with tribes)	1	89
Restoration cost-share agreement	16	963
30-year easement	414	59,230
Permanent easement	708	139,904
<b>Total</b>	<b>1,139</b>	<b>200,186</b>

Once enrollment has occurred, NRCS proceeds with acquisition activities such as obtaining title review and 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 3 to 5 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 2,495,128 acres; this excludes cancelled, terminated or expired enrollment transactions. In 2011, NRCS closed easements on 210,419 acres through 1,218 easement transactions, including 415 30-year easements on 52,357 acres and 803 permanent easements on 158,062 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	10,020	1,947,154
Enrolled 30-year Easements	2,582	421,237
Restoration Cost-Share Agreement	866	123,479
30-Year Contract with tribes	17	3,258
<b>Total</b>	<b>13,485</b>	<b>2,495,128</b>
<b>Agreement Type</b>	<b>Cumulative Easements</b>	<b>Cumulative Acres</b>
Closed Permanent Easements	8,849	1,707,926
Closed 30-Year Easements	1,947	335,092
<b>Total</b>	<b>10,796</b>	<b>2,043,018</b>

<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 varies from vernal pools to bottomland hardwood forests, to prairie potholes, 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 types accounts for the 84 percent of the acreage enrolled in WRP, while the remaining 16 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. Over 84 percent of the acres enrolled in WRP are converted but restorable habitats, while the remaining 16 percent is existing habitat that is protected and further improved by the WRP restoration efforts.

**Initiatives and Partnership Projects.** NRCS has 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. In 2011, WRP was a key tool in delivering conservation benefits to these initiative efforts.

- In 2011, NRCS created the Red River Initiative (RRI) to provide \$10 million in WRP funds to restore wetlands and associated uplands in order to retain and slow floodwaters in the Red River Valley Watershed. The RRI included portions of Minnesota, North Dakota and South Dakota where more than 80 percent of the restorable wetlands are privately owned. Many partners, including local Conservation Districts, Watershed Districts, Water Boards and the new Red River Retention Authority (RRRA) provided assistance by conducting outreach and establishing priorities to focus enrollments in areas with the highest potential to reduce peak flows and maximize conservation benefits for each dollar spent. As a result, all high priority applications were funded, and they were funded at a lower cost than was originally anticipated. Over 7,800 acres were enrolled for \$7.8 million.
- In 2011, NRCS continued its efforts through the Migratory Bird Habitat Initiative (MBHI). MBHI, initiated in 2010 in response to the Gulf Oil Spill, provides additional food and habitat resources for migratory waterfowl and waterbirds. MBHI provided funds to restore or enhance 76,502 acres on 350 existing WRP easements in Arkansas, Louisiana, Mississippi, and Missouri. In 2011, the initial results of Mississippi State University's three year study commissioned by NRCS to quantify the impacts of MBHI on migrating and wintering waterbirds were issued. Results showed MBHI activities increased food, habitat, and survival of waterfowl and other waterbirds. Of additional significance is the finding that many of these benefits were provided during a period of severe drought when waterfowl and waterbirds would have been even more negatively affected by oiled coastal wetlands if alternative wetlands and food resources had not been available.
- In 2011, NRCS targeted WRP funds to address critical habitat needs identified in the Sage Grouse Initiative (SGI). SGI focuses on restoring and protecting critical wet meadow brood rearing habitat vital to Sage Grouse survival and averting a potential listing of the bird under the Endangered Species Act. In a short period of time, SGI has generated unprecedented support and participation from landowners in Nevada. The number of Nevada's wetland acres protected by WRP easements increased 20 times with the enrollment of 3,695 acres in 2011. An additional 6,296 acres are awaiting enrollment in 2012. All easements are targeted in areas of high sage-grouse abundance and maximize the biological returns on the investment. Until WRP easements were offered as part of SGI, Nevada had enrolled only 190 acres in a single WRP easement.

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

**Florida: Large Contiguous Easement Offers Multiple Benefits.** In 2011, NRCS demonstrated its continued commitment to restoring and protecting wetlands in the critically important Northern Everglades Watershed providing \$100 million in WRP funds and enrolling an additional 23,000 acres in the watershed. These efforts complement the 26,000 acres that were enrolled in WRP in 2010 along Fisheating Creek. The wetland restoration will slow runoff and reduce the concentration of nutrients entering the public water management system, Lake Okeechobee and the Everglades. The restoration efforts will also enable Florida to manage Lake Okeechobee water levels to mimic natural conditions, making it less likely to require large releases of water that damage the region's productive estuaries. The WRP efforts in the Northern Everglades Watershed help connect public and private lands and are forming a conservation corridor from the Kissimmee River to Everglades National Park. These WRP projects also provide the large open spaces, food resources, and connectivity needed by wide-ranging animals like the Florida Black Bear, Whooping Crane, and Florida Panther, along with other numerous rare and imperiled species documented on the enrolled areas. Working with conservation partners and others, NRCS helps communities find local solutions to natural resource issues such as protecting a large-scale ecosystem like the Northern Everglades. WRP is helping improve watershed health, the vitality of agricultural lands, and the economies of local communities.

## ENVIRONMENTAL QUALITY INCENTIVES PROGRAM

### **Current Activities.**

**Background.** Section 2503 of the Food, Conservation and Energy Act of 2008 (the 2008 Act) (P.L. 110-246) re-authorized and amended the Environmental Quality Incentives Program (EQIP) (16 U.S.C. 3839aa), created by the Food Security Act of 1985 as amended by the Federal Agriculture Improvement and Reform Act of 1996 (P. L. 104-127, April 4, 1996) and the Farm Security and Rural Investment Act of 2002 (P.L. 107-171, May 13, 2002). The Commodity Credit Corporation (CCC) funds EQIP.

**Program Objectives.** America faces serious environmental challenges which financial and technical assistance delivered through EQIP can help address. Federal, tribal, State and private lands face risks to the long-term sustainability of our natural resources and pressing environmental concerns. For example, climate change poses multiple challenges to agriculture: changing growing conditions for producers, new opportunities for production of climate-friendly renewable fuels, and the desire on the part of many producers to reduce greenhouse gas emissions. To meet these challenges, EQIP promotes the voluntary application of farming and other land use practices that maintain or improve the condition of soil, water, air, and other natural resources. The program assists agricultural producers in identifying natural resource issues and opportunities to improve their agricultural operation and provides technical and financial assistance to address them in an environmentally beneficial and cost-effective manner.

EQIP promotes practices to meet a variety of environmental and natural resource challenges. In the Mississippi River Basin and the Chesapeake Bay Watershed, EQIP practices reduce nutrients and sediment to improve water quality and habitat for fish and wildlife. EQIP-promoted practices address water quantity and quality concerns in the Ogallala Aquifer, combating declining water tables affecting eight States, including Colorado, South Dakota, Nebraska, Wyoming, Kansas, Oklahoma, New Mexico and Texas. EQIP-promoted practices reduce the threat to the habitat of Endangered Species Act Candidates such as Sage Grouse and Lesser Prairie Chicken and provide critical habitat for migratory birds to offset losses due to oil damage from the Deepwater Horizon well.

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

- Flexible technical and financial assistance to farmers and ranchers that face the most serious threats to soil, water, air, and related natural resources;
- 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 2008 Act also added energy conservation as a national priority. After an extensive effort to invite input from the public, agricultural and environmental organizations, Conservation Districts, agencies, and other partners, NRCS established 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; and
- Promotion of at-risk species habitat conservation.

**Eligibility.** To participate in EQIP, both the land and the applicant must be eligible. Eligible land includes cropland, rangeland, pastureland, private nonindustrial forestland, 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 or natural hazard. Publicly-owned land is eligible when the land is under private control for the contract period, and 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. Applications are accepted year round at local USDA Service Centers, but there are ranking cut-off dates that vary by State.

**Technical Assistance.** NRCS works with the participant to develop the EQIP plan of operations that 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 a certified technical service provider (TSP) who develops a conservation plan for the offered acres initially determined eligible. The plan identifies the conservation practices and activities that will be implemented through EQIP.

Installation of conservation practices and systems must contribute to an improvement in the identified natural resource concern. Conservation practices include structural practices, land management practices, vegetative practices, forest management practices, and other improvements that achieve the program purposes. EQIP activities may also 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. These plans 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. Contracts are for a minimum term that ends one year after the implementation of the last scheduled practices and for a maximum term of ten years.

Total conservation payments are limited to \$300,000 in financial assistance per person or legal entity between 2009 through 2014 regardless of the number of farms or contracts. A waiver of the \$300,000 payment limit may be granted by the NRCS Chief for projects of special environmental significance that will result in significant environmental improvements as determined by NRCS policy. The payment limitation for these contracts of special environmental significance may be extended up to \$450,000.

**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, local conservation districts in efforts to deliver a program beneficial to program participants and the environment, and others. 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.

The Cooperative Conservation Partnership Initiative (CCPI) is a voluntary conservation initiative that enables the use of EQIP and other conservation programs, combined with resources of eligible partners, to provide financial and technical assistance to agricultural producers. Under CCPI, NRCS enters into partnership agreements with eligible entities that want to enhance conservation outcomes on these lands in an effort to leverage funds to get more conservation benefit. Eligible partners include Federally-recognized Indian tribes, State and local units of government, producer associations, farmer cooperatives, institutions of higher education, and nongovernmental

organizations with a history of working cooperatively with producers. NRCS does not provide funds to the partners but directly to producers to implement the agreed upon conservation practices. Partners provide additional technical or administrative resources to assist with planning, implementation, and/or monitoring of project effectiveness.

### **2011 Activities.**

In 2011, EQIP financial assistance obligations by States were over \$871 million in 38,352 active and completed contracts covering an estimated 13.2 million acres. In addition to regular EQIP projects, these funds also supported projects in resource based initiatives such as air quality, on-farm energy audits, migratory bird habitat, and the Mississippi River Basin, and projects in initiatives, such as organic production, seasonal high tunnels, America's Great Outdoors focus on environmental benefit and agricultural production as compatible goals.

**Air Quality** - In 2011, NRCS provided \$34 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 2011, 830 active and completed contracts supported some 2,842 practices on more than 168,000 acres.

**Energy** - In 2011, NRCS worked to provide financial assistance to more than 414 producers for on-farm energy audits by offering the Agricultural Energy Management Plan (Conservation Activity Plan) through EQIP active and completed contracts. NRCS also supported the implementation of on-farm energy audit recommendations for more than 38 producers throughout the country and encouraged farmers to conserve fuel and reduce greenhouse gases. In partnership with the private sector and other organizations, NRCS is developing technical tools and training to evaluate and reduce agricultural energy consumption through implementation of on-farm energy audit recommendations. NRCS is also working to provide technical assistance to help producers adapt plants and practices for better energy efficiency and on-farm energy production.

**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 2011, NRCS obligated nearly \$23 million in EQIP funds through 1,667 active and completed contracts which support 8,998 practices in order to treat 95,578 acres in organic production or in transition to organic production. The most often prescribed practices include nutrient management, cover crop, pest management, conservation crop rotation, and prescribed grazing. Each of these conservation practices has specific environmental benefits, especially when applied as a complete system of practices. One critical benefit is sustaining the natural physical, biological, and chemical properties of the soil, which is vital to organic production. The seasonal high tunnel interim practice is also one of the most prescribed practices in the Organic Initiative. As an interim practice, NRCS is conducting a three-year evaluation on the environmental benefit of the practice.

**Strategic Watershed Action Teams.** In 2011, NRCS committed \$18 million in EQIP technical assistance to fund Strategic Watershed Action Teams (SWAT) through partnership agreements with nongovernmental organizations (NGOs), state and local units of government, universities, and others able to provide the technical skills and personnel needed. The partnership agreements enabled NRCS to leverage over \$11 million in partner funds, resulting in more than 400 non-federal staff years of technical support over the next three years. The teams will accelerate the conservation practice implementation and increase the number of practices installed, resulting in reductions in sediment and nutrient loading in targeted water bodies, improvements to habitat for threatened and endangered species, and restoration of critical habitat and ecosystems in decline. For example, in New England, SWAT funding is anticipated to increase EQIP's contribution to the protection and restoration of forest ecosystems by 30 percent over current levels, reducing soil erosion by 41,000 tons, and decreasing the sediment and phosphorus reaching Lake Champlain by 26,000 tons and 39,000 pounds, respectively.

EQIP is highly popular among producers, and demand for the program is high across the country. Nationally, slightly over 68 percent of qualifying projects (valid applications) were funded in 2011, as the table below shows.

**2011 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 Applications
ALABAMA	3,296	1,384	789	60%	\$11,189	\$8,827,847
ALASKA	260	196	20	91	39,469	789,381
ARIZONA	355	161	7	96	104,302	730,115
ARKANSAS	4,723	1,239	2,363	32	21,688	51,249,145
CALIFORNIA	5,087	1,691	616	70	43,688	26,912,025
COLORADO	1,712	789	288	71	32,966	9,494,068
CONNECTICUT	289	219	2	99	25,342	50,684
DELAWARE	348	137	1	99	35,295	35,295
FLORIDA	1,275	470	25	95	37,771	944,277
GEORGIA	3,071	1,054	469	66	13,642	6,398,171
HAWAII	215	120	25	82	46,737	1,168,417
IDAHO	980	359	269	55	38,364	10,319,884
ILLINOIS	1,836	928	613	53	12,417	7,611,773
INDIANA	1,699	849	474	62	23,209	11,001,169
IOWA	4,145	1,212	1,357	43	20,663	28,039,629
KANSAS	2,934	1,089	1,147	46	20,748	23,797,822
KENTUCKY	2,467	754	580	54	14,848	8,611,818
LOUISIANA	3,077	794	1,108	38	19,653	21,775,167
MAINE	2,093	750	707	46	14,061	9,941,174
MARYLAND	578	226	178	53	28,261	5,030,402
MASSACHUSETTS	592	251	66	76	26,046	1,719,066
MICHIGAN	1,504	624	413	59	31,245	12,904,297
MINNESOTA	2,115	1,132	285	78	21,202	6,042,471
MISSISSIPPI	4,795	2,453	9	100	10,917	98,252
MISSOURI	4,135	1,339	1,243	49	21,960	27,296,223
MONTANA	1,443	562	89	85	34,524	3,072,604
NEBRASKA	4,404	1,076	1,865	32	20,987	39,139,922
NEVADA	212	100	50	61	79,023	3,951,130
NEW HAMPSHIRE	587	290	192	57	11,607	2,228,510
NEW JERSEY	343	198	2	99	24,409	48,818
NEW MEXICO	1,274	479	58	88	45,514	2,639,826
NEW YORK	1,440	365	715	33	37,778	27,010,915
NORTH CAROLINA	1,750	628	11	98	27,419	301,605
NORTH DAKOTA	3,561	1,380	1,429	46	12,812	18,308,579
OHIO	2,430	929	91	90	18,064	1,643,832
OKLAHOMA	5,266	1,293	1,572	42	17,313	27,215,345

State	Total Applications Received	Number of Active and Completed Contracts	Unfunded Valid Applications	Valid Applications Funded Percent	Average Contract Amount	Estimated Unfunded Applications
OREGON	1,313	583	722	55	26,348	6,123,295
PENNSYLVANIA	1,948	445	745	37	29,856	22,242,975
RHODE ISLAND	222	165	0	100	19,586	0
SOUTH CAROLINA	717	330	5	98	26,255	131,273
SOUTH DAKOTA	1,124	661	24	95	23,879	573,089
TENNESSEE	2,552	888	883	45	12,801	11,303,565
TEXAS	8,864	4,163	2,935	53	20,436	59,980,525
UTAH	1,377	367	78	82	43,764	3,413,555
VERMONT	618	373	2	99	24,384	48,769
VIRGINIA	986	336	0	100	34,407	0
WASHINGTON	1,247	455	140	75	28,526	3,993,648
WEST VIRGINIA	1,995	386	423	45	18,378	7,773,998
WISCONSIN	2,405	968	154	84	17,829	2,745,622
WYOMING	861	314	198	57	45,499	9,008,893
PACIFIC BASIN	110	82	16	70	8,465	135,444
CARIBBEAN AREA	556	316	14	96	14,434	202,081
TOTAL	103,186	38,352	25,467	60	27,692	534,026,390

<sup>1</sup>Source: Protracts as of October 1, 2011. Unfunded applications include pre-approved, deferred, eligible, pending, and disapproved. Estimated Value of Unfunded Applications (\$) determined from number of unfunded valid applications multiplied by average contract amount.

### Significant EQIP Accomplishments.

**Conservation Innovation Grants.** The Conservation Innovation Grants (CIG) component of the Environmental Quality Incentives Program (EQIP) provides a competitive grants program that stimulates innovative science based approaches to leveraging Federal investment in environmental enhancement and protection in conjunction with agricultural production. CIG enables NRCS to work with other public and private entities to accelerate transfer and adoption of promising conservation technologies, management systems and innovative approaches to address some of the Nation's most pressing natural resource concerns. CIG projects lead to the transfer of these cutting edge technologies, systems, and approaches into NRCS policy, technical manuals, guides, and references or to the private sector.

In 2011, NRCS awarded nearly \$30 million in CIG for 61 projects representing 40 states and U.S. territories in the Pacific. Grant recipients provide matching funds to CIG bringing the total value of the approved projects to more than \$60 million. In the 2011 CIG application process, projects targeting nutrient, pest and waste management were funded the highest, placing water quality efforts as a priority for CIG.

- National: The 36 projects selected (approximately \$14.9 million) will demonstrate the use of innovative technologies or approaches to address specific natural resource concerns nationwide.
- Chesapeake Bay Watershed: The eight projects selected (approximately \$3.7 million) will demonstrate the use of innovative technologies or approaches to address specific natural resource concerns within the Chesapeake Bay Watershed. These projects will tackle specific deep-rooted agricultural problems that contribute significantly to degraded Chesapeake Bay water quality (e.g., manure/poultry litter nutrient excesses, legacy sediment, and the cumulative effect of small dairies).
- Mississippi River Basin: The eight projects selected (approximately \$3.7 million) will demonstrated the use of innovative technologies or approaches to address specific natural resource concerns within the Mississippi River Basin and address the Mississippi River Basin Healthy Watersheds Initiative objectives to manage and

optimize nutrient management, reduce downstream nutrient loads, maintain agricultural productivity, and enhance wildlife and other ecosystem services.

- Greenhouse Gas (GHG): The nine projects selected (approximately \$7.4 million) will support large-scale demonstration projects to accelerate the adoption of new approaches to reduce GHG emissions and promote carbon sequestration on private lands.

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

CIG. Through the CIG project titled “The Stewardship Index for Specialty Crops”, NRCS was able to have a large, multi-stakeholder body explore the introduction of performance metrics into the specialty crops supply chain and develop a set of preliminary metrics to help quantify sustainability. Many dynamics were in play as different audiences participated in discussions on the “right” metrics for sustainability, how the results could be used to convey progress in resource management, and how businesses could operationalize sustainability metrics in individual businesses and within the supply chain. Incentivizing the adoption of data collection and reporting in the production agriculture sector will be a critical factor to success

CIG. Climate Change Challenge Efforts. In 2011, NRCS, through CIG, offered a separate funding opportunity to support large-scale demonstration projects to accelerate the adoption of new approaches to reduce greenhouse gas (GHG) emissions and promote carbon sequestration on private lands. This was the first time in CIG’s history since 2004 that the program expanded outside NRCS needs to address a global concern. The Secretary of Agriculture approved \$7.4 million to fund nine large-scale greenhouse gas mitigation projects in 24 States, making NRCS the first USDA Agency to take direct action towards meeting the climate change challenge. The Confederated Tribes of the Colville Indian Reservation in Washington received over \$1.2 million to adapt and implement forest carbon sequestering practices and to develop protocols that overcome the legal and technical barriers faced by tribes in entering carbon credit trading markets in a project titled “Adaptation of a Forest Carbon Protocol to Include Tribal Lands”.

Texas: Migratory Birds Habitat. The Migratory Bird Habitat Initiative (MBHI) was a huge success in Texas, with many landowners joining NRCS to develop alternative habitats to those areas normally used by migrating birds along the Gulf Coast. Landowners have expressed excitement in the number of species of migratory waterfowl that have been sighted on fields entered into the program. Initial formal monitoring supports this success. In southeast Texas alone, more than 29,000 acres were enrolled through MBHI. MBHI provided the resources necessary to create habitat that has not previously been available. It enhanced the effectiveness to hold waterfowl in the area. Additionally, the flooded acres increased populations of various waterfowl species, including wood ducks and diver ducks, such as Redheads and Bluebills. The enrolled lands also provided the necessary habitat needed by waterfowl to feed, rest, roost and build energy before moving on their migration path. The MBHI has been one of the true gems in supporting our natural resources, in particular coastal wildlife species, as NRCS responded to the Deep Horizon oil spill.

## **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).

**Program Objectives.** The purpose of AWEP is 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 include Federal, State and local entities and local conservation districts whose conservation goals complement and are compatible with NRCS’s mission.

AWEP was specifically created to address serious surface and ground water shortages as well as water quality concerns in many agricultural areas. The security of the Nation’s food supply is dependent upon the continued

delivery of clean, reliable, irrigation water to farms and ranches. AWEP is one of the few programs which provide assistance directly to producers while helping them stay in business.

AWEP follows 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 Operation.** Through AWEP, eligible partners submit proposals for funding to NRCS. The proposals are evaluated and successful applicants enter 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. This is not a grant program and individual producers are not eligible. Only groups of eligible partners may submit a proposal. In evaluating partnership proposals, NRCS gives priority to those that:

- Include a high percentage of agricultural land and producers in the region or other appropriate area;
- Result in high levels of applied agricultural water quality and water conservation activities;
- Significantly enhance agricultural activity;
- Allow for monitoring and evaluation;
- Assist agricultural producers in meeting a regulatory requirement that might otherwise reduce the economic scope of the producer's operation;
- Are able to achieve the project's land and water treatment objectives within five years or less;
- Include conservation practices that support the conversion of agricultural land from irrigated farming to dryland farming;
- Leverage AWEP funds with funds provided by partners; and
- Assist producers in areas with high-priority water quantity concerns in the following regions: Eastern Snake Plain Aquifer, Puget Sound, Ogallala Aquifer, Sacramento River Watershed, Upper Mississippi River Basin, Red River of the North Basin, or Everglades.

As part of EQIP, AWEP contracts provide 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 may receive a payment amount not to exceed 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 are eligible to receive up to 90 percent of the payment rate.

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 in which their average adjusted gross income for the preceding three years exceeds \$1 million unless two-thirds of that income is from farming, ranching, or forestry interests.

### **2011 Activities.**

This is the third year in which AWEP has been implemented and interest from the agricultural sector has remained steady. In 2011, NRCS obligated \$59 million in 1,300 new contracts to implement conservation practices on nearly 250,000 acres of agricultural land. The ability to leverage funding through partnership agreements has also remained strong. Partners provided approximately \$90 million in technical and financial assistance in 2011, nearly matching NRCS's AWEP investment. Through AWEP, the Agency approved eight new partner project areas in 2011, and continued to provide support for 91 existing project areas approved during 2009 and 2010.

**2011 Applications.**

State	Total Number of Applications	Number of Active and Completed Contracts	Number of Valid Applications Unfunded	Percentage Valid Applications Funded	Average Contract Amount	Estimated Unfunded Contracts
ALABAMA	83	28	70	40%	\$26,188	\$1,440,330
ARKANSAS	77	64	70	91	28,980	376,742
CALIFORNIA	1,050	303	818	37	59,913	44,754,907
COLORADO	27	19	25	76	54,190	433,523
FLORIDA	8	7	7	100	108,360	108,360
GEORGIA	237	151	197	77	8,733	751,033
IDAHO	105	34	66	52	127,157	9,028,132
INDIANA	71	49	55	89	24,735	544,168
IOWA	10	9	9	100	11,385	11,385
KANSAS	73	44	49	90	100,677	2,919,624
MICHIGAN	107	38	86	44	83,166	5,738,481
MINNESOTA	75	42	61	69	22,265	734,739
MISSISSIPPI	262	31	168	18	91,131	21,051,344
MONTANA	30	5	23	22	82,420	2,060,494
NEBRASKA	548	106	354	30	44,189	19,531,432
NEW JERSEY	9	5	5	100	24,904	99,616
NEW MEXICO	2	2	2	100	13,959	0
NEW YORK	17	13	14	93	24,304	97,216
NORTH CAROLINA	21	9	11	82	9,257	111,081
NORTH DAKOTA	139	59	96	61	40,518	3,241,403
OKLAHOMA	56	22	31	71	49,992	1,699,725
OREGON	115	58	103	56	41,888	2,387,596
PENNSYLVANIA	1	0	1	0	0	0
SOUTH DAKOTA	6	3	5	60	56,798	170,394
TEXAS	258	183	203	90	28,819	2,161,412
VERMONT	1	0	0	0	0	0
WASHINGTON	40	10	21	48	63,192	1,895,745
WYOMING	6	5	5	100	140,496	140,496
<b>Total</b>	<b>3,434</b>	<b>1,299</b>	<b>2,555</b>	<b>51</b>	<b>45,560</b>	<b>121,489,378</b>

**2011 Funding.**

AWEP funding has been invaluable in helping NRCS address areas in which water demand outstrips water supply. Approximately 60 percent of the projects approved in 2011 are located in the designated high-priority water quantity concern areas. Socially disadvantaged producers received 5.8 percent of all contracts under the program. Approximately 50 percent of valid applications were funded in 2011.

**Get Conservation on the Ground.**

California: Lower Susan River Watershed Partnership Project. In 2010, in a partnership formed with the Susan River Watershed group, Honey Lake Valley Resource Conservation District (RCD) applied for AWEP funding to assist private landowners in the lower Susan River on irrigation system improvements, noxious weed treatment and resource restoration. The partnership was awarded \$750,000 in 2010, with that amount to continue for each of the next four years. The entire project area includes 168,773 acres, of which 24,500 acres is irrigated land. Priority areas for treatment are the 19,500 acres along the Lower Susan River, where practices have the most direct impact on both water quality and groundwater use.

A total of 10 contracts were awarded through the partnership in 2010 for conservation practices on more than 4,650 acres. These AWEP contracts are helping farmers and ranchers in the Lower Susun River watershed conserve water and reduce noxious weeds while improving the stream corridor and floodplain. Practices to address water quantity include irrigation water management, sprinkler systems, underground pipelines, and tail water recovery systems. Practices to improve water quality include cover crops, irrigation canals, pest management, and filter strips. NRCS is also providing direct technical assistance in conservation plan development. In addition to the NRCS resources provided, the partners are providing services to plan and monitor water conservation and regulated water quality issues within the project area. Over the five-year project period (2010-2014) the partnership will contribute nearly \$8 million in non-Federal resources and services.

New York: Livestock Waste Storage Project. NRCS has partnered with the Watershed Agricultural Council through an AWEP agreement to address livestock waste concerns in the New York City watershed. Since 2009, eight farms have been awarded AWEP contracts totaling \$1,127,742 for livestock waste projects.

One project completed in 2010 was the Lamport manure storage tank in Delaware County. The original earthen lagoon manure storage was constructed in gravel soils where contaminants could potentially leak into the ground water supply. In addition, parts for the aging manure transfer pump were becoming increasingly hard to find. Plans were developed to install a new, 16 feet deep by 120 feet diameter, cast-in-place, concrete manure storage tank with a capacity of 1.3 million gallons.

The manure storage tank allows the Lamport's to better schedule their Nutrient Management Plan by custom-spreading manure twice a year to maximize the fertilizer value of the waste. Also, by spreading fewer times per year, they effectively reduce environmental impacts by targeting fields that benefit most and utilize dryer periods when surface runoff is minimal.

Florida: Agricultural Groundwater. Florida's AWEP contracts total \$1.45 million and the focus is to address groundwater consumption, primarily on 8,000 acres of strawberries. Florida produces 18 million flats of strawberries each year with an economic impact on the local community exceeding \$272 million.

In the winter, farmers apply irrigation water to coat strawberry fields with a layer of ice when temperatures drop below freezing. This project was designed to utilize water from an existing surface water pond to provide freeze protection to the winter strawberry crop. A pumping plant was installed on the pond and a high pressure pipeline was installed to connect the pump to the mainline of the existing overhead sprinkler system. Two structures for water control were also installed in order to facilitate the return of tailwater into the pond and prevent erosion on the banks of the pond. These improvements have created an effective tailwater recovery system on the farm that addresses water quantity concerns. As a result of AWEP funding, they will be able to reduce their groundwater pumping during future freezes and reuse the irrigation water applied to the fields that return to the pond.

Idaho: Eastern Snake Plain Aquifer. The Idaho Water Resources Board AWEP projects focus on actions to meet the established objectives of the State's Comprehensive Aquifer Management Plan to help stabilize and sustain the Eastern Snake Plain Aquifer. The aquifer provides all or part of the water supply for more than two million acres of irrigated agriculture in eastern Idaho. NRCS obligated \$3.6 million over the last three years (2009-2011) for 56 individual projects covering 11,776 acres. When all these projects are completed, the estimated annual water savings will be 15,611 acre-feet of water, or about 1.3 acre-feet of water per acre of land. Over five billion gallons of ground water will no longer be pumped from the aquifer.

## **WILDLIFE HABITAT INCENTIVES PROGRAM**

### **Current Activities.**

**Background.** Section 2602 of the Food, Conservation, and Energy Act of 2008 reauthorized the Wildlife Habitat Incentives Program (WHIP) by amending Section 1240N of the Food Security Act of 1985 (16 U.S.C. 3839bb-1) NRCS administers WHIP with funds made available through the Commodity Credit Corporation.

**Program Objectives.** WHIP provides assistance to agricultural landowners for the protection, restoration or enhancement of upland wildlife habitat, wetland wildlife habits, threatened and endangered species, fisheries, and other types of habitat. This effort is accomplished while educating and changing public attitudes toward wildlife habitat management and land stewardship on private agricultural land, nonindustrial private forest land, and Indian land, but the benefits extend far beyond wildlife. Focused efforts on habitat for fish and wildlife also contribute to more sustainable use of resources and reduced greenhouse gas emissions. By prioritizing specific geographic areas, WHIP is able to target financial and technical assistance funds to affect habitats needed for specific declining wildlife species.

WHIP practices are often compatible with, and beneficial to, farming and ranching enterprises. Some practices enhance 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 has been used to control invasive species, re-establish native vegetation, manage non-industrial 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 are 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 impacts 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 may identify priorities for enrollment in WHIP that complement the goals and objectives of relevant fish and wildlife conservation initiatives at the national, regional, and State level. The priorities serve as a guide for the development of WHIP ranking criteria in each State. States generally select two to six priority habitat types.

**Eligibility.** To be eligible for WHIP, the land must be private agricultural land, nonindustrial private forest land, or Tribal land. Applicants must own or control the land for the duration of the cost-share agreement.

**Financial Assistance.** WHIP provides up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat through agreements that last from one to ten years. Higher payments may be made to eligible socially disadvantaged farmers or ranchers in addition to beginning and limited resource farmers or ranchers and Indian Tribes. WHIP provides additional financial assistance to landowners who enter into 15-year or longer agreements to protect and restore high value, essential plant and animal habitat. Aggregate WHIP payments to any participant may not exceed \$50,000 per year.

**Technical Assistance.** NRCS and its partners provide 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.

**Partnerships.** Partners play a significant role in WHIP implementation. In addition to assisting with the delivery of technical assistance to WHIP participants, they contribute cost-share support, supply equipment, and install practices. Partners include public agencies, non-profit organization partners, and technical service providers. Their participation in WHIP has improved communication and coordination among various interests addressing wildlife concerns.

### **2011 Activities.**

In 2011, NRCS obligated almost \$61million in more than 3,800 agreements to enroll almost 850,000 acres in WHIP. Forty-six of these contracts valued at over \$4.4 million are with American Indian and Alaskan Natives. At the end of 2011, an additional 3,400 eligible applications valued at over \$33 million remain unfunded, demonstrating the strong producer interest in the program. In 2011, 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). The goal is to provide habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians, and other species that require shallow water for at least a part of their life cycle; and
- Rare and declining habitat (areas that once supported or currently support a unique, dwindling, or imperiled native plant and animal community).

**Initiatives.** WHIP plays an important role in implementing a number of NRCS special initiatives.

- Longleaf Pine Initiative. In 2011, NRCS enrolled over 77,400 acres of Longleaf Pine forest in over 1,000 contracts valued at nearly \$15 million. Through the practices applied with WHIP funding, the landowners improved the health and extent of the Longleaf Pine forest ecosystem in ways that benefited both the health of the plant community and wildlife habitat in Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia.
- Lesser Prairie Chicken Initiative. WHIP enrolled land in Colorado, Kansas, and Texas in order to help limit the need to list the Lesser Prairie Chicken as threatened and endangered under the Endangered Species Act, while also improving grazing and wildlife habitat. In 2011, NRCS enrolled over 111,000 acres in these States in over 100 WHIP contracts valued at more than \$4.1 million.
- New England-New York Forestry Initiative. WHIP expanded stewardship opportunities for forest lands and wildlife in the New England/New York States of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. In 2011, NRCS enrolled over 47,600 acres in these States in more than 380 WHIP contracts valued at more than \$6.5 million.
- Sage Grouse Initiative. In 2011, NRCS enrolled almost 92,000 acres in 38 WHIP contracts valued at more than \$3.1 million. WHIP planned conservation practices in nine States (California, Colorado, Idaho, Montana, Nevada, Oregon, South Dakota, Utah, and Wyoming) that will reduce threats to Sage Grouse habitat. These practices are designed both to help limit the need to list the Sage Grouse as threatened and endangered and to provide grazing land for ranches.
- Migratory Bird Habitat Initiative. In 2011, NRCS again responded to the threat posed to migrating species by the Deepwater Horizon oil spill in eight States (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, and Texas) with the goal of providing diverse habitat in mid- to late- 2011 for feeding, loafing, and resting to attract and hold migratory birds. Over 250,000 acres of shallow water development and management were implemented in 2011 with payments totaling over \$5 million. Other conservation practices were also implemented with total payments for the Initiative in 2011 over \$6.5 million.
- Northern Plains Migratory Bird Habitat Initiative. Designed to assist agricultural producers in developing sustainable agricultural and wildlife habitat systems by conserving and restoring grasslands and farmed wetlands, in 2011 NRCS enrolled over 8,000 acres in 25 contracts valued at over \$600,000.
- Strike Force Initiative. This initiative brings together Agency staff with experts with intimate knowledge of USDA programs and a sensitivity towards working with communities with limited resources and information. Strike Force is focusing on two areas: socially disadvantaged farmers and persistent poverty communities in Arkansas and Georgia. In 2011 NRCS enrolled 18 contracts on approximately 3,300 acres valued at over \$200,000.

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

New York: Habitat protection in Lake Champlain Watershed. Protecting habitat for shrub and grass land birds in the Lake Champlain Watershed as part of the America's Great Outdoors Initiative (AGOI). Lake Champlain was chosen as a national signature project for the AGOI due to its comprehensive pollution control and restoration plan for protecting water quality, wetlands, wildlife, recreational and cultural resources in the watershed. NRCS worked with 18 landowners to provide technical and financial assistance to create and protect the habitats for declining bird species such as the Golden-winged Warbler, American Woodcock, Sedge Wren, Bobolink, and many other grass and shrubland bird species. Grassland birds are declining significantly in the Northeast due to the loss of suitable habitat. In some cases, haying or pasturing of animals can be a compatible farm use when mowing or grazing is done after July 15<sup>th</sup>. Mowing after this date allows birds time to nest and raise their young, and keeps grass and

shrublands open for migrant songbirds. Working with private landowners helps protect habitat in these and other areas throughout the Lake Champlain watershed.

Massachusetts: River restoration to provide aquatic habitat and retain jobs. The Briggsville dam, a 15-foot high and 145-foot long structure, in place since the 1840s on the North Hoosic River, was removed to prevent the threat of dam failure, reduce the risk of upstream flooding, provide aquatic habitat, and save jobs. More than 30 miles of high quality headwater streams have been restored benefiting native river species including Eastern Brook Trout, Slimy Sculpin, Longnose Sucker (a state-listed species of concern), and other fish species. The dam was owned by a local company that has been in business over 78 years employing 150 people in a small community in Massachusetts. This challenge would have caused the company to abandon the land, lay off employees, and leave the area. Public and private partners worked together on this project. As mentioned by one public official, “this project exemplifies how Federal, State, and local partners can come together to restore wildlife habitat, enhance communities and stimulate local economies.”

Iowa: Grazing land for agriculture and wildlife habitat. The Loess Hills of Western Iowa are one of the State’s seven major topographic regions and one of Iowa’s most unique landscapes. The Eastern Red Cedar tree grows quickly, killing native grasses and other plant life and leaving the soil susceptible to erosion. The wildlife-friendly plan for this ranch includes restrictions on haying, mowing or harvesting for seed production during the nesting season for grassland birds as these grasslands are in significant decline. These agricultural activities are not permitted on 20 percent of the contracted acres during the nesting season to promote use by wildlife. Grazing is also managed to prevent overgrazing. Fencing and grass buffer strips are used to develop wildlife areas. The landowner has cleared the invasive Eastern Red Cedar and associated brush species through the use of prescribed burning and herbicides. The landowner of this ranch is working hard to make it agriculturally productive and wildlife friendly.

## **FARM AND RANCH LANDS PROTECTION PROGRAM**

### **Current Activities.**

**Background.** 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). It authorized the Natural Resources Conservation Service (NRCS) to purchase conservation easements for the purpose of protecting topsoil by limiting nonagricultural uses of the land. The 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 reflect more accurately the types of land the program protects. The Food, Conservation and Energy Act of 2008 (the 2008 Act) amended the FRPP by changing the purpose of the program to provide funding for the purchase of conservation easements by eligible entities.

**Program Objectives.** The FRPP 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. According to NRCS National Resources Inventory (NRI) data, over 7.5 million acres of prime farmland, an area equivalent to the states of Maryland and Delaware, were converted to non-agricultural uses between 2002 and 2007. 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. By enrolling in FRPP, 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, FRPP 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.

**Program Operations.** Working in conjunction with existing non-Federal farmland protection programs, the agency partners with State and local governments, soil and water conservation districts, tribes, and eligible non-

governmental organizations to purchase conservation easements. Potential partners must provide written evidence of their:

- Commitment to long-term conservation of agricultural lands through the use of legal instruments (i.e., right-to-farm laws, agricultural districts, zoning, or land use plans);
- Use of non-regulatory, voluntary approaches to protect farmland from conversion to nonagricultural uses;
- 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 must apply to and be accepted by eligible State, tribe, or local governments or non-governmental programs to participate in FRPP. As a Title XII program, these individual landowners must meet Farm Bill payment eligibility requirements for adjusted gross income, wetland conservation, and Highly Erodible Land conservation. The land to be enrolled in FRPP must meet one of three criteria to qualify for consideration: 1) have at least 50 percent prime, unique, or important farmland soils; 2) have historic or archeological resources; or 3) support the policies of a State or local farm and ranch lands protection program.

**Application and Selection Process.** NRCS uses a continuous signup under which cooperating entities may propose and submit parcels for funding. Upon receipt of the applications for parcels from an eligible cooperating 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 eligible cooperating entities that submit the highest ranked parcels for which the NRCS State office has FRPP funding. Awarding of funds focuses on farms that are accessible to appropriate markets, have adequate infrastructure and agricultural support services, have surrounding parcels of land that can support long-term agricultural production, and are faced with those development pressures typically ranked the highest for the program.

NRCS and the cooperating entities sign a cooperative agreement to obligate the FRPP funds. The cooperating entities process the easement acquisition and then hold, monitor, manage, and enforce the acquired easements. The Federal share for any easement acquisition cannot exceed 50 percent of the appraised fair market value of the conservation easement. Each conservation easement deed must include 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 provides technical assistance to develop conservation plans for acres accepted into FRPP.

**NRCS Technical Assistance.** In addition to helping landowners develop conservation 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.

**Data Adjustments.** In 2010, the new National Easement Staging Tool (NEST) database was deployed. NEST is the official data tracking tool for easement programs data; however it does not serve as a substitute for the Foundation Financial Information System (FFIS), which is the official NRCS financial tracking system. Easement program data in NEST is undergoing an intense quality assurance review process in 2011 in order to improve the overall quality and accuracy of data. During the review process, data will continually be updated to ensure completeness.

#### **2011 Activities.**

In 2011, approximately 82 new FRPP cooperative agreements were entered into with partners. NRCS and its partners enrolled 301 parcels with an associated 212,668 acres through cooperative agreements. Additionally, 386 FRPP permanent easements from previous years were closed in 2011, encompassing approximately 97,013 acres.

<b>Cumulative Program Activity Through 2011</b>	
<b>Closed Easements (Permanent)</b>	<b>Cumulative</b>
Number of Easements	3,137
Number of Acres	647,728
<b>Enrolled Easements (Permanent)</b>	<b>Cumulative</b>
Number of Easements	3,805
Number of Acres	980,078

FRPP contributed to the agency's strategy to reduce threats to Sage Grouse habitat and improve rangeland health and sustainability by working with partners to enroll 46 new parcels with 133,882 associated acres in 2011.

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

Virginia: Protecting valuable farmland from development. The McKay family has been farming the land for over 200 years. Mr. McKay raises dairy cattle on the property, as well as corn and barley to feed the cows. The land is good for farming, with gently rolling fields and rich loam soils. Because of its value as productive farmland, NRCS and the Piedmont Environmental Council worked together to purchase an easement on 103 acres - over half of which are prime agricultural soils. Mr. McKay donated a portion of the easement. Piedmont Environmental Council will hold the easement and take responsibility for upholding these protections over time.

Ohio: Yellow Springs village preserves open space to protect drinking water supply. Since the 1970's the priority for this small village is to protect the properties that feed Jacoby Creek, which provides the drinking water supply for Yellow Springs, Ohio. Tecumseh Land Trust has worked to uphold the village government's land use plan to preserve properties along the creek by contacting landowners year after year to ensure protection is maintained. In 2011, the Semlers, who own one of four remaining dairies in Greene County, were finally ready to take the leap and preserve their farm forever. Utilizing the village's Greenspace Fund to provide the matching funds for enrollment into FRPP, this 171-acre farm will now be protected from developmental pressures and will remain a farm forever.

California: Multi-generational farming family preserves historic property. Stuart and Lena Clark farm almonds and pistachios on land the family purchased in the early 1900s. Their property, known as the Howe Ranch, will stay in agricultural use forever after the Clarks worked with the Sequoia Riverlands Trust, the State of California, and NRCS to place it in an FRPP easement, shielding it from development. The 153-acre Howe Ranch will provide productive and healthy wildlife habitat for a number of species in Kings County. This easement is the first agricultural conservation easement in the history of Kings County. Additionally, this easement protects a treasure of the region – San Joaquin Valley prime farmland.

## **CONSERVATION SECURITY PROGRAM**

#### **Current Activities.**

**Background.** The Conservation Security Program was 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 Conservation Security Program into 2011. The program was not reauthorized by the Food, Conservation, and Energy Act of 2008 (the 2008 Act) (P.L. 110-246), which stipulated that a conservation security program contract may not be entered into or renewed after September 30, 2008. Pursuant to Section 2301 of the 2008 Act, the Secretary shall make payments on contracts entered into before September 30, 2008 using such sums as are necessary.

**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 practiced 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 who met the very highest standards of conservation and environmental management on their operations,

- Create powerful incentives for other producers to meet those same standards of conservation performance on their operations, and
- Provide public benefits for generations to come.

NRCS is not currently authorized to enter into new Conservation Security Program contracts but continues to make payments to producers with existing five- to ten-year contracts.

**Program Operations.** NRCS used a watershed approach to deliver the Conservation Security Program. The agency prioritized watersheds nationally based upon a consistent process that used existing natural resource, environmental quality, and agricultural activity data along with other information necessary to efficiently operate the program. Signups to participate in the program were rotated among watersheds across the nation on an annual basis. The program emphasized water quality and soil quality as nationally significant resource concerns because of the potential for significant environmental benefits derived from conservation treatment of those resources.

**Eligibility.** The program provided financial and technical assistance to participants committed to advancing the conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on tribal and private working lands. Eligible lands included cropland, grassland, improved pasture, and rangeland, as well as forested land and other non-cropped areas that are an incidental part of an agricultural operation. Equitable access to the program was provided to producers regardless of size of operation, crops produced, or geographic location.

**Financial and Technical Assistance.** Financial assistance payments under the program had four components:

- An annual stewardship component for the base level of conservation treatment;
- An annual existing-practice component for the maintenance of existing conservation practices;
- An enhancement component for exceptional conservation effort and additional activities that provide increased resource benefits beyond the prescribed level; and
- A one-time new-practice component for additional, needed practices.

Technical assistance was provided to participants through either NRCS staff or an approved technical service provider (TSP). TSPs finalized applications after NRCS had determined that producers met minimum requirements, and documented conservation stewardship plans to apply conservation treatment.

**Application and Selection Process.** The Conservation Security Program was offered in 331 watersheds in all 50 states, the District of Columbia, and the Pacific and Caribbean areas during the 2002 Farm Bill. Applicants had to meet certain conservation standards, including minimum tier eligibility, the minimum level of treatment, and other applicant and land eligibility requirements. NRCS determined at the National level which enrollment categories and subcategories could be funded in accordance with the signup notice and available funds and funded the highest priority categories until the available funds were exhausted.

### **2011 Activities.**

In 2011, NRCS provided \$177,858,031 in financial assistance payments on 14,718 contracts from signups held in 2004, 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 on existing contracts for enhancement activities that 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.

## 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).

**Program Objectives.** The Conservation Stewardship Program 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 resource concerns (soil quality, soil erosion, water quantity, water quality, air quality, plant resources, and animal resources) as well as energy. Listed here are examples of how the program addresses these 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 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.

Congress authorized the enrollment of a maximum of 12,769,000 acres per year for the period beginning October 1, 2008, and ending on September 30, 2017. Continuous sign-up for CSP started on August 10, 2009.

Although the program is national in scope, NRCS did not establish national priority resource concerns. Instead States determine the three to five priority resource concerns that are of specific concern for their State or for geographic areas within the State. NRCS did, however, establish national technical focus areas for on-farm research and demonstration (R&D) or pilot projects to promote new technology and research in areas of importance to the agency, including pollinators, water quality, and energy.

**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 in FSA. Eligible lands include cropland, pastureland, rangeland and nonindustrial 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 the conservation measurement tool (CMT) to assess an applicant's conservation activities. These activities must meet or exceed the stewardship threshold, as determined by CMT, for at least one resource concern at the time of the application and one 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. Through 5-year contracts, payments are made as soon as practical after October of each year for contract activities installed and maintained in the previous 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 5-year period. Each CSP contract is limited to \$200,000 over the term of the initial contract period with the exception of joint operations, which 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 assists producers and forestry land owners to 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.

Partnership efforts have been forged with Federal, State, and local entities, including 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. 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.

The Cooperative Conservation Partnership Initiative (CCPI) enables the use of certain conservation programs, including CSP, along with resource of eligible partners to provide financial and technical assistance to owners and operators of agricultural and nonindustrial private forest lands. Under CCPI, NRCS enters into partnership agreements with eligible entities that want to enhance conservation outcomes on agricultural and nonindustrial private forest lands in an effort to leverage funds to get more conservation benefit. The partners do not receive any funds from NRCS. All financial assistance is provided directly to producers for implementation of activities in CSP contracts. Partners agree to provide additional technical or administrative resources to assist with planning, implementation, and/or monitoring of project effectiveness. Eligible partners include Federally recognized Indian tribes, State and local units of government, producer associations, farmer cooperatives, institutions of higher education, and nongovernmental organizations (NGO) with a history of working cooperatively with producers.

### **2011 Activities.**

In 2011, CSP provided \$191,403,998 in Financial Assistance funding, as shown in the State distribution table below. These funds will be used to treat 12,750,676 acres.

State	No. of Contracts	Financial Assistance (\$ obligated)	Acres Treated
ALABAMA	140	\$1,280,837	136,023
ALASKA	2	57,737	2,866
ARIZONA	3	1,886,756	205,527
ARKANSAS	453	10,763,237	413,137
CALIFORNIA	74	1,114,536	85,907
COLORADO	329	7,787,737	800,534
CONNECTICUT	4	47,838	944
DELAWARE	9	180,524	7,928
FLORIDA	55	714,417	38,273
GEORGIA	413	10,091,492	263,641
HAWAII	7	18,995	1,321
INDIANA	45	682,785	26,708
IOWA	713	10,539,389	368,164
LOUISIANA	300	8,009,324	304,767
MAINE	21	117,806	9,070
MARYLAND	23	292,636	11,162
MASSACHUSETTS	5	12,587	903
MICHIGAN	186	1,682,915	75,506
MINNESOTA	764	16,457,101	552,156
MISSISSIPPI	163	5,627,310	230,498
MISSOURI	711	6,541,113	349,046
MONTANA	270	9,175,260	964,233
NEBRASKA	569	13,109,924	1,260,005
NEVADA	14	200,598	58,621
NEW JERSEY	5	41,995	1,453
NEW MEXICO	101	5,313,558	905,792
NEW YORK	79	574,285	35,049
NORTH CAROLINA	98	832,075	43,887
NORTH DAKOTA	336	12,661,607	634,775
OHIO	74	735,456	30,443
OKLAHOMA	590	11,115,376	737,811
OREGON	146	3,763,666	311,702
PENNSYLVANIA	124	877,703	33,979
RHODE ISLAND	3	2,337	148
SOUTH CAROLINA	133	918,579	77,875
SOUTH DAKOTA	330	11,433,655	868,844
TENNESSEE	101	671,286	31,079
TEXAS	206	4,204,359	498,875
UTAH	23	492,264	124,966
VERMONT	1	767	241
VIRGINIA	89	1,141,244	46,510
WASHINGTON	175	5,282,957	325,463
WEST VIRGINIA	247	675,802	45,579
WISCONSIN	587	4,264,603	253,947
WYOMING	67	1,734,615	418,089
<b>Total</b>	<b>9,630</b>	<b>191,403,998</b>	<b>12,750,676</b>

**Get Conservation on the Ground.**

Pennsylvania: Bucks County. One of the few remaining dairy farms in Bucks County has cropland acres with an implemented conservation system, including practices such as cover crop, diversions, waterways and strip cropping. Prior to applying for CSP assistance, the owner of the farm took it upon himself to install water bars on a field lane that was experiencing some mild erosion. Through the CSP interview and application process, the owner decided to add a simple, yet effective enhancement to further his existing benchmark level of conservation: cover crop mixes with the addition of clover to his oat cover crop. The owner plans to use the CSP financial assistance to offset the cost of a new Turbo Till, which will increase surface residue, further reducing soil erosion. CSP rewarded a producer already practicing outstanding stewardship of his land and the financial assistance is being used to further improve the level of conservation on his farm.

**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 by Section 2401 of the Farm Security and Rural Investment Act of 2002 (P.L. 107-171). Section 2403 of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246) reauthorized GRP and made several amendments, including authorizing the enrollment of an additional 1.22 million acres of eligible land from 2009 through 2012.

**Program Objectives.** GRP helps landowners and operators restore and protect rangeland, pastureland, and other grassland while maintaining the land's suitability for grazing. Participants voluntarily limit 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 desperately needed by threatened and endangered species, preserves agricultural heritage and green space, provides for recreational activities, and ensures the Nation's ability to produce its own food.

**Program Operations.** NRCS and the Farm Service Agency (FSA) jointly administer GRP. NRCS has lead responsibility on conservation planning, technical assistance to owners and operators, and easement administration. FSA has lead responsibility for rental contract administration and financial activities. National ranking criteria guide the development of State ranking criteria to ensure GRP funds are focused on projects that support grazing operations, protect grassland from conversion to other uses, enhance plant and animal biodiversity, leverage non-Federal funds, and address that State's program priorities. Priority is given to expiring Conservation Reserve Program (CRP) grasslands. Applications, ranking criteria, and program forms are 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.** Land is eligible if it is private or tribal land and is: 1) grassland that contains forbs or shrubs (including rangeland and pastureland) for which grazing is the predominant use; or 2) located in an area that has been historically dominated by grassland, forbs, or shrubs. The land also must have potential to provide habitat for animal or plant populations of significant ecological value if it is either retained in its current use or restored to a natural condition.

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

**Rental contract.** Participants may choose a 10-year, 15-year, or 20-year contract, during which USDA provides annual payments in an amount not more than 75 percent of the grazing value established by the Farm Service Agency. County-based grazing values (determined on soil productivity) are posted in USDA field offices. Payment

rates are evaluated to assure that the rates reflect local prevailing rental rates. Payment is limited to \$50,000 per person or legal entity per year.

**Permanent easement.** Easement duration is in perpetuity or to the maximum extent allowed by State law. Participants are provided an easement payment at the time of easement purchase. Easement payment amounts may not exceed the current market value of the land less the grazing value of the land encumbered by the easement. Easement compensation is determined as the lowest of: 1) an appraisal or area-wide market survey, 2) a geographic cap, or 3) landowner offer. Easements are recorded in the local land records.

**Restoration agreement.** If NRCS and the landowner determine that restoration is necessary to return the vegetation to a desired condition, cost-share assistance is available through a restoration agreement that pays up to 50 percent of the restoration cost, up to \$50,000 per person or legal entity per year. Participants may pay part of their share through in-kind contributions. If funds are limited, USDA gives higher priority to applications with high-quality grassland that does not need restoration than to poorer-quality grassland that also needs restoration.

**Cooperative agreement.** The Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) authorizes USDA to enter into cooperative agreements with a unit of State or local government, tribe, or non-governmental organization that demonstrates it has the relevant mission, experience, and resources to administer a GRP easement. The Federal Government will pay up to 50 percent of the purchase price of the easement. The cooperating entity has the responsibility to enforce the easement, but the United States maintains a contingent right of enforcement.

**Technical Assistance.** The participant develops a grazing management plan or conservation plan with NRCS, including grazing practices for the acres determined eligible for GRP and specifies the manner in which the grasslands should be managed to maintain their viability. NRCS technical assistance includes reviews of restoration measures, guidance on management activities, and biological advice to achieve optimum results considering all grassland resources.

**Data Adjustments.** In 2010, the new National Easement Staging Tool (NEST) database was deployed. NEST is the official data tracking tool for easement programs data; however it does not serve as a substitute for the Foundation Financial Information System (FFIS), which is the official NRCS financial tracking system, or FSA's financial data tracking system. Easement program data in NEST is undergoing an intense quality assurance review process in 2011 in order to improve the overall quality and accuracy of data. During the review process, data will continually be updated to ensure completeness.

### **2011 Activities.**

The Food, Conservation, and Energy Act of 2008, authorizes GRP to enroll an additional 1,220,000 acres of eligible land in 2009 through 2012. In 2011, the program obligated and committed \$70.7 million of the financial assistance funding allocated to the States and enrolled 202,362 acres. Of the funding provided, approximately 60 percent funded the enrollment of GRP easements and 40 percent funded the enrollment of rental contracts. Enrollments include current active and completed agreements.

<b>2011 GRP Enrollment Summary</b>			
	<b>Active Easements</b>	<b>Rental Contracts Signed</b>	<b>Total</b>
Approved Participants	110	218	328
No. of Acres Enrolled	78,323	124,039	202,362
Funding	\$56,266,400	\$14,481,600	\$70,748,000

<b>Cumulative Program Activity</b>				
<b>GRP Accomplishments</b>	<b>2003 to 2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Number of Enrolled Easements	252	56	141	110
Enrolled Easement Acres	117,618	27,611	67,789	78,323
Rental Acres Enrolled	618,103	89,580	273,519	124,039
Total Acres Enrolled	735,721	117,191	341,308	202,362
Cumulative Acres enrolled under 2008 Farm Bill		117,191	458,499	660,861

<b>Cumulative Closed Easements (Through 2011)</b>	
Number of Easements	369
Acres of Easements	171,831

### **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 in the program was so high that USDA received 23 applications to enroll 42,910 acres. 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.

## **AGRICULTURAL MANAGEMENT ASSISTANCE PROGRAM**

### **Current Activities.**

**Background.** Section 524(b), Agricultural Management Assistance (AMA), authorized the Secretary of Agriculture to use \$15 million of Commodity Credit Corporation (CCC) funds for cost-share assistance in 16 States where participation in the Federal Crop Insurance Program is historically low. Section 524(b) of the Federal Crop Insurance Act, 7 U.S.C. 1524(b), was added by Title I, Section 133, of the Agricultural Risk Protection Act of 2000 (PL 106-224, June 22, 2000). Section 133 (P.L. 106-224, Section 524(b), was further amended by the Farm Security and Rural Investment Act of 2002, (Farm Bill), P.L. 107-171, May 13, 2002. This amendment identified the following 16 States that are eligible for AMA: Connecticut, Delaware, Hawaii, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Utah, Vermont, West Virginia, and Wyoming. Section 133 (P.L. 106-224, Section 524(b), was further amended by the Food, Conservation and Energy Act of 2008 (P.L. 110 – 246) and this amendment added Hawaii as the 16<sup>th</sup> State eligible for participation in AMA. The 2008 Farm Bill amendment also specifies the amount of funds to be apportioned to NRCS, the Risk Management Agency (RMA), and the Agricultural Marketing Service (AMS).

**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:

- Reductions of non-point source pollution, such as nutrients, sediment, pesticides, or excess salinity in impaired watersheds consistent with Total Daily Maximum Loads, where available;
- Reduction of surface and groundwater contamination;
- Promotion of conservation of ground and surface water 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 from unacceptably high levels on agricultural land; and
- Promotion of at-risk species habitat conservation.

Like other cost-share 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: systems which have the highest irrigation efficiency and which can reduce water usage significantly;
- Sprinkler Irrigation Systems: the most widely used type of irrigation water delivery system which is both effective and efficient;
- Irrigation Storage Reservoirs: used to store irrigation water for re-use;  
Pumping Plants: installed in conjunction with other irrigation system components to assist in water use or reuse;
- Water wells: 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 and a vital component of any grazing management system;
- Brush Management: used to control invasive species and increase land productivity; and
- Seasonal High Tunnel System for Crops: temporary structures which 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 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 cost-share assistance to eligible participants. Participation is voluntary but requires a conservation plan. NRCS works with the applicant to develop the plan. A contract must be for a minimum duration of one year after completion of the last practice, but 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.

### **2011 Activities.**

In 2011, NRCS allocated \$7.5 million of CCC funds for financial and technical assistance for approval of new AMA contracts. Of this amount, approximately \$6 million was obligated into 275 contracts covering 7,869 acres. Cumulatively, AMA has 673 contracts in implementation and a continuing backlog of applications that indicates strong interest among producers in the program. At the end of 2011, AMA had a backlog of 648 applications, with an estimated contract value of \$9.4 million for 10,825 acres.

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 criteria 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.

AMA funding helps address issues of concern to the Chesapeake Bay Watershed Initiative (CBWI) in New York, Pennsylvania, West Virginia, Delaware, and Maryland and implement water quality practices in the Chesapeake Bay Watershed drainage area.

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

New York: Wellington Hoop House. Twelve years ago Frederick and Carolyn Wellington were looking for a new challenge and decided to try farming. Over the years they invested in and expanded their diversified farm operation, Wellington Herbs and Spices in Schoharie, NY. Recently they worked with USDA's NRCS to protect water resources on their farm and save energy by installing a seasonal high tunnel hoop house and an irrigation water management system. Financial and technical assistance was provided by NRCS through the Agricultural Management Assistance (AMA) Program.

The Wellingtons worked with their local NRCS office to develop a conservation plan for their 13 acre organic vegetable and herb farm. By helping the Wellingtons build a high tunnel hoop house and a micro irrigation system, the Wellingtons have been able to use less water and grow more produce using less energy.

"At a time when we would normally be winding down our season, Swiss chard is thriving in the hoop house and we are planting spinach and beets to sell at indoor farmers markets this fall and winter," said Frederick Wellington. "Next year we hope to harvest our first crop at the end of March instead of July when we usually start harvesting" The farm also installed a micro irrigation system and has already seen significant benefits during the 2011 growing season. The system allows the farm to apply water directly to the plant root zone through low pressure trickle delivery. This method of watering saves thousands of gallons of water. "Watering was something we spent a lot of time on in the past," said Wellington. "Now we just open a valve on our irrigation system. We've even been able to broaden our vegetable production."

Pennsylvania: Water Quality Project. Kenneth Stehr & Sons operates a 350 acre vegetable, fruit, and row crop farm in Schuylkill County, Pennsylvania. This farm is in the Upper Mahantango Creek watershed in Schuylkill County and is in one of Pennsylvania's Chesapeake Bay priority watersheds. The Stehr family's high quality fresh fruits and vegetables are a customer favorite at the twice-a-week Harrisburg Farm Show Farmers' Market; having sold there for a number of years.

Before working with NRCS there was no chemical containment or facility to fill and clean the numerous sprayers they use on the farm. They were using an area adjacent to the main road where the road ditch ran right to a culvert and into a stream, potentially taking with it any chemical residues and rinse water. After NRCS began working with the producers and discussed these resource concerns with the Stehrs, they applied for AMA specialty crop funding. They received an AMA contract in 2009, to construct an agrichemical mixing facility and implement pest management practices on their farm. The agrichemical mixing facility was completed in 2011, and includes an area to lock and store chemicals and a roofed loading and mixing pad that accommodates all sprayers used on the operation, and can also be used to wash down the sprayers. The Stehrs also worked with a private consultant to develop an Integrated Pest Management Plan (IPM). Through this plan the producers are implementing an intense scouting program and adding new techniques such as pheromone traps to better target pesticide applications. The Stehrs are pleased with the end product and continue to adopt new IPM techniques on their farm.

## **CHESAPEAKE BAY WATERSHED PROGRAM**

### **Current Activities.**

**Background.** Section 2605 of the Food, Conservation, and Energy Act of 2008 (2008 Act) (P.L. 110-246, June 18, 2008) added the Chesapeake Bay Watershed Program to the Food Security Act of 1985 (1985 Act) by amending Chapter 5 of subtitle D of Title XII of the 1985 Act by inserting after section 1240P (16 U.S.C. 3839bb-3) the following new section: Section 1240Q – Chesapeake Bay Watershed.

**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 Chesapeake Bay Watershed Program (CBWP) helps 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 encompasses all tributaries, backwaters, and side channels, including their watersheds, draining into the Chesapeake Bay. This area includes portions of the states of Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia.

**Program Operations.** The Natural Resources Conservation Service (NRCS) implements CBWP through the various natural resources conservation programs authorized by subtitle D, Title XII of the 1985 Act. In 2011, NRCS implemented CBWP through the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP). NRCS announces the availability of CBWP funding through a request for proposals.

CBWP funding supports 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 supports 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 are also national priorities, and include focusing on high priority watersheds, focusing and integrating Federal and State programs, accelerating conservation adoption, and accelerating development of new conservation technologies.

**Eligibility.** Only agricultural producers owning or operating within the Chesapeake Bay Watershed are eligible to participate in CBWP. In addition, NRCS applies the eligibility requirements of the particular natural resource program used to implement CBWP (i.e., EQIP, WHIP).

**Conservation Plan.** With assistance from NRCS or approved technical service providers (TSPs), an agricultural producer develops a conservation plan for some or all of the land owned or operated. The plan specifies the method in which the planned conservation treatment practices and systems on the enrolled acres will be implemented, operated, and maintained. A conservation plan is the basis for the program contract.

**Financial Assistance.** NRCS targets financial assistance under CBWP in several ways. Eligible applications for CBWP funding receive additional ranking points if they are: located in high nutrient and sediment yielding priority watersheds; include core and supporting practices that address State water quality milestones; and treat soils that are vulnerable to leaching or runoff.

NRCS uses CBWP funds to enter into contracts with eligible producers to share the costs of the applicable conservation treatment on agricultural lands in the Chesapeake Bay Watershed. NRCS provides payments for approved conservation practices and systems and land use adjustments within a time schedule specified by the conservation plan. 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. The modification must follow the rules of the conservation program used to apply the conservation treatment.

**Technical Assistance.** The NRCS provides technical assistance through CBWP to help agricultural producers and others address opportunities, concerns, and problems related to the use of natural resources and to help them make sound natural resource management decisions on lands within the Chesapeake Bay Watershed. Examples of technical assistance include helping producers identify conservation problems through resource inventories and proposing conservation practices to solve the problems.

**Partnerships.** The agency consults with appropriate Federal and State agencies to ensure CBWP conservation activities complement other Federal and State programs in the Chesapeake Bay Watershed. Across the watershed, States are working with State agriculture departments to align NRCS program delivery with the State's needs for

implementing watershed implementation plans; partnering with State associations of conservation districts and local conservation districts for conservation planning and implementation. The agency also works with the Environmental Protection Agency and the Chesapeake Bay Program Office on implementation of the Executive Order Strategy to Protect and Restore the Chesapeake Bay Watershed.

### **2011 Activities.**

For 2011, approximately 3,500 agricultural producers submitted applications to NRCS to participate in CBWP. NRCS approved more than 1,700 contracts for more than \$60 million of financial assistance to treat an estimated 243,544 acres of high priority agricultural land. Examples of conservation treatment practices include conservation crop rotation, conservation tillage, cover crop, stream exclusion, waste storage facility, riparian buffers, heavy use area protection, nutrient management, upland wildlife habitat management, and streambank and shoreline protection.

In 2011, CBWP technical and financial assistance played an important role in the improvement of water 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;
- Water quality in the Bay is extremely poor, meeting only 24 percent of goals established by the Chesapeake Bay Program;
- Stream quality in the watershed is degraded. Fifty two percent of the streams have a rating of poor or very poor (based on the index of biological integrity);
- 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.

To help producers apply conservation treatment, CBWP made extensive use of technical service providers (TSPs) in 2011. Approximately \$1.78 million was obligated to 80 TSPs to enable them to provide technical assistance to producers.

In 2011, the NRCS committed \$3 million in EQIP technical assistance to fund Strategic Watershed Action Teams (SWAT) through partnership agreements with nongovernmental organizations (NGOs), State and local units of government, universities, and others in Delaware, Maryland, Pennsylvania, Virginia, and West Virginia. These agreements leveraged over \$3 million and are able to provide the technical skills and personnel needed to focus on the development of comprehensive nutrient management plans, design and install nutrient management practices, design and install livestock-related practices, and establish riparian buffers.

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

Chesapeake Bay Watershed: Targeting Resources to Maximize Impact. In 2011, NRCS identified priority watersheds to target conservation treatment efforts. The NRCS used U.S. Geological Survey (USGS) and EPA nutrient and sediment load data to identify 20.5 million priority acres at the subwatershed (12-digit HUC or hydrologic unit code) level within the Chesapeake Bay Watershed. Based on the USGS and EPA data, NRCS targeted approximately 90 percent of its 2011 CBWP funding toward the priority areas—an approach that is expected to maximize the environmental benefits of the program’s conservation practices on improving water quality and enhancing wildlife habitat.

Pennsylvania: Protecting the Chesapeake Bay. A farmer of Pitman, Pennsylvania owns and operates a 200 acre row crop farm and a 120,000 bird broiler operation. His farm is in the Upper Mahantango Creek watershed in Schuylkill County, PA and is in one of Pennsylvania’s Chesapeake Bay priority watersheds. The Pitman farmer began working with NRCS because he wanted to improve how he stored and handled manure and mortality from his poultry operation. He was stacking poultry manure and dead birds outside with no protection from rain and runoff. After working with NRCS to develop a conservation plan, he applied for CBWP funding assistance and received a contract in 2010. The Pitman farmer worked with NRCS engineers who designed an 80 foot x 60 foot roofed manure storage and composting facility which he built in Spring 2011 and is now using. A private consultant was

hired to update his Nutrient Management Plan to fit with his new storage system. He is very pleased with the storage and continues to monitor his nutrient management practices on the farm.

## **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), amended by the Food, Conservation and Energy Act of 2008 (2008 Farm Bill), P.L. 110-246.

**Program Objectives.** HFRP assists landowners in restoring, enhancing, and protecting forest ecosystems 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. As funds are made available, the NRCS Chief solicits project proposals State Conservationists have developed in cooperation with partnering organizations. States selected for funding provide public notice of the availability of funding within the selected area. 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 available to Indian Tribes only;
- 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 a tribe, is eligible for enrollment in HFRP. In addition, to be eligible, the landowner must commit to restoring, enhancing, or measurably increasing the likelihood of recovery of a threatened or endangered species or candidates for the Federal or State threatened or endangered species list, and must improve biological diversity or increase carbon sequestration. Land enrolled in HFRP must have a restoration plan that includes practices necessary to restore and enhance habitat for species listed as threatened or endangered or species that are candidates for the threatened or endangered species list. NRCS provides technical assistance to help owners comply with the terms of their HFRP restoration plans.

Landowners may receive safe harbor assurance for land enrolled in the HFRP who 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 U.S. Fish and Wildlife Service and the 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 participant after the project is enrolled, by reviewing restoration measures and providing guidance on management activities and biological advice to achieve optimum results.

**Data Adjustments.** In 2010 the new National Easement Staging Tool (NEST) database was deployed. NEST is the official data tracking tool for easement programs data; however it does not serve as a substitute for the Foundation Financial Information System (FFIS), which is the official NRCS financial tracking system. Easement program data in NEST has undergone an intense quality assurance review process during 2010 and 2011 in order to improve the overall quality and accuracy of data.

**2011 Activities.**

In 2011, NRCS received 215 applications to participate in HFRP. Of these applications, 43 were enrolled into the program; this includes one 30-year contract with tribes, 19 permanent easements, 20 30-year easements, and three restoration cost-share agreements. These 2011 active agreements encompass approximately 22,995 acres.

Cumulatively, through HFRP, NRCS has closed on 20 easements encompassing approximately 3,516 acres, as the table below shows.

<b>Cumulative Program Activity (Through 2011)</b>	
<b>Closed Easements (Permanent and 30-Year)</b>	<b>Cumulative</b>
Number of Easements	20
Number of Acres	3,516
<b>Active Restoration Cost-Share Agreements</b>	<b>Cumulative</b>
Number of Agreements	10
Number of Acres	700,783
<b>Active 30 Year Contract with Tribes</b>	<b>Cumulative</b>
Number of Contracts	1
Number of Acres	216
<b>Summary</b>	<b>Cumulative Summary</b>
Total Agreements Enrolled	31
Total Acres	704,515

**Get Conservation on the Ground.**

Oregon: Landowners work to preserve and protect land for future generations. In the Camp Creek area just East of Eugene, Oregon, Andy Petersen owner of Petersen Ranch, LLC enrolled approximately 83 acres of forest land in the Healthy Forest Reserve Program through a permanent easement with the NRCS. The ranch has been in his family since the 1940's, and Mr. Petersen was looking for a program that would allow him to be able to continue to harvest the property. HFRP allows him to continue to make a living off the land while ensuring protection of the land for endangered species as well as future generations. On the Petersen Ranch, NRCS plans to create room for the larger trees to thrive and will create snags and downed wood to provide a better habitat for the small mammals that owls like to eat. These enhancements are important for establishing good, sustainable habitat for the Northern Spotted Owl. When asked about the benefits of HFRP Mr. Petersen replied, "I think this is going to be a beautiful piece of ground for my kids' grandkids, or whoever else's grandkids to manage down the road, and it's going to be done in a way that is responsible. This program ensures that." (Note: There is a You Tube video featuring this property at: [http://www.youtube.com/watch?v=SU5COYbDDEs&feature=channel\\_video\\_title](http://www.youtube.com/watch?v=SU5COYbDDEs&feature=channel_video_title)).



## NATURAL RESOURCES CONSERVATION SERVICE

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

The Natural Resources Conservation Service (NRCS) was established as the Soil Conservation Service in 1935 pursuant to Public Law 74-46 and renamed in the Department of Agriculture Reorganization Act of 1994, (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.

This year NRCS efforts, launched under the 2011-2015 Strategic Plan, focused on the core mission outcomes of the agency under USDA Strategic Goal 2. Under USDA Strategic Goal 2, NRCS has one goal: “Get More Conservation on the Ground” which is a reflection of the authorizing statutory purpose of the Agency. NRCS is committed to making our nation stronger from the ground up by providing and improving its direct technical assistance to America’s private landowners and land managers.

In order to maximize conservation success, resource managers and conservationists must assess the status of natural resources and evaluate the direct impact of the conservation work. Improved outcome-based key performance measures were developed in 2011 in order to quantify the conservation impact of conservation activities. These measures will reflect the long-term outcomes of public investment by using short-term metrics that can be reported on a quarterly basis. Currently, the baselines and targets of these outcome measures are being developed and will be included in the 2013 Annual Performance Plan.

NRCS administers the following discretionary programs:

Funded:

- Conservation Technical Assistance (CTA)
- Soil Survey (SOIL)
- Snow Survey and Water Supply Forecasting (SNOW)
- Plant Material Centers (PMCs)
- Water bank Program;

Currently unfunded:

- Watershed Operations (P.L. 78-534);
- Small Watersheds (P.L. 83-566) and;
- Resource Conservation and Development (RC&D).
- Healthy Forests Reserve Program (HFRP); and
- Water Bank Program.
- Watershed Rehabilitation Program (REHAB) and;
- Emergency Watershed Protection Program (EWP).

NRCS also administers the following mandatory Farm Bill programs:

- Wetlands Reserve Program (WRP);
- Environmental Quality Incentives Program (EQIP);
- Farm and Ranch Lands Protection Program (FRPP);
- Wildlife Habitat Incentives Program (WHIP);
- Conservation Security Program;
- Conservation Stewardship Program (CSP);
- Agricultural Management Assistance (AMA);
- Grassland Reserve Program (GRP);
- Agricultural Water Enhancement Program (AWEP); and
- Chesapeake Bay Watershed Program (CBWP).

The Agency also provides technical assistance to the Conservation Reserve Program (CRP) administered by Farm Services Agency.

All programs and performance support USDA's Strategic Goal 2 as outlined in the following table.

USDA Strategic Goal#2	Agency Strategic Goal	Agency Objectives	Programs that Contribute	Selected Key Outcomes	Key Performance Measures (KPMs)
Ensure Our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources	Get More Conservation on the Ground	Restore and conserve the Nation's forests, farms, ranches, and grasslands	CTA, EQIP, SOIL, Conservation Security Program, CSP, FRPP, AMA, WRP, GRP, HFRP	1. Maintain Productive working farms and ranches.	Cropland with conservation applied to improve soil quality  Grazing and forest land with conservation applied  Prime, unique, and important farmland protected
			CTA, EQIP, WRP, GRP, HFRP, WHIP	2. Decrease threats to "candidate" and threatened/endangered species.	Non-Federal land with conservation applied to improve fish and wildlife habitat quality
	Protect and enhance America's water resources	CTA, EQIP, Conservation Security Program, CSP, WRP, AWEP, CBWP, CRP, SNOW, Water Bank	5. Eliminate and reduce impairments to water bodies and help prevent the listing of additional water bodies as "impaired".	Agency Priority Goal  Land with conservation applied to improve water quality  Wetlands created, restored, or enhanced	

Key Outcome 1: Maintain productive working farms and ranches.

Long-term Performance Measures:\*

- Target: By 2015, farmers will manage 70 percent of cropland for sustained productivity and improved ecological health.\*  
Baseline: In 2003, 65 percent of cropland was managed for sustained productivity and improved ecological health. More recent baseline conditions with an outcome-based target will be developed in 2012.
- Target: By 2015, farmers, ranchers, and other landowners will apply management practices that will maintain or improve long-term vegetative condition on 150 million acres of grazing and forest land.  
Baseline: In 2003, about 200 million acres of grazing and non-industrial private forest land were considered to be in minimal or degrading vegetative condition. More recent baseline conditions with an outcome-based target will be developed in 2012.

\* Calculation is through statistical methods of the NRCS National Resources Inventory and Conservation Effects Assessment Project, which includes annual collection of onsite data at subsets of the annual sample segments and points, and farmer surveys in conjunction with the USDA National Agricultural Statistics Service.

### Key Performance Measure: Cropland with conservation applied to improve soil quality

#### Selected Past Accomplishments Toward Achievement of the Key Outcome:

In 2011, across all NRCS programs, over 13.7 million acres of cropland had conservation applied to improve soil quality. This measure is used as the NRCS 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 NRCS National Resources Inventory, between 1982 and 2007, soil erosion on America's cropland decreased 43 percent. Water (sheet & rill) erosion on cropland in 2007 had declined from 1.68 billion tons per year to 960 million tons per year, and erosion due to wind declined from 1.38 billion tons per year to 765 million tons per year.

Key Performance Measure	2010 Actual	2011 Actual	2012 Target	2013 <sup>a/</sup> Target
Cropland with conservation applied to improve soil quality (millions of acres)				
CTA	8.2	8.2	7.3	7.1
EQIP	4.8	4.6	4.8	4.8

<sup>a/</sup> Farm Bill account subject to reauthorization.

*Accomplishments Expected at Proposed Funding Level:* Soil health will be improved on almost 12 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.

*NRCS Programs Contributing to Outcomes:* The two key programs that contribute to on-the-ground improvements in soil health are the CTA program and EQIP. The CTA program provides planning and technical assistance to landowners, resulting in the application of over 7 million acres of science-based conservation practices that improve soil health. Through EQIP, landowners can access financial assistance, and will apply 4.8 million acres of conservation practices that improve soil quality.

### Key Performance Measure: Grazing and forest land with conservation applied

#### Selected Past Accomplishments Toward Achievement of the Key Outcome:

According to NRCS's National Resource Inventory privately-owned range lands 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 land 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; improved wildlife habitat; and preservation of beautiful open space. In 2011, all NRCS programs contributed to the application of grazing and forest management systems. As a result, over 30 million acres of pasture, range, and forest lands had conservation applied to improve grazing and forest health. In addition, NRCS also provided technical assistance to landowners and managers on the application of effective grazing and forest land management practices.

Key Performance Measure	2010 Actual	2011 Actual	2012 Target	2013 <sup>a/</sup> Target
Grazing and forest land with conservation applied to protect the resource base (millions of acres) <sup>1/</sup>				
CTA	17.6	17.1	15.1	14.7
EQIP	17.5	16.3	16.2	16.2

<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.

*Accomplishments Expected at Proposed Funding Level:* The NRCS National Resources Inventory findings show that 20 percent of the rangeland is in need of conservation treatment for soil stability, hydrologic function, and/or biological integrity. NRCS has prioritized grazing land conservation through initiatives to assist America’s ranchers with improving the health of their lands and animals. State Resource Assessments have identified the need for 30 million acres of grazing and forest land conservation treatment, and set 2013 targets for both the CTA and EQIP programs. With these funds, NRCS will assist landowners and managers in installing prescribed grazing and forestry systems that improve ecosystem health.

*NRCS Programs Contributing to Outcomes:* The two key programs that contribute to on-the-ground grazing land conservation are the CTA program and EQIP. Through conservation planning (CTA) and implementation (EQIP), the Nation’s private landowners and managers work with NRCS to apply conservation practices on their land to reduce erosion and improve soil organic matter. In addition, easement programs such as the GRP fund the purchase of conservation easements on the Nation’s grasslands, while other programs such as WHIP assist in wildlife habitat restoration for species that live on pastures and range land.

**Key Performance Measure: Prime, unique, and important farmland protected from conversion to non-agricultural uses by conservation easements**

Selected Past Accomplishments Toward Achievement of the Key Outcome: Prime, unique and important farmland is critical to sustainable food production and the nation’s food security because it has the best combination of physical and chemical characteristics for producing food and fiber. NRCS maintains productive working farms and ranches by providing the financial and technical assistance to protect prime, unique and important farmland from conversion to other uses. In 2011, FRPP protected over 50,000 acres of prime, unique and important farmland from conversion to non-agricultural uses through permanent agricultural conservation easements. Local support has been strong, with participating State, Tribal and local entities, non-governmental organizations and landowner contributing \$2 for each Federal dollar of investment.

<b>Key Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013<sup>a/</sup> Target</b>
Prime, unique, and important farmland protected from conversion, to non-agricultural uses by conservation easements, thousand acres FRPP	53.9	51.5	45.0	60.0

*Accomplishments Expected at Proposed Funding Level:* The proposed funding will provide financial and technical assistance to landowners and partners in local communities that wish to permanently protect the Nation’s best soil on farms in local communities for future generations. During 2013, 60 thousand acres of prime, unique, and important farmland will be protected in perpetuity.

*NRCS Programs Contributing to Outcomes:* FRPP is the one program in NRCS that contributes to this outcome. NRCS partners with private farm and ranch land owners, state and local governments, and non-profit organizations to preserve working farms permanently.

Key Outcome 2: Decrease threats to “candidate” and threatened/endangered species

Long-term Performance Measures

Target: By 2015, farmers, ranchers, and non-industrial private forest landowners will implement conservation measures to improve an additional 60 million acres of essential habitat to benefit at-risk or declining species.

Baseline: In 2010, farmers, ranchers, and other landowners and managers improved habitat for declining and at-risk species on 13 million acres.

**Key Performance Measure: Non-Federal land with conservation applied to improve fish and wildlife habitat quality**

Selected Past Accomplishments Toward Achievement of the Key Outcome: Nearly 70 percent of the fish and wildlife habitat in America is on privately owned lands. NRCS provides private landowners financial and on-site technical assistance for: assessment of the quality of wildlife habitat; installation of practices necessary to restore or enhance that habitat; and the development of 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. In 2011, using the EQIP, CTA, and WHIP programs, over 18 million acres of habitat were improved for wildlife. These acres included improvement of habitat for wildlife species on Federal and state lists of threatened and endangered species and for other species of 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, wetland creation and restoration, and more. Privately-owned working farms and ranches provide habitat for much of the Nation’s wildlife. Protecting specific ecosystems and landscapes (including wetlands, grasslands, floodplains, and certain types of forests) can help support wildlife and aquatic species and provide benefits in the form of recreation, hunting, and other forms of agritourism.

<b>Key Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013<sup>a/</sup> Target</b>
Non-Federal Land with conservation applied to improve fish and wildlife habitat quality, millions of acres				
WHIP	0.9	1.3	0.7	1.1
EQIP	6.0	4.8	5.0	5.0

*Accomplishments Expected at Proposed Funding Level:* For 2013, over 15 million acres of wildlife habitat will be improved through the direct assistance from NRCS staff. Wildlife habitat such as riparian areas, wetlands, and upland areas will be improved through the application of conservation practices, especially in priority areas that have threatened/endangered species. By focusing of the program dollars only in the highest priority areas, the direct impacts of the funding will be improved.

*NRCS Programs Contributing to Outcomes:* There are three key NRCS programs that contribute to the improvement of wildlife habitat on America’s private lands: CTA, EQIP, and WRP. These programs contribute to wildlife habitat improvement through conservation methods that have multiple and interrelated benefits on the land. Smaller programs that specifically target wildlife habitat improvement include WHIP, and HFRP.

Key Outcome 3: Eliminate and reduce impairments to water bodies and help prevent the listing of additional water bodies as “impaired”

Long-term Performance Measures:

- Target: By 2015, sediment delivery from agricultural operations will be reduced by an additional 37.5 million tons, and nitrogen delivery will be reduced by an additional 215,000 tons.  
Baseline: In 2007, sediment delivery from agricultural operations was 970 million tons per year. In 2003, annual nitrogen delivery from agricultural operations was an estimated 6 million tons. More recent baseline numbers are being developed for outcome-based Key Performance Measures and will be updated in 2012.
- Target: By 2015, farmers and ranchers will create, restore, or enhance an additional 1.25 million acres of wetlands on non-Federal lands (1.1 percent improvement over baseline).  
Baseline: In 2003, there were 111 million wetland acres on non-Federal lands in the contiguous United States.

### **Agency Priority Goal**

**Agency Priority Goal:** Further accelerate the protection of clean and abundant water resources by implementing High Impact Targeted (HIT) practices through FSA, Forest Service, and NRCS Programs on four million acres in critical and/or impaired watersheds.

**Goal Statement:** By September 30, 2013, accelerate the protection of clean, abundant water resources by implementing high impact targeted (HIT) practices through U.S. Forest Service, FSA and NRCS programs on 4 million acres within critical and/or impaired watersheds. By September 30, 2013, quantify improvements in water quality by developing and implementing an interagency outcome metric within 2-4 pilot watersheds.

**Approaches and Strategies:** Protecting and enhancing the Nation's water resources is recognized as one of the most critical issues of our time. Eighty-seven percent of America's surface supply of drinking water originates on land that NRCS programs can impact in some way. Thus NRCS has a key role to play in addressing the challenges facing the Nation's water resources. NRCS has a network of experts working in communities across the country and an array of authorities, tools, and programs with which to take action. While the agricultural and forestry communities have made good progress in improving water quality and water use efficiency, conservation efforts need to be accelerated. Furthermore, climate change and population growth are generating greater uncertainty and demand for water resources among agricultural, industrial and municipal users. Three USDA agencies: NRCS, USFS, and FSA have been charged with this priority goal and will collaborate to develop an integrated approach to achieve measurable results in water quality and water use efficiency.

There are three key elements to the strategy. First, Landscapes of National Interest have been established, representing large-scale priority watersheds through executive orders, statute, and/or other policy guidance that national leaders have identified as important for natural resource conservation: the Great Lakes Basin; Mississippi River Basin/Gulf of Mexico; Chesapeake Bay Watershed; and the Bay-Delta in California. By engaging the expertise of agency staff and land management partners, sub-watersheds have also been identified and targeted. Sub-watershed selection criteria include, but are not limited to:

- Watersheds with a high proportion of agricultural and forest land;
- Watersheds in which restoration would benefit public health, economic viability, cultural heritage, and ecological sustainability (watersheds with 303(d) listed streams, or at risk due to physical characteristics such as impervious surfaces or soil types and slopes that contribute to nutrient or sediment losses to streams or rivers);
- Watersheds in good condition where protection of high quality and abundant water supplies will benefit public health, economic viability, cultural heritage, and ecosystems. Watershed condition is evaluated by such factors as water quality or the presence of healthy populations of fish and mammals; and
- Watersheds with strong partnerships and opportunity to leverage Federal investments to achieve measurable results.

The second element of NRCS's strategy is to work with farmers, ranchers, forest and rangeland owners, and others to apply HIT practices in these watersheds to protect and enhance the Nation's water resources. Each watershed is evaluated to determine the mix of conservation practices that will best protect water quantity and quality that will address the particular problems in the watershed. NRCS, USFS, and FSA have identified HIT practices and grouped them into three categories: nutrient management, land management, and watershed protection/restoration.

The third element of NRCS's strategy is to integrate ongoing or existing NRCS research and data to develop more meaningful outcome metrics. This includes creating interfaces between the USFS's Watershed Condition Framework and NRCS's/Agricultural Research Service's Conservation Effects Assessment Project (CEAP) which quantifies the environmental effects of conservation practices.

**Accomplishments:** By leveraging existing funding and programs in targeted areas, NRCS was able meet its share of the USDA's two-year goal (2010-2011) of implementing HIT practices on six million acres in priority areas. Within each NRCS Priority Watershed, HIT practices were applied to improve water quality or quantity.

Key Performance Measure	2010 Actual	2011 Actual	2012 Target	2013 Target
Critical and/or impaired watersheds with high impact targeted conservation practices applied to improve water quality, millions of acres CTA	1.9	1.8	1.7	1.6

*Accomplishments Expected at the Proposed Funding Level.* The three agency goal statement is as follows: By September 30, 2013, accelerate the protection of clean, abundant water resources by implementing high impact targeted (HIT) practices through Farm Services Agency (FSA), U.S. Forest Service (USFS), and NRCS programs on four million acres in critical and/or impaired watersheds. Implement in two to four watersheds an interagency metric to quantify improvements in water quality, such as reductions in tons of nutrients, pesticides, and sediment entering water bodies.

*NRCS Programs Contributing to Outcomes:* There are several existing programs that contribute to the accomplishment of the multi-agency USDA goal. The primary programs are CTA and EQIP with additional accomplishments through activities of the WHIP, AMA, GRP AWEP, CBWP, and WRP.

**Key Performance Measure: Land with conservation applied to improve water quality**

Selected Past Accomplishments Toward Achievement of the Key Outcome: In 2011, NRCS assisted landowners and managers with the application of 40 million acres of conservation practices designed to improve water quality. NRCS conservation practices are science-based and have a demonstrated effect. A scientific study was done by CEAP with the following results: Between 2003-2006, adoption of conservation practices in Chesapeake Bay agriculture has reduced the 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.

Key Performance Measure	2010 Actual	2011 Actual	2012 Target	2013 <sup>a/</sup> Target
Land with conservation applied to improve water quality, millions of acres <sup>2/</sup> CTA	22.3	24.0	20.0	19.8
EQIP	14.2	14.5	16.0	16.0

<sup>2/</sup> In 2011, the key performance measure used for water quality was “comprehensive nutrient management plans (CNMPs), applied.” After careful analysis and the need to move toward outcome-based measures, the above measure will be used as an as a more accurate reflection of agency impact on water quality. This measure captures the impact of CNMPs as well as additional water quality improvement impacts.

*Accomplishments Expected at Proposed 2013 Funding Level:* In 2012 and 2013, there is an increased focus of programs and conservation investments in water quality, especially in priority watersheds. Nearly 40 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, and nutrient management.

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 United States Geological Survey, and the Environmental Protection Agency, will work collaboratively with stakeholders such as agriculture producer organizations, conservation districts, States, Tribes, NGOs, and other local leaders to identify areas where a more targeted and coordinated approach can achieve substantial improvements in water quality. In 2013, The President’s Budget seeks to achieve substantial improvements in water quality from conservation programs by ensuring that USDA’s key investments through Farm Bill conservation programs and related efforts are appropriately leveraged by other federal programs by targeting technical and financial assistance within critical and impaired watersheds. As a

result, USDA will increase the level of mandatory conservation funding targeted to improve water quality in watersheds that have a high level of non-point source nutrient impairments.

*NRCS Programs Contributing to Outcomes:* There are two key NRCS programs that contribute to the improvement of water quality on America's private lands: CTA and the EQIP. In addition, programs that focus on specific areas or practices are the AWEP, CBWP, AMA, and WRP. The Conservation Reserve Program (CRP) and the Conservation Stewardship Program (CSP), and its predecessor Conservation Security Program also contribute to improved water quality.

**Key Performance Measure: Wetlands created, restored, or enhanced**

Selected Past Accomplishments Toward Achievement of the Key Outcome: In the continental United States over 50 percent of the historical 220 million acres of wetland that once existed have been lost, with some States having lost over 90 percent of their wetland acreage. Protection, restoration, creation and enhancement of wetland ecosystems is important in protecting source water, improving water quality, providing fish and wildlife habitat, sequestering carbon, storing floodwaters, and maintaining surface water flows during seasonal dry periods. The greatest potential for wetland restoration exists on private lands because over 70 percent of our land is in private hands. NRCS provides technical and financial assistance to restore, create or enhance wetlands and their associated functions and values. Healthy and productive wetland ecosystems filter sediment and other pollutants from surface and ground water, slow run-off, aid ground water re-charge, and reduce the overall temperature in surrounding waters. During 2011, 270 thousand acres of wetlands were restored, created, or enhanced, providing a direct impact to the protection and enhancement of America's water resources by reducing impairments to water bodies, streams and rivers. These restored, created or enhanced wetlands also provide critical habitat for wildlife especially species listed as threatened/ endangered.

<b>Key Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013<sup>a/</sup> Target</b>
Wetlands created, restored or enhanced, thousand acres WRP	129.1	131.8	175.0	75.0

*Accomplishments Expected at Proposed Funding Level:* In 2013, 40 thousand acres of wetlands will be created, restored, or enhanced through the application of NRCS conservation practices.

*NRCS Programs Contributing to Outcomes:* The Wetlands Reserve Program (WRP) is the NRCS program that assists farmers and ranchers with wetland restoration, creation, and enhancement. Both the CTA program and EQIP program also contribute significantly to annual wetland conservation as well.

**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.**

	2010 <u>Actual</u>	2011 <u>Actual</u>	2012 <u>Estimate</u>	<u>Change</u>	2013 <u>Estimate</u>
<b>Discretionary:</b>					
Conservation Technical Assistance	\$772,637	\$754,926	\$729,459	-\$659	\$728,800
Staff Years	5,352	5,419	5,001	-142	4,859
Soil Survey	93,939	93,751	80,000	-	80,000
Staff Years	676	634	534	-15	519
Snow Survey and Water Supply Forecasting	10,965	10,943	9,300	-	9,300
Staff Years	65	56	47	-2	45
Plant Materials Program	11,088	11,066	9,400	-	9,400
Staff Years	98	92	74	-2	72
Watershed Operations					
P.L. 78-534					
1. Technical Assistance	1,030	-	-	-	-
2. Financial Assistance	4,116	-	-	-	-
Subtotal, P.L. 78-534	5,146	-	-	-	-
Staff Years	5	2	12	-12	-
Emergency Watershed Protection Program					
1. Technical Assistance	-	-	43,180	-43,180	-
2. Financial Assistance	-	-	172,720	-172,720	-
Subtotal, EWP	-	-	215,900	-215,900	-
Staff Years	140	141	354	-303	51
Small Watershed Operations					
P.L. 83-566					
1. Technical Assistance	7,032	-	-	-	-
2. Financial Assistance	17,822	-	-	-	-
Subtotal, P.L. 83-566	24,854	-	-	-	-
Staff Years	28	35	34	-34	-
Watershed and Flood Prevention , Recovery Act					
Staff Years	202	-	-	-	-
Watershed Rehabilitation					
1. Technical Assistance	17,200	14,371	7,500	-7,500	-
2. Financial Assistance	22,961	3,593	7,500	-7,500	-
Subtotal, Rehabilitation	40,161	17,964	15,000	-15,000	-
Staff Years	82	88	43	-43	-
Watershed Rehabilitation, Recovery Act					
Staff Years	27	-	-	-	-
Resource Conservation and Development					
Staff Years	50,730	23,730	-	-	-
	403	190	-	-	-
Healthy Forests Reserve Program					
Staff Years	-	-	-	-	-
	1	-	-	-	-
Water Bank Program					
Staff Years	-	-	7,500	-7,500	-
	-	-	4	-4	-
Total Cost, Discretionary	1,009,520	912,380	1,066,559	-239,059	827,500
Total Staff Years, Discretionary	7,079	6,657	6,103	-557	5,546

**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.**

	2010 <u>Actual</u>	2011 <u>Actual</u>	2012 <u>Estimate</u>	<u>Change</u>	2013 a/ <u>Estimate</u>
<b>Mandatory:</b>					
Wetlands Reserve Program	\$630,139	\$569,014	\$707,117	-\$482,810	\$224,307
Staff Years	217	269	431	-120	311
Environmental Quality Incentives Program	1,174,039	1,230,878	1,400,000	+3,000	1,403,000
Staff Years	2,407	2,598	2,913	-68	2,845
Agricultural Water Enhancement Program	72,160	73,391	60,000	-	60,000
Staff Years	65	79	66	-2	64
Wildlife Habitat Incentives Program	82,926	83,472	50,000	+23,000	73,000
Staff Years	126	147	88	38	126
Farm and Ranch Lands Protection Program	149,896	168,714	150,000	+50,000	200,000
Staff Years	29	26	24	+7	31
Conservation Security Program	222,169	198,871	197,085	-14,465	182,620
Staff Years	154	134	128	-9	119
Conservation Stewardship Program	389,813	577,804	768,500	203,598	972,098
Staff Years	496	470	486	+117	603
Grasslands Reserve Program	100,108	77,945	66,737	-62,122	4,615
Staff Years	28	28	24	-8	16
Agricultural Management Assistance	7,250	7,469	2,500	-	2,500
Staff Years	12	11	4	-	4
Chesapeake Bay Watershed Program	44,036	72,560	51,676	-1,676	50,000
Staff Years	85	97	68	-3	65
Healthy Forests Reserve Program	7,617	17,046	13,344	-13,344	-
Staff Years	6	14	15	-15	-
Conservation Reserve Program	59,563	122,847	80,000	+28,000	108,000
Staff Years	529	937	602	+187	789
Total Costs, Mandatory	2,939,716	3,200,010	3,546,959	-266,819	3,280,140
Total Staff Years, Mandatory	4,154	4,810	4,849	124	4,973
Total Costs, All Strategic Goals	3,949,236	4,112,390	4,613,518	-505,878	4,107,640
Total Staff Years, All Strategic Goals	11,233	11,467	10,952	-433	10,519

<sup>a/</sup> Farm Bill account subject to reauthorization.

NATURAL RESOURCES CONSERVATION SERVICE  
**Summary of Budget and Performance**  
**Key Performance Outcomes and Measures**

**USDA Strategic Goal #2:** USDA will ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change while enhancing our water resources.

Key Outcome 1: Maintain productive working farms and ranches.

Long-term Performance Measures:

- Target: By 2015, farmers will manage 70 percent of cropland for sustained productivity and improved ecological health.  
Baseline: In 2003, 65 percent of cropland was managed with sustained productivity and improved ecological health. Recent baseline conditions and outcome-based target will be developed in 2012.
- Target: By 2015, farmers, ranchers, and other landowners will apply management that will maintain or improve long-term vegetative condition on 150 million acres of grazing and forest land.  
Baseline: In 2003, about 200 million acres of non-industrial private forest land were considered to be in minimal or degrading vegetative condition. More recent baseline conditions with an outcome-based target will be developed in 2012.

Key Performance Measure:

- Measure- Cropland with conservation applied to improve soil quality, acres. Soil health describes the capacity of a soil to sustain plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation. High soil quality is the foundation of productive croplands, forest lands, and grasslands and a vibrant and productive agriculture. Controlling erosion, minimizing soil disturbance and compaction, and managing plants and soil organic matter are all essential to maximizing soil quality and function for agricultural and environmental benefits. This measure captures the cropland acres on which conservation practices have been applied to improve soil quality, as measured in millions of acres.
- Measure: Grazing and forest land with conservation applied to protect the resource base, acres. Grazed forest, range and grasslands comprise nearly 55 percent of the Nation's total land area. Applying properly planned conservation practices are essential to maintaining productive working farms and ranches that provide sustainable production of sufficient food and fiber for an ever increasing population. This measure includes land on which a conservation system or practice is applied with NRCS technical assistance and/or financial assistance. The conservation applied includes a wide range of practices tailored to the resource conditions and producer's operation and goals on the specific site. This measure is acres (in millions) of grazing and non-industrial private forest land on which conservation practices have been applied to protect the resource base.
- Measure: Prime, unique, or important farmland protected from conversion to non-agricultural uses by conservation easements, acres. Prime, unique and important farmland is critical to sustainable food production and the nation's food security. It is farmland that has the best combination of physical and chemical characteristics for producing food and fiber. USDA maintains productive working farms and ranches by providing the financial and technical assistance to protect prime, unique and important farmland from conversion to other uses. Through the Farm and Ranch Lands Protection Program (FRPP), USDA partners with private farm and ranch land owners, state and local governments and non-profit organizations to preserve working farms permanently.

<b>Performance Measure</b>	<b>2007 Actual</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013 a/ Target</b>
Cropland with conservation applied to improve soil quality							
CTA acres (million)	7.3	8.3	7.6	8.2	8.2	7.3	7.1
EQIP, acres (million)	5.3	5.6	4.8	4.8	4.6	4.8	4.8
Grazing and forest land with conservation applied to protect the resource base <sup>1/</sup>							
CTA, acres (million)	0.8	16.0	16.0	17.6	17.1	15.1	14.7
EQIP, acres (million)	16.5	16.9	17.2	17.5	16.3	16.2	16.2
Prime, unique, or important farmland protected from conversion to non-agricultural uses by conservation easements							
FRPP, acres (thousand)	38.5	27.4	38.3	53.9	51.5	45.0	60.0

<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>a/</sup> Farm Bill account subject to reauthorization.

**Key Outcome 2:** Decrease threats to “candidate” and threatened/endangered species

Long-term Performance Measures

**Target:** By 2015, farmers, ranchers, and non-industrial private forest landowners will implement conservation measures to improve an additional 60 million acres of essential habitat to benefit at-risk or declining species.

**Baseline:** In 2010, farmers, ranchers, and other landowners and managers improved habitat for declining and at-risk species on 13 million acres.

Key Performance Measure:

- Measure: Non-Federal land with conservation applied to improve fish and wildlife habitat quality. Privately-owned and other non-Federal lands that make up our rural landscape provide critical habitat for much of the Nation's wildlife. Protecting specific ecosystems and landscapes such as wetlands, grasslands, floodplains, and certain types of forests, can help support wildlife and aquatic species and provide benefits in the form of recreation, hunting, and other forms of agritourism.

<b>Performance Measure</b>	<b>2007 Actual</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013 a/ Target</b>
Non-Federal land with conservation applied to improve fish and wildlife habitat quality							
WHIP, acres (thousand)	388.8	316.9	335.4	876.9	1,279	700	1,100
EQIP, acres (million)	4.8	4.8	5.2	6.0	4.8	5.0	5.0

Key Outcome 3: Eliminate and reduce impairments to water bodies and help prevent the listing of additional water bodies as “impaired”.

Long-term Performance Measures:

- Target: By 2015, sediment delivery from agricultural operations will be reduced by an additional 37.5 million tons, and nitrogen delivery will be reduced by an additional 215,000 tons.  
Baseline: In 2003, sediment delivery from agricultural operations was 970 million tons per year. In 2003, annual nitrogen delivery from agricultural operations was an estimated 6 million tons. Recent baseline and targets are being developed during 2012.
- Target: By 2015, farmers and ranchers will create, restore, or enhance an additional 1.25 million acres of wetlands on non-Federal lands (1.1 percent improvement over baseline).  
Baseline: In 2003, there were 111 million wetland acres on non-Federal lands in the contiguous United States.

Key Performance Measures:

- Measure #1: Land with conservation applied to improve water quality, million acres. Water running off the land surface or infiltrating the ground can carry a number of potential pollutants into streams, lakes, groundwater, and estuaries from agricultural operations. States and tribes have identified sediment and nutrients as the most extensive agricultural contaminants affecting surface water quality; nutrients and agrichemicals are the major concerns for groundwater. NRCS has set long-term targets for reducing sediment and nutrients losses from agricultural operations.
- Measure #2: Wetlands created restored, or enhanced, acres. Wetlands provide wildlife habitat, protect and improve water quality, attenuate water flows due to flooding, and recharge groundwater. Restoration, creation or enhancement of wetlands and their associated functions and values provides a direct impact to the protection and enhancement of America’s water resources by reducing impairments to water bodies, streams and rivers. Healthy and productive wetland ecosystems filter sediment and other pollutants from surface and ground water, slow surface runoff, improve ground water recharge, and reduce the overall temperature in surrounding waters. NRCS will help protect and improve wetland resources by supporting voluntary incentive-based approaches to wetland restoration, making wetland determinations, and conducting wetland compliance reviews.
- Agency Priority Goal (APG): Priority landscapes with high impact targeted conservation practices applied to improve water quality, acres. Protecting and enhancing the Nation’s water resources is recognized as one of the most critical issues of our time. Eighty-seven percent of America’s surface supply of drinking water originates on land that NRCS programs can impact in some way. Thus NRCS has a key role to play in addressing the challenges facing the Nation’s water resources. NRCS has a network of experts working in communities across the country and an array of authorities, tools, and programs with which to take action. While the agricultural and forestry communities have made good progress in improving water quality and water use efficiency, conservation efforts need to be accelerated. Furthermore, climate change and population growth are generating greater uncertainty and demand for water resources among agricultural, industrial and municipal users. Three USDA agencies, NRCS, the Farm Services Agency (FSA), and the U.S. Forest Service (USFS) been charged with this priority goal and will collaborate to develop an integrated approach to achieve 4 million acres of water quality and water use efficiency conservation efforts in critical and/or impaired watersheds.

There are three key elements to the strategy. First, Landscapes of National Interest have been established, representing large-scale priority watersheds through executive orders, statute, and/or other policy guidance that national leaders have identified as important for natural resource conservation: the Great Lakes Basin; Mississippi River Basin/Gulf of Mexico; Chesapeake Bay Watershed; and the Bay-Delta in California. By engaging the expertise of agency staff and land management partners, sub-watersheds have also been identified and targeted. Sub-watershed selection criteria include, but are not limited to:

- Watersheds with a high proportion of agricultural and forest land;
- Watersheds in which restoration would benefit public health, economic viability, cultural heritage, and ecological sustainability (watersheds with 303(d) listed streams, a high proportion of hard surfaces such as roads, parking lots and roof tops or soil types and slopes that contribute to nutrient or sediment losses to streams or rivers);
- Watersheds in good condition where protection of high quality and abundant water supplies will benefit public health, economic viability, cultural heritage, and ecosystems. Watershed condition is evaluated by such factors as water quality or the presence of healthy populations of fish and mammals; and
- Watersheds with strong partnerships and opportunity to leverage Federal investments to achieve measurable results.

The second element of NRCS's strategy is to work with farmers, ranchers, forest and rangeland owners, and others to apply HIT practices in these watersheds to protect and enhance the Nation's water resources. Each watershed is evaluated to determine the mix of conservation practices that will best protect water quantity and quality that will address the particular problems in the watershed. NRCS, USFS, and FSA have identified HIT practices and grouped them into three categories: nutrient management, land management, and watershed protection/restoration.

The third element of NRCS's strategy is to integrate ongoing or existing NRCS research and data to develop more meaningful outcome metrics. This includes creating interfaces between the USFS's Watershed Condition Framework and NRCS's/Agricultural Research Service's Conservation Effects Assessment Project (CEAP) which quantifies the environmental effects of conservation practices.

<b>Performance Measure</b>	<b>2007 Actual</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013 a/ Target</b>
Land with conservation applied to improve water quality <sup>2/</sup>							
CTA, acres (million)	6.4	8.7	20.5	22.3	24.0	20.0	19.8
EQIP, acres (million)	13.6	14.8	14.5	14.2	14.5	16.0	16.0
Wetlands created, restored or enhanced							
WRP, acres (thousand)	149.3	128.9	106.4	129.1	131.8	175.0	75.0
Critical and/or impaired watersheds with high impact targeted conservation practices applied to improve water quality							
CTA, acres (million)	N/A	N/A	N/A	1.9	1.8	1.7	1.6

<sup>2/</sup> In 2011, the key performance measure used for water quality was "comprehensive nutrient management plans (CNMPs), applied." After careful analysis and the need to move toward outcome-based measures, the above measure will be used as an as a more accurate reflection of agency impact on water quality. This measure captures the impact of CNMPs as well as additional water quality improvement impacts.

## NATURAL RESOURCES CONSERVATION SERVICE

**Full Cost by Department Strategic Goal**  
(Dollars in thousands)

<b>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</b>					
<b>Program</b>	<b>Program Items</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Estimate</b>	<b>2013 a/ Estimate</b>
<b>Conservation Technical Assistance</b>					
	Technical Assistance	772,637	754,926	729,459	728,800
	Total Costs	772,637	754,926	729,459	728,800
	Staff Years	5,352	5,419	5,001	4,859
	Performance measure: Cropland with conservation applied to improve soil quality				
	Performance, million acres	8.2	8.2	7.3	7.1
	Performance measure: Grazing and forest land with conservation applied to protect the resource base				
	Performance, million acres	17.6	17.1	15.1	14.7
	Performance measure (APG): Critical and/or impaired watersheds with high impact targeted conservation practices applied to improve water quality				
	Performance, million acres	1.9	1.8	1.7	1.6
	Performance measure: Land with conservation applied to improve water quality				
	Performance, million acres	22.3	24.0	20.0	19.8
	Performance measure: Wetlands created, restored or enhanced				
	Performance, acres	65,797	80,976	59,000	58,000
	Performance measure: Non-Federal land with conservation applied to improve fish and wildlife habitat quality				
	Performance, million acres	9.2	10.7	9.3	9.0
	Performance measure (DRAFT): Improved Soil Health on Cropland				
	Performance, tons of soil carbon retained on cropland	N/A	N/A	N/A	TBD
	Performance measure (DRAFT): Reduced water quality impairments				
	Performance, Tons pollutants reduced leaving cropland	N/A	N/A	N/A	TBD
<b>Soil Survey</b>					
	Technical Assistance	93,939	93,751	80,000	80,000
	Total Costs	93,939	93,751	80,000	80,000
	Staff Years	676	634	534	519
	Performance measure: Soil surveys mapped or updated				
	Performance: million acres	38.8	34.8	36.0	36.0
<b>Snow Survey &amp; Water Supply Forecasting</b>					
	Technical Assistance	10,965	10,943	9,300	9,300
	Total Costs	10,965	10,943	9,300	9,300
	Staff Years	65	56	47	45
	Performance measure: Water supply forecasts issued				
	Performance, number	12,400	12,117	10,000	10,000
<b>Plant Materials Centers</b>					
	Technical Assistance	11,088	11,066	9,400	9,400
	Total Costs	11,088	11,066	9,400	9,400
	Staff Years	98	92	74	72
	Performance measure: New plant materials released to commercial growers				
	Performance, number	11	4	7	5
	Performance measure: Technical documents prepared and transferred to customers				
	Performance, number	329	334	275	250
<b>Flood Prevention Operations P.L. 78-534</b>					
	Technical Assistance	1,030	-	-	-
	Financial Assistance	4,116	-	-	-
	Total Costs	5,146	-	-	-
	Staff Years	5	2	12	-

## NATURAL RESOURCES CONSERVATION SERVICE

**Full Cost by Department Strategic Goal**  
(Dollars in thousands)

<b>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</b>				
	2010	2011	2012	2013 a/
<b>Watershed Operations P.L. 83-566</b>				
Technical Assistance	7,032	-	-	-
Financial Assistance	17,822	-	-	-
Total Costs	24,854	-	-	-
Staff Years	28	35	34	-
<b>Emergency Watershed Protection Program</b>				
Technical Assistance	-	-	43,180	-
Financial Assistance	-	-	172,720	-
Total Costs	-	-	215,900	-
Staff Years	140	141	354	51
<b>Watershed Rehabilitation Program</b>				
Technical Assistance	17,200	14,371	7,500	-
Financial Assistance	22,961	3,593	7,500	-
Total Costs	40,161	17,964	15,000	-
Staff Years	82	88	43	-
Performance measure: Dams with watershed rehabilitation plans authorized				
Performance, number	20	9	-	-
<b>Resource Conservation &amp; Development</b>				
Technical Assistance	50,730	23,730	-	-
Total Costs	50,730	23,730	-	-
Staff Years	403	190	-	-
Performance measure: Jobs created or retained in rural communities through effective natural resource and community planning efforts				
Performance, number	8,762	-	-	-
<b>Water Bank</b>				
Technical Assistance	-	-	1,480	-
Financial Assistance	-	-	6,020	-
Total Costs	-	-	7,500	-
Staff Years	-	-	4	-
<b>Discretionary Total</b>				
Total Costs	1,009,520	912,380	1,066,559	827,500
Staff Years	6,849	6,657	6,103	5,546
<b>Wetlands Reserve Program</b>				
Technical Assistance	35,920	45,686	74,228	54,989
Financial Assistance	594,219	523,328	632,889	169,318
Total Costs	630,139	569,014	707,117	224,307
Staff Years	217	269	431	311
Performance measure: Wetlands created, restored or enhanced				
Performance, acres	129,082	131,793	175,000	75,000
Performance measure: Farmland, forest land, and wetlands protected by conservation easements				
Performance, acres	74,180	107,394	145,000	65,000

a/ Farm Bill account subject to reauthorization.

## NATURAL RESOURCES CONSERVATION SERVICE

**Full Cost by Department Strategic Goal**  
(Dollars in thousands)

<b>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</b>				
	2010	2011	2012	2013 a/
<b>Environmental Quality Incentives Program</b>				
Technical Assistance	317,342	336,369	381,925	382,744
Financial Assistance	856,697	894,509	1,018,075	1,020,256
Total Costs	1,174,039	1,230,878	1,400,000	1,403,000
Staff Years	2,407	2,598	2,913	2,845
Performance measure: Land with conservation applied to improve water quality				
Performance, million acres	14.2	14.5	16.0	16.0
Performance measure: Cropland with conservation applied to improve soil quality				
Performance, million acres	4.8	4.6	4.8	4.8
Performance measure: Non-Federal land with conservation applied to improve fish and wildlife habitat quality				
Performance, million acres	6.0	4.8	5.0	5.0
Performance measure: Grazing and forest land with conservation applied to protect the resource base				
Performance, million acres	17.5	16.3	16.2	16.2
Performance measure (DRAFT): Improved Soil Health on Cropland				
Performance, tons of soil carbon retained on cropland	N/A	N/A	N/A	TBD
Performance measure (DRAFT): Reduced water quality impairments				
Performance, Tons pollutants reduced leaving cropland	N/A	N/A	N/A	TBD
<b>Grasslands Reserve Program</b>				
Technical Assistance	6,700	7,647	6,682	4,615
Financial Assistance	93,408	70,298	60,055	-
Total Costs	100,108	77,945	66,737	4,615
Staff Years	28	28	24	16
Performance measure: Farmland and grazing lands protected by conservation easements				
Performance, acres	26,016	31,454	40,000	25,000
<b>Agricultural Water Enhancement Program</b>				
Technical Assistance	11,347	14,204	11,976	11,976
Financial Assistance	60,813	59,187	48,024	48,024
Total Costs	72,160	73,391	60,000	60,000
Staff Years	65	79	66	64
Performance measure: Land with conservation applied to improve irrigation efficiency				
Performance, acres	93,945	130,656	82,000	82,000
Performance measure: Land with conservation applied to improve water quality				
Performance, acres	117,831	147,563	120,000	120,000
<b>Wildlife Habitat Incentives Program</b>				
Technical Assistance	20,324	22,892	13,878	20,261
Financial Assistance	62,602	60,581	36,122	52,739
Total Costs	82,926	83,472	50,000	73,000
Staff Years	126	147	88	126
Performance measure: Non-Federal land with conservation applied to improve fish and wildlife habitat quality				
Performance, acres	876,895	1,278,752	700,000	1,100,000

<sup>a/</sup> Farm Bill account subject to reauthorization.

## NATURAL RESOURCES CONSERVATION SERVICE

**Full Cost by Department Strategic Goal**  
(Dollars in thousands)

<b>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</b>				
	2010	2011	2012	2013 a/
<b>Farm and Ranch Lands Protection Program</b>				
Technical Assistance	5,854	7,668	7,091	9,455
Financial Assistance	144,042	161,046	142,909	190,545
Total Costs	149,896	168,714	150,000	200,000
Staff Years	29	26	24	31
Performance measure: Prime, unique, and important farmland protected from conversion to non-agricultural uses by conservation easements				
Performance, acres	53,898	51,493	45,000	60,000
<b>Conservation Security Program</b>				
Technical Assistance	22,241	21,153	20,412	19,467
Financial Assistance	199,928	177,717	176,673	163,153
Total Costs	222,169	198,871	197,085	182,620
Staff Years	154	134	128	119
<b>Conservation Stewardship Program</b>				
Technical Assistance	69,415	69,668	72,966	93,142
Financial Assistance	320,398	508,136	695,534	878,956
Total Costs	389,813	577,804	768,500	972,098
Staff Years	496	470	486	603
Performance measure: Cropland that uses management practices to reduce nitrogen loading to surface and groundwater				
Performance, acres	N/A	433,975	575,000	725,000
<b>Agricultural Management Assistance</b>				
Technical Assistance	1,201	1,529	517	517
Financial Assistance	6,049	5,940	1,983	1,983
Total Costs	7,250	7,469	2,500	2,500
Staff Years	12	11	4	4
Performance measure: Land with conservation applied to improve irrigation efficiency				
Performance, acres	33,502	4,160	2,000	2,000
<b>Healthy Forests Reserve Program</b>				
Technical Assistance	1,391	1,793	2,044	-
Financial Assistance	6,226	15,253	11,300	-
Total Costs	7,617	17,046	13,344	-
Staff Years	6	14	15	-
Performance measure: Farmland and forest lands protected by conservation easements				
Performance, acres	431	1,921	1,200	-
<b>Chesapeake Bay Watershed Program</b>				
Technical Assistance	10,497	12,464	8,974	8,682
Financial Assistance	33,539	60,096	42,703	41,318
Total Costs	44,036	72,560	51,676	50,000
Staff Years	85	97	68	65
Performance measure: Land with conservation applied to improve water quality				
Performance, acres	94,088	132,281	125,000	125,000
<b>Conservation Reserve Program</b>				
Technical Assistance	59,563	122,847	80,000	108,000
Total Costs	59,563	122,847	80,000	108,000
Staff Years	529	937	602	789
<b>Mandatory Total</b>				
Total Costs	2,939,716	3,200,010	3,546,959	3,280,140
Staff Years	4,154	4,810	4,849	4,973
<b>Agency Total</b>				
Total Costs	3,949,236	4,112,390	4,613,518	4,107,640
Staff Years	11,003	11,467	10,952	10,519

a/ Farm Bill account subject to reauthorization.