2022 USDA EXPLANATORY NOTES – NATURAL RESOURCES CONSERVATION SERVICE

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AGENCY-WIDE

PURPOSE STATEMENT

The mission of the Natural Resources Conservation Service (NRCS) is "Helping People Help the Land." The agency accomplishes this mission by providing products and services that enable people to be good stewards of the Nation's soil, water, and related natural resources on non-Federal lands. The establishment of the Soil Conservation Service (SCS) marked the beginning of the Federal government's enduring commitment to assisting in the conservation of natural resources on private lands. Originally authorized by Congress in 1935, to better reflect the broad scope of the agency's mission the agency was later renamed NRCS in the Department of Agriculture Reorganization Act of 1994 (P.L. 103-354, 7 U.S.C. 6901 et seq.). From the beginning, the agency brought a national focus to the emerging resource issues of the Dust Bowl era: prevention of wind and water erosion. Desperate to retain its productive Midwest soils, the Nation turned to SCS for technical guidance and advice on minimizing the impacts of erosion. Although the Dust Bowl has passed, the relationship between landowners and the agency remains.

Over time, the agency's suite of programs expanded and NRCS became a conservation leader for all natural resources: soil, water, air, plants, and animals. Now NRCS supports the rural economy by helping private landowners and producers protect the natural resource base on private lands. Technical assistance provided to farmers, ranchers, and other private landowners supplies the knowledge and tools they need to conserve, maintain, and restore the natural resources on the lands they manage. Financial assistance partially offsets the cost to install conservation practices necessary to safeguard natural resources and improve wildlife habitat.

About 70 percent of the land in the United States is privately owned, making stewardship by private landowners and land managers critical to the health of our Nation's agricultural economy. These are the people who make day-to-day decisions about natural resource use and management on non-Federal lands, and NRCS offers them the technology, technical and financial assistance needed to benefit the resources, sustain productive lands, and maintain healthy ecosystems.

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

NRCS's Conservation Delivery System provides services directly to the landowner or land manager in cooperation with conservation districts. Conservation districts are units of local government created by State law and exist in every county and territory of the United States. Conservation districts are responsible for providing guidance to the agency on local resource concerns and serving as the voice of the local community on resource issues. NRCS also works in partnership with State and local agencies, locally elected or appointed farmer committees, Federal agencies, tribal governments, and private sector organizations to encourage cooperation and facilitate leveraging of the financial and technical resources these groups can offer. By bringing together groups that have a common and vested interest in the local landscape, community, or watershed, NRCS facilitates collaboration among groups that collectively support sustainable agriculture and maintain natural resource quality.

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

The USDA's Farm Production and Conservation mission area developed and released farmers.gov - a dynamic and mobile-friendly website that delivers information, tools, and first-hand advice built around the needs of the people who grow the Nation's food, fiber, flora, and fuel. The external website serves as the customer gateway and informational counterpart to an authenticated, transactional portal where USDA customers can apply for programs, process technical and financial transactions, and manage accounts. USDA has built farmers.gov around customer needs and ideas through a streamlined, farmer-centered approach – bringing the most usable information together in a new way.

Private Lands Conservation Operations

The programs funded in the Private Lands Conservation Operations account are authorized by the 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), as amended. The purpose of Private Lands 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. Private Lands Conservation Operations has four major program components: Conservation Technical Assistance Program; Soil Survey Program; Snow Survey and Water Supply Forecasting Program; and Plant Materials Centers.

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

Through the CTA Program, NRCS helps land managers develop comprehensive conservation plans that include activities that 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 private 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 Program funding is used to:

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

Soil Survey Program. NRCS's Soil Surveys provide the public with information on the properties, capabilities, and conservation treatment needs of their soils through the use of soil maps and interpretive analyses. Soil Surveys help people make informed land use and management decisions that take into consideration various soil characteristics, such as soil carbon, and capabilities to ensure soil is healthy and productive. In addition, it provides soils information and interpretation to individuals or groups of decision-makers, and to communities, States, and others to aid sound decision-making in the wise use and management of soil resources; NRCS conducts Soil Surveys cooperatively with other Federal agencies, Land Grant Universities, State agencies, tribes, and local governments. NRCS's major Soil Survey Program objectives are to:

- Inventory and map the soil resource on all lands of the United States;
- Keep soil surveys relevant to meet emerging and ever-changing needs to mitigate the impacts of climate change and increase the resiliency of working agricultural lands;
- Interpret the data and make soil survey information available to meet public needs;
- Provide technical assistance in the use of soil survey information to maximize conservation outcomes; and
- Lead the National Cooperative Soil Survey Program.

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 measurement, nutrient management, and soil health initiatives) require that the soil survey collect and interpret new data to best inform decision makers.

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

Within the Soil Survey Program, the Science of Soil Health project is developing and implementing a statistically robust dynamic soil properties and soil health indicators assessment protocol to provide nationwide soils and management data for evaluation of the effects of conservation practices on soil health, soil erosion, carbon sequestration, and other resource issues. These efforts include the development of appropriate database infrastructure allowing USDA to collect, compile, store, and disseminate field- and farm-scale soil carbon and related data received through the agency's Conservation Assessment and Ranking Tool (CART), focused soil survey projects, soil carbon measurement and evaluation, and state-based assessment and monitoring activities. This project will complement ongoing efforts such as the National Cooperative Soil Survey, the Soil Monitoring project undertaken collaboratively with Colorado State University, a new Rapid Carbon Assessment, the Natural Resources Inventory and the NRCS Soil Health Division/Plant Materials Center cover crop impact study. NRCS initiated the effort in 2016; with the emphasis on soil health in the 2018 Farm Bill, full implementation of the Science of Health network is anticipated by 2023.

Snow Survey and Water Supply Forecasting (SSWSF) Program. Program and partners collect high elevation snow, weather, and climate data in the western United States providing snowpack data for water supply forecasts. Snowmelt in the West accounts for approximately 75 percent of the region's seasonal water supply for agriculture and municipal needs. NRCS staff collects and reviews data on snow depth, snow water equivalent, and other climate parameters such as precipitation and temperature at 2,000+ high-elevation sites. Presently, 926 of these remote sites (SNOTEL, SnoLite, and Hydromet) are automated and provide near real-time publicly available data. Snow courses and aerial markers provide snowpack information on a monthly basis between January and June. Data are analyzed to assess annual water availability, drought conditions, and flooding potential. Many stations have sensors to assess soil moisture conditions useful for predicting runoff likelihood or avalanche potential.

The SSWSF Program has operated under USDA in twelve western States, including Alaska, since 1935 and provides seasonal water supply forecasts essential to the national economy and resource management. Program importance continues to increase as water management in the West adapts to stresses such as population increase, rapid urbanization, flooding, droughts, fires, increased proximity to avalanche, and competing needs over limited resources between water users.

Snow and climate data and water supply forecasts are used by farmers, ranchers, and irrigation districts; municipal and industrial water providers; hydroelectric power utilities; fish and wildlife management; reservoir managers; recreationists; Tribal Nations; Federal, State, and local government agencies including transportation departments; International treaties, and many other entities.

Program objectives:

- Provide reliable, accurate, and timely seasonal surface water supply forecasts to agricultural producers, water managers, and water users in the West.
- Obtain, manage, and disseminate high quality data and information on snow, water, climate, and hydrologic conditions.
- Provide climate data supporting NRCS conservation planning tools.

Additionally, the Soil Climate Analysis Network (SCAN) provides climate information as well as soil moisture and temperature data at lower elevations across the U.S. SCAN consists of 217 sites in the 48 contiguous United States, Alaska, Hawaii, Puerto Rico, and U.S. Virgin Islands.

Plant Materials Centers (PMCs). NRCS's network of 25 PMCs identify, evaluate, and demonstrate the performance of plants and plant technologies to solve natural resource problems and improve the utilization of our nation's natural resources. PMCs continue to build on their long and successful history of releasing plants for resource conservation that have been instrumental at increasing the commercial availability of appropriate plant materials to the public. PMC activities contribute to reducing soil erosion; increasing cropland soil health and productivity; restoring wetlands, improving water quality, improving wildlife habitat (including pollinators); protecting streambank and riparian areas; stabilizing coastal dunes; producing forage; improving air quality; and addressing other conservation treatment needs.

The results of studies conducted by PMCs provide much of the basis for NRCS vegetative recommendations and conservation practices. This work ensures that NRCS conservation practices are scientifically based, improves the knowledge of NRCS field staff through PMC-led training sessions and demonstrations, and develops recommendations to meet new and emerging natural resource issues. PMCs carry out their work 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
Through the programs funded in the Watershed and Flood Prevention Operations account, NRCS cooperates with State and local agencies, tribal governments, and other Federal agencies to prevent damage caused by erosion, floodwater, and sediment, to further the conservation, development, utilization, and disposal of water, and advance the conservation and utilization of the land. Authorization includes the Watershed Operations Program authorized by the Flood Control Act of 1944 (P.L. 78-534) and the Watershed Protection and Flood Prevention Program authorized by P.L. 83-566 (16 U.S.C. 1001-1008), as amended.

Congress established the Watershed Program by enacting the Flood Control Act of 1944 (Public Law 78-534) and the Watershed Protection and Flood Prevention Act of 1954 (Public Law 83-566). Under these authorizations, the USDA Natural Resources Conservation Service (NRCS) has assisted watershed project sponsors in the construction of more than 11,845 flood control dams in 1,271 watersheds in 47 States since 1948 with a maximum individual watershed size of set at 250,000 acres. These projects provide an estimated $2.2 billion in annual benefits in reduced flooding and erosion damages, recreation, water supplies and wildlife habitat.

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

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

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

Local communities have constructed more than 11,849 watershed dams with assistance from NRCS from 1948 to 2020. These dams protect America’s communities and natural resources with flood control, offer recreation, wildlife benefits, and some many also provide the primary source of drinking water for the area. Funding is used for rehabilitation projects to bring the dam up to current safety standards through planning, design, and construction of the rehabilitation project, but may also be used for dam removal. The program may provide up to 65 percent of the total cost of the rehabilitation projects; Federal funds cannot be used for operation and maintenance.

Water Bank Program
The program focuses technical and financial assistance on flooded cropland, flooded hay and pasture land, and flooded forestland. Under the program, landowners and operators have non-renewable ten-year rental agreements to receive annual payments to protect wetlands and provide wildlife habitat by preventing adverse land uses and activities, such as drainage, that would destroy the wetland characteristics of those lands. Program participants who wish to establish or maintain conservation practices may also apply for financial assistance through other NRCS or State financial assistance programs where available.

Mandatory-Farm Bill Programs:

Environmental Quality Incentives Program (EQIP)
EQIP advances the voluntary application of conservation practices to promote agricultural production, forest management, and environmental quality as compatible uses. Conservation practices funded through EQIP help producers improve the condition of soil, water, air, and other natural resources. The program assists owners and operators of agricultural and forest land with the identification of natural resource problems and opportunities in their operation and provides assistance to solve identified problems in an environmentally beneficial and cost-effective manner. The program, which is authorized by Sections 1240 through 1240G and Section 1241(a) of the Food Security Act of 1985, was amended by the Agricultural Act of 2014 and re-authorized through 2019 by Section 60102 of the Improvements to Agriculture Programs Act of 2018. The program was further enhanced by the Agriculture Improvement Act of 2018 (2018 Farm Bill) and funded through 2023. The 2018 Farm Bill enhancements include soil testing and remediation as EQIP practices, allowing advance payments for certain producers, lowering the livestock set-aside to 50 percent, raising the organic EQIP payment limit, and allowing irrigation districts to participate in certain EQIP projects.

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

Conservation Stewardship Program (CSP)
The purpose of CSP is to encourage producers to address resource concerns in a comprehensive manner by undertaking additional conservation activities and improving, maintaining, and managing existing conservation activities. The program, which is authorized by Sections 1238E through 1238G and Section 1241(a) of the Food Security Act of 1985, was amended and re-authorized through 2018 by Sections 2101 and Section 2601 of the Agricultural Act of 2014. However, the 2018 Farm Bill eliminated the program authorized by the 2014 Farm Bill and established a new CSP program that is now a dollar-capped program (and not acre-based) by eliminating the prior $18 per acre payment rate. Moreover, the new CSP is authorized to be more closely aligned with EQIP. For example, the new CSP expands the definition of conservation activities by adding comprehensive conservation plan, soil health planning (including organic), and fosters the use of predictive analytical tools to more accurately measure conservation improvement. Therefore, the enhancements to CSP are in tandem to the enhancements in EQIP.

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

CSP is a voluntary program available through a continuous sign-up process, with announced cut-off dates for ranking and funding applications. This allows producers to submit their applications at any time. Applications are evaluated relative to other applications within similar geographic areas to facilitate a competitive ranking process among applications that face similar resource challenges. The 2018 Farm Bill prescribed the following factors for evaluating and ranking applications:

- Requires that at least two resource concern categories meet or exceed a science-based stewardship threshold at the time of contract offer, and meet or exceed one additional resource concern category by the end of the contract.
- Level of conservation treatment on all applicable natural resource concern categories at the time of application.
- Degree to which the proposed conservation activities increase natural resource conservation and environmental benefit.

Agricultural Conservation Easement Program (ACEP)
The 2018 Farm Bill made changes to the ACEP authorizing legislation in the Food Security Act of 1985, including:

- Identifying and protecting agricultural land by limiting non-agricultural uses that negatively affect the land's agricultural uses and conservation values as an ACEP purpose.

- Removing the requirement that NRCS seek input from the Secretary of the Interior at the local level in the determination of eligible land.
- Defining the term "monitoring report."
- Removing the requirement that an agricultural land easement be subject to an agricultural land easement plan but retaining the requirement that there be a conservation plan on any portion of the easement area that is highly erodible cropland.
- Identifying for agricultural land easements that the U.S. right of enforcement does not extend to a right of inspection except under certain circumstances.
- Introducing new considerations for certification of eligible entities, including whether the entity is an accredited land trust or is a State department of agriculture.
- Adding improving water quality to the priority considerations for acquiring wetland reserve easements.
- Adding additional criteria and parameters for the authorization of compatible economic uses on wetland reserve easements.
- Adding further specificity to considerations made in developing a wetlands reserve easement plan.
- Authorizing the Secretary to enter into a legal arrangement with an eligible entity that is interested in a "buy-protect-sell" transaction for the acquisition of an agricultural land easement.
- Removing the requirement that 50 percent of the non-Federal share for an agricultural land easement be provided by cash resources of the eligible entity and identifying the extent to which the non-Federal share can be comprised by other sources, such as a qualified charitable donation by the landowner.
- Specifying the existing policy of the Secretary to adjust agricultural land easement ranking and evaluation criteria for geographic differences and to give priority to applications that maintain agricultural viability.
- Introducing additional terms and conditions that may be included in the agricultural land easement deed.
- Specifying the existing policy of the Secretary to ensure that the grazing uses on a wetland reserve easement with a reservation of grazing rights comply with a grazing management plan, that is reviewed and modified as needed at least every 5 years.
- Identifying the criteria under which NRCS may authorize the restoration of the wetland reserve easement area to hydrologically appropriate native vegetative communities or alternative naturalized vegetative communities, subject to certain requirements.
- Incorporating changes to NRCS's subordination, modification, exchange, or termination of ACEP easements.

The Agricultural Conservation Easement Program (ACEP) is authorized by subtitle H of title XII of the Food Security Act of 1985, as amended by Section 2301 of the 2014 Farm Bill (P. L. 113-79) and sections 2601-2605 of the Agricultural Improvement Act of 2018 (2018 Farm Bill). ACEP consolidates the purposes and functions of three former easement programs that are no longer authorized: Farm and Ranch Lands Protection Program (FRPP), the Grassland Reserve Program (GRP), and the Wetlands Reserve Program (WRP). Lands enrolled under these former easement programs are enrolled in ACEP. ACEP is funded by the Commodity Credit Corporation (CCC) and administered by NRCS. ACEP is a voluntary program through which NRCS provides financial and technical assistance to help conserve agricultural lands and wetlands, and their related benefits by directly acquiring or funding the acquisition of conservation easements on private or tribal lands. ACEP has two components - ACEP-Agricultural Land Easements (ACEP-ALE) and ACEP-Wetland Reserve Easements (ACEP- WRE).

ACEP-ALE helps farmers and ranchers keep their land in agriculture. The program also protects grazing uses and related conservation values by conserving or restoring grassland, including rangeland, pastureland and shrubland. Eligible entities include Indian tribes, State governments, local governments, or nongovernmental organizations, which have farmland or grassland protection programs that purchase agricultural land easements for the purpose of protecting agriculture use, grazing uses, and related conservation values, by limiting conversion to non-agricultural uses of the land. To enroll land through agricultural land easements, NRCS enters into agreements with eligible entities that include the terms and conditions under which the eligible entity is permitted to use ACEP cost-share assistance.

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

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

Regional Conservation Partnership Program (RCPP)
The Regional Conservation Partnership Program (RCPP) promotes coordination of NRCS conservation activities with partners that offer value-added contributions to expand our collective ability to address on-farm, watershed, and regional natural resource concerns. Through RCPP, NRCS seeks to co-invest with partners to implement projects that demonstrate innovative solutions to conservation challenges and provide measurable improvements and outcomes tied to the resource concerns they seek to address.

Through agreements with partners and conservation program contracts directly with producers, RCPP helps implement conservation projects that may focus on water quality and quantity, soil erosion, wildlife habitat, drought mitigation and flood control or other regional priorities. RCPP is authorized through 2018 by Sections 1271 through 1271F of the Food Security Act of 1985, as amended by Section 2401 of the Agricultural Act of 2014 (P.L. 113-79). The 2018 Farm Bill reauthorized RCPP and increased annual funding to $300 million. It provided expanded Alternative Funding Arrangement authority, authorizing the funding of up to 15 projects through a more grant-like approach with lead partners accepting nearly all project implementation responsibilities. It also directs the Secretary to allocate 50 percent of funds to a State/Multistate pool, and 50 percent to projects in Critical Conservation Areas.

RCPP partners include agricultural or silvicultural producer associations or other groups of producers, State or local governments, Indian tribes, farmer cooperatives, municipal water treatment entities, irrigation districts, conservation driven nongovernmental organizations, and institutions of higher education are eligible. RCPP projects must be carried out on agricultural and nonindustrial private forest lands, or associated lands. RCPP projects may consist of any combination of five eligible conservation activities—land management, land rental, entity-held easements, U.S.-held easements, and public works activities.

RCPP is administered through funding announcements. Lead partners submit proposals that are evaluated based on four criteria-- impact, partner contributions, innovation, and partnership and management. All lead partners funded under the 2018 Farm Bill must report on the environmental outcomes of their projects.

Agricultural Management Assistance Program (AMA)
AMA provides technical and financial assistance in 16 States: Connecticut, Delaware, Hawaii, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Utah, Vermont, West Virginia, and Wyoming. AMA is funded through the Commodity Credit Corporation. The program is permanently authorized by Section 524(b) of the Federal Crop Insurance Act (7 U.S.C. 1524(b)), as amended. Section 524(b)(4)(B) provides $10 million each year for the program, of which 50 percent is allocated to NRCS. Under the program, NRCS provides technical and financial assistance to producers to construct or improve water management structures or irrigation structures; plant trees for windbreaks; and take actions to improve water quality. In addition, the Risk Management Agency (RMA) has collaborated with NRCS to provide financial assistance for producers to implement high-tunnel conservation practices. The Agricultural Marketing Service also provides AMA financial assistance to program participants receiving certification or continuation of certification as an organic producer.

Voluntary Public Access and Habitat Incentive Program (VPA-HIP)
The program encourages private landowners to voluntarily make their land available to the public for wildlife-dependent recreation, such as hunting, fishing and wildlife viewing. States and tribes are eligible for VPA-HIP and compete for funding by submitting proposals to NRCS. VPA-HIP funding can be used both to expand public access to private lands and to improve or enhance wildlife habitat on lands enrolled in the program. The overall goal of VPA-HIP is to enhance wildlife habitat and management and to boost local economies through activities that attract wildlife enthusiasts.

Feral Swine Eradication and Control Pilot Program
The program is authorized by Sections 2408 of the Agriculture Improvement Act of 2018. The program is implemented by NRCS and the Animal Plant Health Inspection Service to respond to the threat feral swine pose to agriculture, native ecosystems, and human and animal health.

Healthy Forests Reserve Program (HFRP)
The Healthy Forests Reserve Program assists private and Tribal landowners in restoring, enhancing, and protecting forest ecosystems to: promote the recovery of threatened and endangered species; improve biodiversity; conserve forest land that provides habitat for at-risk species, and enhance carbon sequestration. The program is authorized by Sections 501 through 508 of the Healthy Forests Restoration Act of 2003 (P.L. 108-148) as amended by Section 8407 of the Agriculture Improvement Act of 2018. The 2018 Farm Bill made changes to HFRP to expand enrollment and eligibility options including providing that permanent easements are an enrollment option for acreage owned by an Indian Tribe and adding that eligibility of land may include considerations for a species of greatest conservation need as identified by a State wildlife action plan.

HFRP offers four enrollment options including 10-year restoration agreements, 30-year or permanent easements, or 30-year contracts on acreage owned by an Indian tribe To be eligible, the landowner must commit to restoring, enhancing, or measurably increasing the likelihood of recovery of an at-risk species as identified in the 2018 Farm Bill. Landowners must also improve biological diversity or increase carbon sequestration on enrolled land. For all enrollment options, a restoration plan is developed that includes practices necessary to restore and enhance habitat for at-risk species. Technical assistance is provided to help landowners develop and comply with the terms of their HFRP restoration plans.

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

HFRP applicants must provide proof of ownership, or an operator (tenant) must provide written concurrence from the landowner of tenancy for the period of the HFRP restoration agreement in order to be eligible. Land enrolled in HFRP easements must be privately owned or owned by Indian tribes.

The 2018 Farm Bill authorizes to be appropriated $12 million annually from 2018 through 2023.

Programmatic and Landscape Conservation Activities
NRCS and its partners have established programmatic and landscape-scale activities to address regionally important conservation needs by providing additional support for voluntary conservation on private lands. NRCS has targeted funding to support activities through a variety of Farm Bill conservation programs. NRCS provides technical assistance through its CTA Program; partners may also provide technical and financial support.

Each activity is intended to raise awareness of a specific resource concern or opportunity, stimulate interest and commitment for voluntary action, help focus funding, and optimize conservation outcomes. NRCS's coordination efforts with other Federal agencies, state and local governments, and other stakeholder groups optimizes efficiency and effectiveness; generates additional partner resources to expand capacity and accelerate action; and establishes mutual support for core conservation practices and systems that benefit the watershed, ecosystem, or species of concern.

National Water Quality Initiative. NRCS works with farmers and ranchers in small watersheds throughout the Nation to improve and protect water quality where this is a critical concern. NRCS works collaboratively with the Environmental Protection Agency at the national level to facilitate selection of high-priority watersheds and source water protection areas where NRCS and partners target outreach and assistance and demonstrate improvements in water quality. NRCS identifies priority watersheds through the help of local partnerships and state agencies. This strategic approach leverages funds and helps agricultural producers take needed actions to protect drinking water and reduce the runoff of sediment, nutrients, and pathogens into waterways where water quality is a critical concern. Water quality-related conservation practices can benefit agricultural producers by lowering input costs and enhancing the productivity of working lands. Eligible producers receive assistance under EQIP to install conservation systems that may include practices such as nutrient management, cover crops, and filter strips. In 2017, the initiative increased emphasis on and support for watershed assessment and planning to further target conservation efforts and expanded in 2019 to include planning and conservation implementation in source water protection areas (both surface and ground water sources). In 2020 reaffirmed the commitment to the NWQI approach and identified activities in all states to address water quality in 2021.

Longleaf Pine Initiative. Longleaf pine forests once covered more than 90 million acres in the Southeastern United States. Stretching along Eastern Texas, through Central Florida, and north to Southern Virginia, these forests represent one of the world's most unique and biologically diverse ecosystems. However, 97 percent of the historic

forests have been lost. According to Forest Service Forest Inventory and Analysis data, only 3.4 million acres of longleaf pine and mixed longleaf pine/oak forest types remained in 2008. These remaining forests provide critical habitat for 29 threatened and endangered species. In 2009, America's Longleaf Restoration Initiative (ALRI) released the Range-Wide Conservation Plan for Longleaf Pine. The plan calls for restoring, improving, and maintaining 8 million acres of longleaf pine by 2024. NRCS is a key partner in ALRI, along with the rest of USDA, Department of Defense, Department of the Interior, National Fish and Wildlife Foundation, and other public and private collaborators. Since the plan's creation, more than 1.3 million acres of longleaf pine forest has been restored through establishment, 12 million acres improved and maintained through prescribed fire and vegetation management (with multiple treatments to some acres), and over 200,000 acres of land has been protected. Over the past ten years, NRCS has enrolled more than three million acres of private lands in longleaf conservation practices. These conservation practices included vegetation management, prescribed fire, planting, conservation easements, and other supporting conservation practices. Continued coordination between public and private partners over the next five years will be critical in achieving the initiative's goal.

Mississippi River Basin Healthy Watersheds Initiative (MRBI). The MRBI activity was established in 2010 and covers Arkansas, Kentucky, Illinois, Indiana, Iowa, Louisiana, Minnesota, Mississippi, Missouri, Ohio, 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. In 2015, the activity was refined to support the Nutrient Reduction Strategies developed by each state to address nutrient losses to the Mississippi River and the Gulf of Mexico. In 2019, the initiative strengthened its emphasis on and support of watershed assessment and planning to further target conservation efforts for water quality benefit.

Working Lands for Wildlife (WLFW). The WLFW activity is designed to provide targeted financial and technical assistance to improve habitat for identified wildlife species. Two-thirds of the land in the lower 48 states is privately owned, and these working farms, ranches, and forests produce much of the country's food and fiber. These working lands also provide much of our Nation's open space and the habitats that wildlife need. NRCS assists agricultural producers who want to voluntarily make wildlife-friendly improvements on their land. These conservation activities or practices benefit fish and wildlife while boosting the land's resilience and production. Producers have conserved millions of acres of wildlife habitat from the sagebrush and grasslands of the West to forests in the East. This work has led to the rebound and recovery of many species, including the Oregon chub, Louisiana black bear, New England cottontail, and greater sage-grouse.

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

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

Workforce Status and Locations
As of September 30, 2020, NRCS had 9,444 full time employees with permanent appointments. Of this total, 202 employees were in the Washington, DC metropolitan area, and 9,242 employees were located outside of the Washington, D.C. metropolitan area.

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

During 2020, NRCS had 2,539 offices located across the Nation. This represents the number of locations where NRCS performs mission-related activities (e.g. field offices, State offices, Plant Materials Centers, etc.) and reports at least one full time equivalent (FTE) at the location. In addition, this number includes locations used for conservation testing, research, and storage.

National Headquarters (NHQ)
Primarily located in the Washington, DC metropolitan area, NHQ assumes leadership for all programs which are national in scale and other activities assigned by the Secretary of Agriculture through the Under Secretary for Farm Production and Conservation. The Chief, Associate Chiefs, Regional Conservationists, and Deputy Chiefs/Chief Executive Officers carry out national headquarters functions such as: 1) planning, formulating, and directing programs, 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.

NRCS Centers
Technological guidance and direction are also provided through the NRCS Centers, including: National Design Construction and Soil Mechanics Center, National Soil Survey Center; National Water and Climate Center; National Water Management Center; National Agroforestry Center; East, Central and West National Technology Support Centers (NTSCs). NTSCs acquire and/or develop new science and technology to provide cutting-edge technological support and direct assistance, and to transfer technologies to field offices for service delivery. NTSCs also develop and maintain national technical standards and other technological procedures and references. Centers are co-located with other NRCS offices where possible.

State Offices
State offices provide program planning and direction, delivery, and accountability for comprehensive soil, water, air, plant, and animal conservation programs. State offices also have responsibility for the technical integrity of NRCS activities, technology transfer and training, marketing of programs and initiatives, and program operations and processing. Where possible, State offices partner with other Federal and State agencies to provide solutions to resource concerns. The State Conservationist position leads all activities in each State. The Director position is similar to that of a State Conservationist for the Pacific Islands Area (Hawaii, American Samoa, Guam, Commonwealth of the Northern Mariana Islands, Republic of Palau, Federated States of Micronesia, and Republic of Marshall Islands) and the Caribbean Area (Puerto Rico, U.S. Virgin Islands).

Service Center Offices
Personalized, one-on-one service is provided by NRCS employees located in Service Centers or specialized offices. This service delivery constitutes a majority of NRCS employees who are largely technical in nature. Service Centers and specialized offices support customers to prevent, or solve, natural resource concerns on private lands and in their communities. Service Center staff work side-by-side with employees of local conservation districts and other State conservation agencies to address resource concerns. Service Centers function as a clearinghouse for natural resource information and help customers gain access to knowledge and assistance available from local, State, regional, and/or national sources. These offices are located across the nation in every area where NRCS works and support the delivery of technical or financial assistance to address resource concerns.

Support Offices
Support offices provide critical technical and administrative support for Service Centers and other NRCS offices. Support offices include: offices that provide administrative and technical support to a group of Service Centers; headquarter offices for watershed or river basin planning and construction activities; soil survey and Major Land Resource Areas offices that inventory and map soil resources on private lands; Plant Materials Centers that test, select, and release plants for conservation purposes in selected plant growth regions throughout the United States.

Accountability
NRCS regularly collects program performance data that provide information to support agency strategic and performance planning, budget formulation, workforce planning, and accountability activities. This Accountability Information Management System tracks and evaluates field and State level conservation planning efforts and practice implementation through the Performance Results System (PRS). In addition to the Accountability Information Management System, the agency implements a suite of actions to monitor program compliance and improve accountability.

Compliance Activities

There were 10 audits and 39 recommendation open at the start of this 2020, one audit and 14 recommendations were added during the year, leaving a total of 53 recommendations in 2020. NRCS closed one of 11 active Office of Inspector General (OIG) and Government Accountability Office (GAO) for a year-end closure rate of nine percent, and closed ten of 53 recommendations, for a closure rate of 19 percent.

OIG AND GAO REPORTS

Table NRCS-1. Completed OIG Reports

ID	Date	Title	Results
10601-0006-31	09/18/2019	NRCS Equitable Relief	Completed Report
10601-0001-23	07/30/2021	NRCS Conservation Easement Compliance	Completed Report
10601-0007-31	09/26/2019	Agriculture Conservation Easement Program	Completed Report
10403-0001-11	11/15/2018	Natural Resources Conservation Service's Balance Sheet for Fiscal Year 2018	Completed Report

Table NRCS-2. In-Progress OIG Reports

ID	Date	Title	Results
50601-0010-31	04/12/2021	Beginning Farmers –	On going

Table NRCS-3. Outstanding OIG Audit Reports & Recommendations

ID	Date	Title	Recommendations
10702-0001-23	09/10/2019	NRCS' Hurricane Disaster Assistance-Emergency Watershed Protection Program	1,2,3,4,5,6,7,8,9
10601-0001-32	09/27/2016	Controls Over the Conservation Stewardship Program	20
10601-0004-31 (2)	11/13/2017	NRCS Regional Conservation Partnership Program	2
10601-0004-31	06/28/2018	NRCS Regional Conservation Partnership Program	1,2,3,4
10403-0001-11	05/09/2019	Natural Resources Conservation Service's Balance Sheet for Fiscal Year 2018	2
10401-0009-11	11/13/2017	Natural Resources Conservation Service's Balance Sheet for Fiscal Year 2017	1
10403-0002-11	11/26/2019	Natural Resources Conservation Service's Financial Statements for Fiscal Year 2019	1,2,4,7,10,12,14
10403-0003-11	03/04/2021	Natural Resources Conservation Service's Financial Statements for Fiscal Years 2020 and 2019	5,9,10,12,15,17,18,19
10601-0005-31	09/24/2019	NRCS' Environmental Quality Incentives Program Payment Schedule	4,6
11601-0001-12	02/13/2020	USDA's Fiscal Year 2019, First Quarter DATA Act Submission	3

Table NRCS-4. In-Progress GAO Reports

ID	Date	Title	Results
GAO 104241	07/30/2020	Flooding and Erosion in Alaska Native Village	On going
GAO 103431	04/09/2019	Wetland Conservation Compliance	On going
GAO 104449	09/24/2020	Federal Efforts to Address Algal Bloom And Hypoxia	On going
GAO 104436	11/18/2020	Compacts Free Association Grants and Trust Funds Update	On going
GAO 104716	02/09/2021	USDA Civil Rights Mandate	On going
GAO 104326	05/21/2020	Emergency Watershed Protection Program	On going

Table NRCS-5. Completed GAO Reports

ID	Date	Title	Results
GAO-19-543	09/16/2020	Federal Efforts in Environmental Justice	No Recommendation
GAO-20-128SP	11/12/2019	Irrigation Agriculture-Technologies	No Recommendation

LEAD-OFF TABULAR STATEMENT

Table NRCS-6. Lead-Off Tabular Statement (In dollars)

Item	Amount
2021 Enacted	$1,033,727,000
Change in Appropriation	+67,016,000
Budget Estimate, 2022	1,100,743,000

AVAILABLE FUNDS AND FTES

Table NRCS-7. Available Funds and FTEs (thousands of dollars, FTEs)

Item	2019		2020		2021		2022	
	Actual	FTE	Actual	FTE	Enacted	FTE	Budget	FTE
Account 1: Private Lands Conservation Operations:								
Discretionary Appropriations	$819,492	3,558	$829,628	3,404	$832,727	3,519	$886,285	3,519
Account 2: Watershed and Flood Prevention:								
Discretionary Appropriations	150,000	16	175,000	18	175,000	18	175,000	18
Mandatory Appropriations	50,000	-	50,000	-	50,000	2	50,000	2
Supplemental Appropriations	435,000	52	-	89	-	87	-	-
Account 3: Watershed Rehabilitation Program:								
Discretionary Appropriations	10,000	1	10,000	1	10,000	1	10,000	1
Mandatory Appropriations	-	5	-	4	-	4	-	-
Account 4: Water Bank Program:								
Discretionary Appropriations	4,000	1	4,000	1	4,000	1	-	-
Account 5: Healthy Forests Reserve Program:								
Discretionary Appropriations	-	-	-	-	-	-	20,000	1
Account 6: Urban Agriculture Innovative Production:								
Discretionary Appropriations	-	-	-	-	-	-	9,458	2
Account 7: Farm Security and Rural Investment:								
Discretionary Appropriations	-	-	10,000	2	12,000	3	-	-
Mandatory Appropriations	4,281,358	4,996	5,160,470	4,993	3,539,115	7,261	3,639,115	7,353
Sequestration	-260,019	-	-307,418	-	-204,580	-	-210,280	-
Transfers In	120	-	-	-	-	-	-	-
Transfers Out	-60,228	-	-61,295	-	-60,228	-	-60,228	-
Total Adjusted Appropriation	5,429,723	8,629	5,870,385	8,512	4,358,034	10,896	4,519,350	10,896
Balance Available, SOY	2,530,598	-	3,213,417	-	3,466,923	-	1,060,393	-
Recoveries, Other	371,199	-	543,601	-	-153,072	-	-	-
Total Available	8,331,520	8,629	9,627,403	8,512	7,671,885	10,896	5,579,743	10,896
Lapsing Balances	-26,689	-	-17,276	-	-	-	-	-
Balance Available, EOY	-3,213,417	-	-3,466,923	-	-1,060,393	-	-723,344	-
Total Obligations	5,091,414	8,629	6,143,204	8,512	6,611,492	10,896	4,856,399	10,896
Other Funding:								
Gulf Coast Restoration Revolving Fund	2,143	2	4,236	3	12,000	2	5,000	2
Other Federal and Non-Federal Reimburs	58,857	113	49,789	82	69,000	113	69,000	113
Total Available, Other Funding	61,000	115	54,025	85	81,000	115	74,000	115
Total Available, NRCS	8,392,520	8,744	9,681,428	8,597	7,752,885	11,011	5,653,743	11,011

PERMANENT POSITIONS BY GRADE AND FTE'S

Table NRCS-8. Permanent Positions by Grade and FTEs

Item	2019 Actual			2020 Actual			2021 Enacted			2022 Budget		
	D.C.	Field	Total	D.C.	Field	Total	D.C.	Field	Total	D.C.	Field	Total
SES	12	3	15	15	2	17	12	3	15	12	3	15
SL	-	-	-	-	-	-	-	-	-	-	-	-
GS-15	44	71	115	37	60	97	58	41	99	58	41	99
GS-14	72	138	210	75	146	221	169	35	204	169	35	204
GS-13	16	496	512	15	499	514	91	432	523	91	432	523
GS-12	9	2,445	2,454	17	2,528	2,545	151	2,306	2,457	151	2,306	2,457
GS-11	11	1,808	1,819	8	1,860	1,868	119	1,738	1,857	119	1,738	1,857
GS-10	-	24	24	-	24	24	4	21	25	4	21	25
GS-9	4	1,426	1,430	10	1,516	1,526	70	1,500	1,570	70	1,500	1,570
GS-8	3	323	326	4	341	345	22	360	382	22	360	382
GS-7	2	1,362	1,364	3	1,549	1,552	71	1,512	1,583	71	1,512	1,583
GS-6	-	229	229	-	230	230	1	240	241	1	240	241
GS-5	-	224	224	-	350	350	4	270	274	4	270	274
GS-4	-	163	163	-	108	108	1	135	136	1	135	136
GS-3	-	219	219	-	172	172	-	175	175	-	175	175
GS-2	-	50	50	-	49	49	-	40	40	-	40	40
GS-1	-	5	5	-	7	7	-	4	4	-	4	4
Other Graded	-	-	-	-	-	-	-	-	-	-	-	-
Ungraded	-	-	-	-	-	-	115	1,311	1,426	115	1,311	1,426
Total Permanent	173	8,986	9,159	184	9,441	9,625	888	10,123	11,011	888	10,123	11,011
Unfilled, EOY	-	363	363	-	-	-	-	-	-	-	-	-
Total Perm. FT EOY	173	8,623	8,796	184	9,441	9,625	888	10,123	11,011	888	10,123	11,011
FTE	136	8,608	8,744	165	8,432	8,597	888	10,123	11,011	888	10,123	11,011

Note: In addition to the numbers above, NRCS maintain over 140 temporary positions throughout the agency that provides support across the agency programs in their national or field location.

VEHICLE FLEET

Motor Vehicle Fleet

As a field-based agency, NRCS has a significant number of employees who require vehicles to visit field offices, job sites (farms and ranches) and other areas where public transportation is non-existent, uneconomical or inadequate. Driving takes place on agricultural land and in an assortment of operating conditions for the purpose of providing technical assistance to farmers and ranchers, which often involves transporting large engineering and other field equipment, thereby requiring employees to have access to pickup trucks and sport-utility vehicles.

NRCS maintains a fleet of vehicles distributed among service centers and field, area and State offices in the 50 States, the Caribbean and the Pacific Basin areas. The majority of the vehicles are owned by the agency, while others are leased through the General Services Administration (GSA). Office locations are assigned vehicles, where multiple employees share vehicles to carry out mission requirements.

Replacement Criteria

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

Fleet Optimization

The optimal fleet inventory for NRCS has been identified. The agency will attain and maintain this optimal fleet inventory through one-for-one vehicle replacements (no direct additions) and eliminating non-essential vehicles.

Looking ahead, NRCS will continue to optimize its fleet by:

- Maximizing its participation in an existing and successful vehicle-sharing program that is rapidly expanding.
- Implementing telematics to simplify vehicle usage recording for field staff.
- Vehicle right-typing, ensuring that the fleet inventory reflects a blend of vehicles that are a proper match to the mission and offer best value back to the Government.
- Reducing the number of fossil fuel-based vehicles within the agency's inventory.
- Identifying opportunities to increase electrification. All electric and hybrid (to include plug-in)-electric vehicles will be prioritized within the replacement strategy, where they are a best match to mission requirements, location, and funding availability.

Table NRCS-9. Size, Composition, and Annual Costs of Motor Vehicle Fleet

Fiscal Year	Sedans and Station Wagons	Lt. Trucks, SUVs, and Vans (4x2)	Lt. Trucks, SUVs, and Vans (4x4)	Medium Duty Vehicles	Buses	Heavy Duty Vehicles	Total Vehicles	Annual Operating Costs
2019	386	1,466	5,100	549	-	17	7,518	$20,607
Change	-49	-204	+363	+12	-	-	+122	+619
2020	337	1,262	5,463	561	-	17	7,640	21,226
Change	-5	+1,260	-1,336	-26	-	-1	-108	+2,823
2021	332	2,522	4,127	535	-	16	7,532	24,049
Change	-	-	-	-	-	-	-	+2,116
2022	332	2,522	4,127	535	-	16	7,532	26,165

Note: Number of vehicles by type include vehicles owned by the agency and leased from commercial sources or GSA.
Annual Operating Costs excludes acquisiton costs and gains from sale of vehicles as shown in FAST.

Table NRCS-10. Size, Statement of Proposed Purchase of Passenger Motor Vehicles

Statement of Proposed Purchase of Passenger Motor Vehicles

Fiscal Year	Net Active Fleet, SOY	Disposals	Replacements	Additions	Total Acquisitions	Net Active Fleet, EOY
2019	386	16	16	-	16	386
2020	386	66	17	-	17	337
2021	337	24	19	-	19	332
2022	332	-	-	-	-	332

SHARED FUNDING PROJECTS

Table NRCS-11. Shared Funding Projects (dollars in thousands)

Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
Working Capital Fund:				
Administrative Services:				
Material Management Service	$68	$91	$94	$13
Mail and Reproduction Services	771	705	833	346
Integrated Procurement Systems	1,326	1,233	1,308	1,016
Procurement Operations Services	802	1,019	599	609
Human Resources Enterprise Management Systems	121	120	122	122
Subtotal	3,089	3,167	2,956	2,105
Communications:				
Creative Media & Broadcast Center	114	405	208	191
Finance and Management:				
National Finance Center	2,520	2,375	2,426	2,419
Financial Shared Services	11,768	13,130	14,871	14,689
Internal Control Support Services	178	153	75	75
Subtotal	14,466	15,658	17,373	17,183
Information Technology:				
Client Experience Center	98,565	116,043	119,354	119,475
Department Administration Information Technology Office	-	116	471	213
Digital Infrastructure Services Center	13,480	17,420	14,774	15,679
Enterprise Network Services	7,496	5,107	19,254	22,852
Subtotal	119,541	138,686	153,853	158,219
Office of the Executive Secretariat	226	227	113	112
Total, Working Capital Fund	137,436	158,142	174,503	177,811
Department-Wide Shared Cost Programs:				
Advisory Committee Liaison Services	2	2	4	4
Agency Partnership Outreach	784	767	618	-
Honor Awards	1	1	1	-
Human Resources Self-Service Dashboard	61	60	-	-
Intertribal Technical Assistance Network	331	340	295	-
Medical Services	23	22	32	32
Office of Customer Experience	265	574	825	782
Personnel and Document Security Program	121	133	133	-
Physical Security	-	586	373	-
Security Detail	440	463	396	375
Security Operations Program	1,071	584	558	-
TARGET Center	125	114	102	-
TARGET Center NCR Interpreting Services	-	-	1	-
USDA Enterprise Data Analytics Services	-	811	430	-
Total, Department-Wide Reimbursable Programs	3,223	4,457	3,768	1,193
E-Gov:				
Budget Formulation and Execution Line of Business	8	9	9	9
Enterprise Human Resources Integration	212	-	-	-
E-Rulemaking	12	-	8	9
Financial Management Line of Business	14	18	20	20
Geospatial Line of Business	13	13	13	13
Benefits.gov	89	72	70	68
Grants.gov	10	25	34	35
Human Resources Line of Business	32	30	26	26
Integrated Acquisition Environment	148	206	109	109
Total, E-Gov	538	371	288	289
Agency Total	141,197	162,970	178,559	179,292

ACCOUNT 1: PRIVATE LANDS CONSERVATION OPERATIONS

APPROPRIATIONS LANGUAGE

The appropriations language follows (new language underscored; deleted matter enclosed in brackets):

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. 2268a); purchase and erection or alteration or improvement of permanent and temporary buildings; and operation and maintenance of aircraft, **[**$832,727,000**]**$886,285,000, to remain available until September 30, **[**2022**]** 2023, of which not less than $29,000,000 is for climate change-related initiatives, including not less than $21,000,000 for climate science and not less than $8,000,000 for climate hubs; *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.**[**: *Provided further*, That of the amounts made available under this heading, $3,000,000 shall remain available until expended for planning and implementation assistance associated with land treatment measures that address flood damage reduction, bank stabilization and erosion control in the watersheds identified under section 13 of the Flood Control Act of December 22, 1944 (Public Law 78–534).**]**

Change Description

The first change (line 9) in language proposes deletion of "2022" and insertion of "2023" to provide two-year funds availability and sets aside funding for climate change related initiatives.

The second change (line 15-19) deletes the language providing funding for authorized ongoing watershed projects with a primary purpose of providing water to rural communities. NRCS will continue to provide assistance to sponsoring local organizations to prepare and implement watershed project plans for authorized ongoing watershed projects with a primary purpose of providing water to rural communities.

LEAD-OFF TABULAR STATEMENT

Table NRCS-12. Lead-Off Tabular Statement (In dollars)

Item	Amount
2021 Enacted	$832,727,000
Change in Appropriation	+ 53,558,000
Budget Estimate, 2022	886,285,000

PROJECT STATEMENT

Table NRCS-13. Project Statement by Appropriations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	Chg Key	FTE	2022 Budget	FTE
Discretionary Appropriations:											
Conservation Technical Assitance	$720,446	3,066	$729,093	2,911	$731,255	3,017	+$42,558	(1)	-	$773,813	3,017
Soil Survey	74,685	419	74,987	388	79,444	419	+5,000	(2)	-	84,444	419
Snow Survey	9,400	42	9,400	43	9,488	52	+7,000	(3)	-	16,488	52
Plant Materials	9,481	31	9,481	62	9,540	31	+2,000	(4)	-	11,540	31
Watershed Projects	5,600	-	5,600	-	3,000	-	-3,000	(5)	-	-	-
Total Adjusted Approp	819,612	3,558	828,561	3,404	832,727	3,519	53,558	-	-	886,285	3,519
Rescission, Transfers In and Out	-120	-	1,067	-	-	-	-	-	-	-	-
Total Appropriation	819,492	3,558	829,628	3,404	832,727	3,519	53,558	-	-	886,285	3,519
Transfers In*:											
Congressional Relations	120	-	-	-	-	-	-		-	-	-
Total Transfers In	120	-	-	-	-	-	-	-	-	-	-
Transfers Out*:											
FPAC-BC	-	-	-1,067	-	-	-	-		-	-	-
Total Transfers Out	-	-	-1,067	-	-	-	-	-	-	-	-
Recoveries, Other	21,813	-	100,932	-	-79,093	-	+79,093		-	-	-
Bal. Available, SOY	150,607	-	108,321	-	143,520	-	-143,520		-	-	-
Total Available	992,032	3,558	1,037,814	3,404	897,154	3,519	-10,869	-	-	886,285	3,519
Lapsing Balances	-25,761	-	-16,671	-	-	-	-		-	-	-
Bal. Available, EOY	-108,321	-	-143,520	-	-	-	-		-	-	-
Total Obligations	857,950	3,558	877,623	3,404	897,154	3,519	-10,869		-	886,285	3,519

Note: The project statement and MAX discrepancy is due to MAX reporting reimbursable funding and FTEs, which are not included in the project statement.

Table NRCS-14. Project Statement by Obligations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	FTE	2022 Budget	FTE
Discretionary Obligations:										
Conservation Technical Assistance	$762,259	3,066	$770,086	2,911	$784,917	3,017	-$11,104	-	$773,813	3,017
Soil Survey	73,980	419	73,642	388	86,309	419	-1,865	-	84,444	419
Snow Survey	8,335	42	8,844	43	11,521	52	+4,967	-	16,488	52
Plant Materials	8,376	31	9,781	62	11,313	31	+227	-	11,540	31
Watershed Projects	5,000	-	15,270	-	3,094	-	-3,094	-	-	-
Total Obligations	857,950	3,558	877,623	3,404	897,154	3,519	-10,869	-	886,285	3,519
Lapsing Balances	25,761	-	16,671	-	-	-	-	-	-	-
Balances Available, EOY:										
Conservation Technical Assistance	83,820	-	64,506	-	-	-	-	-	-	-
Soil Survey	10,421	-	18,688	-	-	-	-	-	-	-
Snow Survey	1,788	-	2,150	-	-	-	-	-	-	-
Plant Materials	2,654	-	2,574	-	-	-	-	-	-	-
Watershed Projects	9,638	-	55,602	-	-	-	-	-	-	-
Total Bal. Available, EOY	108,321	-	143,520	-	-	-	-	-	-	-
Total Available	992,032	3,558	1,037,814	3,404	897,154	3,519	-10,869	-	886,285	3,519
Less:										
Total Transfers In	-120	-	-	-	-	-	-	-	-	-
Total Transfers Out	-	-	1,067	-	-	-	-	-	-	-
Recoveries, Other	-21,813	-	-100,932	-	79,093	-	-79,093	-	-	-
Bal. Available, SOY	-150,607	-	-108,321	-	-143,520	-	+143,520	-	-	-
Total Appropriation	819,492	3,558	829,628	3,404	832,727	3,519	+53,558	-	886,285	3,519

Note: The project statement and MAX discrepancy is due to MAX reporting reimbursable funding and FTEs, which are not included in the project statement.

JUSTIFICATIONS

The numbers and letters of the following listing relates to values in the Change (Chg) Key column of the Project Statement:

(1) A net increase of $42,558,000 and no change in staff years for the Conservation Technical Assistance Program ($731,255,000 and 3,017 staff years available in 2021.

The Conservation Technical Assistance (CTA) Program remains the agency's primary program to work with private landowners across the country through USDA's unique delivery system of local field offices. Working one-on-one, NRCS can help producers use new technologies and conservation practices that address emerging challenges and opportunities, such as organic production systems, on farm energy management, air quality improvement, and enhancement of pollinator populations.

Through the CTA Program, NRCS helps land managers develop comprehensive conservation plans that include activities that: 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. All CTA program goals are foundational to NRCS's efforts to address agriculture's adaptation to climate change, make working lands resilient to climate stressors, and provide tools for mitigating greenhouse gas concentrations in the atmosphere.

In 2022, NRCS proposes to accelerate proven approaches to conservation that generate results at broader scales, leverage tools and resources to gain efficiencies in service delivery and optimize use of existing authorities that will strengthen rural communities and meet the Administration's climate goals through conservation activities. NRCS high-level priorities that address agency conservation and climate goals include:

1) Leverage the roll-out of the Conservation Desktop and the Conservation Application and Ranking Tool with continued integration of our automated business processes to reduce data entry and enhance analytics.
2) Accelerate conservation results at the landscape scale (e.g. watershed, river basin, multi-state, etc.), building on partnerships and new science and policy tools to focus resources and create non-traditional incentives via new authorities in the 2018 Farm Bill under EQIP-Incentives, RCPP, and other programs. Our Conservation Technical Assistance (CTA) is the conservation planning component for these programs under Private Lands Conservation Operations.
3) Support farm- and ranch-specific conservation results that producers rely on to achieve their economic objectives and regulatory requirements.
4) Enable conservation access to more producers, including beginning farmers and ranchers and socially-disadvantaged producers, and leverage State and local government technical capacity.
5) Review existing authorities to amplify community action to build natural resource based economic opportunities and accelerate preparedness planning related to climate-driven natural resource effects.
6) Conduct a Rapid Carbon Assessment to obtain statistically reliable quantitative estimates of current amounts and distribution of carbon stocks for U.S. soils under various land covers and to the extent possible, differing agricultural management which will support model simulations of soil carbon change related to land use change, agricultural management, conservation practices, and climate change to helps land managers develop comprehensive conservation plans

Specifically, NRCS proposes to:

- Target technical and financial resources to achieve conservation objectives and address the most pressing issues affecting landscape resilience. NRCS will work to protect ecosystems, address water resource concerns, and restore habitat for at-risk species in large-scale ecosystems. NRCS will also bring the best available science and work collaboratively with partners to strategically target conservation investments in priority landscapes to generate the most cost-effective return for producers and taxpayers.
- Leverage partnerships to increase financial resources, expand technical capacity, and accelerate conservation implementation by partnering with State, Federal, and other stakeholders for delivering and assessing conservation investments in healthy soils, and to accelerate efforts to adapt and mitigate the effects of a changing climate on functioning landscapes.
- Inform conservation-based decision-making through prioritized investments in science-based tools and data, including advancing knowledge of dynamic soil properties (how soils change with land use) to

improve and develop conservation practices and soil health management systems to help adapt to climate change, to minimize land degradation, and to improve the health of the soil, water, animal, plant, air, and energy ecosystems, such as the Soil Health Monitoring and Enhancement Network (SHMEN). NRCS will support applied research and modeling to identify cost effective strategies to maximize the benefits of improved soil health. Through the Conservation Effects Assessment Project (CEAP) initiatives, NRCS will establish a continuing, statistically-valid survey process to track progress in conservation adoption and conservation investment benefits to the nation's water quality, soil health, and agricultural productivity.

NRCS proposes to continue the investment in the integration and automation conservation planning and program delivery systems through Conservation Desktop, Mobile Technology, Web based customer services, and Financial Assistance Systems. Integrating these tools creates a more effective, efficient, and sustainable business model for delivering conservation assistance through reduced document handling, reduced decision and approval times, improved access to best-available information and technology, and staffing strategies that are aligned with streamlined processes. Thus, NRCS and USDA will benefit from a more efficient business model, and, more critically, NRCS customers will benefit by:

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

Specific changes within the account include:

a. An increase of $21,000,000 for Climate Smart Agriculture (Climate Science).
The amount requested will be used to establish a coordinated, corporate approach to Outreach across NRCS program delivery that will advance the Administration's priorities of racial, environmental, and economic equity to combat climate change. A detailed database and related tools will be developed to identify historic agency funding locations, which will allow NRCS to better align program assistance with areas and communities of greatest need. This will allow an informed and targeted approach to outreach and promote inclusive outcomes.
Climate Smart Agriculture Swat teams would be developed for disadvantaged communities where subject matter experts will assist communities in a collaborative approach.

b. An increase of $10,558,000, which includes $7,187,000 for pay inflation and $3,371,000 for FERS.
This increase will support a 2.7% Cost of Living pay increases for civilian employees, and a 1.1% increase to cover the expenses for the mandated increase of USDA's contribution to FERS. This will ensure adequate resources are available to avoid any disruption or delays in the Private Lands Conservation Operations Account activities and will be used to pay the increased salaries and benefits cost for 3,519 staff years.

c. An increase of $8,000,000 for Climate Hubs.
The Climate Hubs are a framework for connecting a wide range of NRCS partners on climate variability issues including drought, excess rainfall, soil and streams management, and carbon issues. Requested funds will enhance cooperation of the Climate Hubs with NRCS and will result in a greater understanding and delivery of the NRCS mission and programs on a truly national level. The Hubs highlight the technical, financial and economic benefits of NRCS's voluntary conservation programs so that proven science-based information is reaching stakeholders such as producers and resource managers. The amount requested will support Climate Hubs projects that are consistent with the NRCS mission and goals related to making regional and sectoral based vulnerability assessments that assist NRCS in addressing the needs of working lands and

vulnerable natural resources through voluntary conservation programs. Funds will also be used to establish regional and state-based projects that understand how natural resource conditions on working lands are affected by the changing climate. This is essential to improve the performance of programs that conserve the land and sustain agriculture production. The increase in funds will assist the Climate Hubs expand NRCS outreach to the public through more effective and efficient delivery of research to end users. This includes Hub adaptation demonstration projects that serve as concrete responses to real-world agricultural climate management issues.

d. An increase of $3,000,000 to conduct conservation planning related to soil testing and soil remediation to meet Farm Bill requirements.

There are two types of testing that NRCS will undertake in urban areas: 1) soil health testing and 2) soil testing that examines heavy metals. Heavy metal evaluation will include potential presence of soil contaminants, including heavy metals, volatile organic compounds, polycyclic aromatic hydrocarbons, or other contaminants. Soil testing results will be used to complete design and implementation requirements after a conservation plan has identified the need for soil health and/or soil remediation conservation practices for urban agricultural operations.

(2) An increase of $5,000,000 and no change in staff years for the Soil Survey Program ($79,444,000 and 419 staff years available in 2021).

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

- Inventory and map the soil resource on all lands of the United States, including Tribal and Native American lands;
- Keep soil surveys relevant to meet emerging and ever-changing needs, such as the impact of climate change on the soil landscape;
- 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.

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 and integrate that information into the Department's soil carbon measurement and monitoring activities.

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

a. An increase of $5,000,000 to maintain relevant soil survey for all lands of the United States and territories, including Federal and Tribal lands.

The increase in funding will allow NRCS to keep soil survey relevant for all lands of the United States and territories, including Federal and Tribal lands. This is the primary mission of the National Cooperative Soil Survey (NCSS). The NRCS provides the science behind science-based conservation practices and management strategies. Water quality and watershed health used to evaluate conservation practices are key focus areas for NRCS. Conservation practices need supporting data to show landowners and farm managers the strength of using NRCS conservation practices in ensuring the sustainability and health of their soils. Soils data and information will enhance the assessment of watershed health by providing static and dynamic soil properties that affect water quality and that can be used for assessment and modeling.

The funding will support additional soil survey activities for NRCS that will:

- Assess static and dynamic soils information and other data as it relates to evaluating applied conservation practices for multiple land uses.
- Better monitor priority watersheds to assist in evaluation of applied conservation practices. Includes water table monitoring in all watersheds and installation of Soil Climate Analysis Network (SCAN) sites in selected watersheds.
- Collect additional dynamic and static soil property data to fill soil data gaps.
- Generate assessments from data collected in catchments.
- Create digital raster maps of watersheds and provide training to conservation planning staff on using raster data for resource assessment and conservation planning.
- Generate interim and final project report on watershed data and dynamic soil property data, identify strengths and weaknesses of soils data, provide guidance on future watershed projects, and ability of project and soils data to evaluate applied conservation practices.
- Provide States and partners with additional data in support of studying outcomes conservation planning to evaluate applied conservation practices.
- Provide additional point data for CEAP and Outcomes Team for modeling effects of conservation practices on water quality and watershed health.
- Provide accurate measurement of water quality/quantity related temporal soil properties to underpin soil survey and conservation assessments.
- Enhance and expand activities and partnerships in the National Water Quality Initiative (NWQI) and Edge-of-Field Monitoring programs.

Staffing levels must remain at current levels to maintain a cadre of soil scientists to provide detailed soils information to aid decision making by landowners, planners, and policy makers. NRCS is the sole Federal authority and lead in the United States for soil survey. The soil survey program needs to remain a viable enterprise that provides current, complete, consistent, and comprehensive soils information for the public good to enable wise decision making. Decreases in personnel and operational support will mean extended delays in delivering up-to-date core science and technology information for societal and agency needs. Efficiencies have been implemented in the soil survey program, since 2012 when the appropriation was reduced by 15 percent. Staffing decreased by 50 percent, and operating budgets decreased resulting in offices covering up to 12 million acres requiring additional travel to reach customers.

Soil survey information underpins conservation planning in the Conservation Technical Assistance Program, Farm Bill implementation in the Farm Bill Programs, the National Resource Inventory, the Conservation Effects Assessment Projects, and numerous programs in other Federal agencies, State/local agencies, and non-profit organizations.

(3) An increase of $7,000,000 and no staff years for the Snow Survey and Water Supply Forecasting Program ($9,488,000 and 52 staff years available in 2021).

The NRCS Snow Survey and Water Supply Forecasting Program provides mountain snowpack information and streamflow forecasts for the western United States and Alaska. To predict this annual runoff, the Snow Survey & Water Supply Forecasting Program manages and maintains a comprehensive network of manually-measured snow courses and automated Snow Telemetry (SNOTEL) monitoring sites throughout the West. SNOTEL stations also collect data on snow depth, all-season precipitation accumulation, and air temperature with daily maximums, minimums, and averages. Many enhanced SNOTEL sites are equipped to take soil moisture and soil temperature measurements at various depths, as well as solar radiation, wind speed, and relative humidity.

SNOTEL sites are designed to operate unattended and without maintenance for a year or more. A typical SNOTEL remote site consists of measuring devices and sensors, an equipment shelter, for the radio telemetry equipment, and an antenna that also supports the solar panels used to keep batteries charged. The budget to operate SNOTEL has remained flat since 2012 with no funds to replace and upgrade components to the latest technologies. The increase in funds will be used to upgrade standard sensor configurations which includes:

- Upgrade of Air Temperature Sensors and Solar Radiation Shields network wide: All the air temperature sensors we have been testing are all US made, and one of the radiation shields being evaluated is also.

- Program-wide Datalogger Upgrade: This would benefit the standardization of the network and data collection (programs). The dataloggers our program uses are also produced in the US by Campbell Scientific.
- Enhanced sensors to support development of process (conceptual) and physical hydrologic models: Sensor vendors would be US companies.
- GOES/Iridium Upgrades: We don't have a great way to ingest Iridium data currently, and the GOES Radio we have been using was recently discontinued by the vendor. We have been evaluating two options which seem viable, but field testing has yet to occur.

The SNOTEL Platform upgrades will provide 5-10 years of optimum operations depending on maintenance schedules and environmental exposure.

(4) An increase of $2,000,000 and no change in staff years for the Plant Material Centers Program ($9,540,000 and 31 staff years available in 2021) to support climate smart agriculture goals within the agency's network of 25 Plant Material Centers (PMCs).

Funding is requested to accelerate development of vegetative information and training for field staff to meet emerging environmental challenges associated with climate change, contribute to agency conservation planning streamlining efforts, and to address continued investments in Plant Material Center (PMC) facilities and equipment to maintain Federal facilities, improve operational efficiencies, and provide new capabilities so that PMCs continue to be a leader in the development of conservation plants and plant technology and provide the best conservation solutions for farmer/rancher resiliency.

Additional funding ensures the PMC program has adequate budget for supplies, services, and equipment to efficiently conduct the plant science studies and field trials that develop new vegetative plant adaption and resiliency information related to changing rainfall patterns, average temperature increases, carbon sequestration and extreme climatic events. Funding will also improve maintenance of PMC facilities allowing employees to focus on technology development and transfer resulting in 20 percent more scientific documents and 30 percent more training for conservation planning staff. Technical documents support NRCS conservation practices, new and innovative technology delivery, and the planning process. Training delivers plant materials information to field employees, so they have the knowledge and skills needed to perform their jobs. Plant genetics are changing rapidly, and the science used for conservation planning needs to keep pace. The net result is scientifically sound vegetative conservation practices and more efficient implementation of conservation plans with farmers, ranchers, and private landowners.

(5) A decrease of $3,000,000 for the Watershed Projects Program ($3,000,000 available in 2021).

No funds are requested in the 2022 Budget for this program.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTE

Table NRCS-15. Geographic Breakdown of Obligations and FTE (thousands of dollars, FTE)

State/Territory/Country	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	2022 Budget	FTE
Alabama	$8,260	47	$7,991	45	$8,169	47	$8,070	47
Alaska	4,192	27	5,315	26	5,433	27	5,368	27
Arizona	6,362	41	6,458	39	6,602	40	6,522	40
Arkansas	11,928	52	11,307	50	11,559	52	11,419	52
California	17,192	109	18,543	104	18,955	108	18,726	108
Colorado	11,797	72	11,535	69	11,792	71	11,649	71
Connecticut	3,583	24	3,466	23	3,544	24	3,501	24
Delaware	2,338	13	2,603	12	2,661	12	2,629	12
District of Columbia	378,943	483	389,810	463	398,485	479	393,657	479
Florida	7,703	55	6,716	53	6,865	55	6,782	55
Georgia	9,745	47	10,549	45	10,784	47	10,653	47
Hawaii	6,008	30	7,485	29	7,651	30	7,559	30
Idaho	8,420	59	7,850	56	8,025	58	7,927	58
Illinois	11,062	71	11,680	68	11,940	70	11,795	70
Indiana	9,888	78	10,970	75	11,214	78	11,079	78
Iowa	21,760	152	17,856	146	18,253	151	18,032	151
Kansas	16,068	119	12,244	114	12,517	118	12,365	118
Kentucky	10,723	80	10,089	77	10,313	80	10,188	80
Louisiana	10,256	67	9,654	64	9,869	66	9,749	66
Maine	4,645	37	4,163	35	4,255	36	4,204	36
Maryland	5,295	35	5,537	33	5,660	34	5,592	34
Massachusetts	3,611	22	3,517	21	3,595	22	3,552	22
Michigan	10,433	62	8,935	59	9,134	61	9,023	61
Minnesota	9,441	66	11,634	63	11,893	65	11,749	65
Mississippi	9,239	66	12,334	63	12,608	65	12,455	65
Missouri	23,692	119	32,930	114	33,663	118	33,255	118
Montana	11,827	73	12,411	70	12,687	72	12,533	72
Nebraska	14,221	112	14,967	107	15,300	111	15,114	111
Nevada	3,764	23	3,586	22	3,666	23	3,622	23
New Hampshire	3,162	26	3,340	25	3,415	26	3,373	26
New Jersey	4,942	34	4,624	33	4,727	34	4,670	34
New Mexico	6,283	14	7,087	13	7,244	13	7,157	13
New York	9,283	63	7,575	60	7,743	62	7,650	62
North Carolina	9,031	51	8,477	49	8,666	51	8,561	51
North Dakota	13,745	94	11,676	90	11,936	93	11,791	93
Ohio	10,091	49	10,430	47	10,662	49	10,533	49
Oklahoma	12,110	107	11,849	102	12,113	105	11,966	105
Oregon	8,951	39	10,813	37	11,053	38	10,920	38
Pennsylvania	8,622	69	9,965	66	10,186	68	10,063	68
Puerto Rico	3,469	29	3,378	28	3,454	29	3,412	29
Rhode Island	2,268	13	2,251	12	2,301	12	2,273	12
South Carolina	5,051	28	6,623	27	6,771	28	6,689	28
South Dakota	11,088	84	11,794	80	12,056	83	11,910	83
Tennessee	13,866	82	11,411	78	11,665	81	11,524	81
Texas	31,625	189	33,663	181	34,412	187	33,996	187
Utah	6,715	41	6,895	39	7,048	40	6,963	40
Vermont	4,039	29	4,034	28	4,123	29	4,073	29
Virginia	7,404	58	7,239	55	7,400	57	7,310	57
Washington	8,981	71	8,356	68	8,542	70	8,438	70
West Virginia	6,711	40	6,389	38	6,532	39	6,453	39
Wisconsin	11,047	55	11,275	53	11,526	55	11,386	55
Wyoming	7,070	52	6,346	50	6,487	52	6,408	52
Distribution Unknown	-	-	-	-	-	-	-	-
Obligations	857,950	3,558	877,623	3,404	897,154	3,519	886,285	3,519
Lapsing Balances	25,761		16,671	-	-	-	-	-
Rescinded Balances	-	-	-	-	-	-	-	-
Bal. Available, EOY	108,321	-	143,520	-	-	-	-	-
Total, Available	$992,032	3,558	$1,037,814	3,404	$897,154	3,519	$886,285	3,519

CLASSIFICATION BY OBJECTS

Table NRCS-16. Classification by Objects (thousands of dollars)

Item No.	Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
	Personnel Compensation:				
	Washington D.C.	$65,325	$64,366	$69,518	$71,163
	Personnel Compensation, Field	212,857	216,829	234,184	239,726
11	Total personnel compensation	278,182	281,195	303,702	310,889
12	Personal benefits	116,487	126,782	130,012	133,383
13.0	Benefits for former personnel	100	43	41	41
	Total, personnel comp. and benefits	394,769	408,020	433,755	444,313
	Other Objects:				
21.0	Travel and transportation of persons	14,133	2,248	2,169	1,871
22.0	Transportation of things	3,300	3,263	3,456	3,809
23.1	Rental payments to GSA	16,021	14,356	17,493	20,048
23.2	Rental payments to others	31,934	35,493	35,207	35,507
23.3	Communications, utilities, and misc. charges	947	2,061	1,918	1,466
24.0	Printing and reproduction	361	116	148	165
25.0	Other contractual services	-509	-	-	-
25.1	Advisory and assistance services	-	-795	12	14
25.2	Other services from non-Federal sources	179,300	321,698	305,685	275,312
25.3	Other goods and services from Federal sources	1,458	1,996	1,606	1,739
25.4	Operation and maintenance of facilities	163,542	44,299	49,794	55,334
25.5	Research and development contracts	1,158	443	346	80
25.6	Medical Care	365	2	2	2
25.7	Operation and maintenance of equipment	1,698	1,964	1,995	1,988
26.0	Supplies and materials	7,058	6,303	6,583	7,032
31.0	Equipment	40,244	35,308	36,109	36,759
32.0	Land and structures	2,044	503	512	511
41.0	Grants, subsidies, and contributions	-10	-24	-	-
42.0	Insurance Claims and Indemnities	124	347	347	333
43.0	Interest and Dividents	14	23	17	2
44.0	Refunds	-1	-1	-	-
	Total, Other Objects	463,181	469,603	463,399	$441,972
99.9	Total, new obligations	857,950	877,623	897,154	$886,285
	DHS Building Security Payments (included in 25.3).....	$1,458	$1,996	$1,606	$1,739
	Information Technology Investments:.....				
	FBC-1001 Cust Engagement & Mgmt Svcs				
	External Labor (Contractors).....	4,224	10,389	6,730	6,730
25.2	Outside Services (Consulting).....	5,755	-		-
	Subtotal FBC-1001 Cust Engagement & Mgmt Svcs.....	9,979	10,389	6,730	6,730
	FSA-125 Farm Programs				
25.2	Outside Services (Consulting).....	3	-	-	-
	Subtotal FSA-125 Farm Programs.....	3	-	-	-
	FSA-127 Geospatial Services	-	-	-	-
	External Labor (Contractors).....	1,644	969	22,919	22,584
25.2	Outside Services (Consulting).....	101			
	Subtotal FSA-127 Geospatial Services.....	1,745	969	22,919	22,584
	FSA-129 Program Financial Services				
	External Labor (Contractors).....	34	37	32	32
	Subtotal FSA-129 Program Financial Services.....	34	37	32	32
	NRCS-CDSI Conservation Delivery Streamline Initiative				
	Internal Labor.....	120	-	-	-
	External Labor (Contractors).....	16,467	3,598	2,667	2,667
25.2	Outside Services (Consulting).....	1,376	312	-	-
	Subtotal NRCS-CDSI Conservation Delivery Streamline Initiative.....	17,963	3,910	2,667	2,667
	Total Major Investments.....	29,724	15,305	32,348	32,013
	Mission Area Non-Major Investment Totals.....	103,363	62,080	69,999	72,052
25.3	Mission Area Standard Investment Totals.....	3,774	25,299	18,984	19,001
	Mission Area WCF Transfers.....	-	104,584	75,652	77,230
	Information Technology Investments Total:.....	136,861	207,268	196,983	200,296
	Position Data:				
	Average Salary (dollars), ES Position	$177,705	$182,514	$184,339	$187,104
	Average Salary (dollars), GS Position	$72,038	$72,229	$72,951	$74,045
	Average Grade, GS Position	10.0	10.0	10.0	10.0

Note: The position data reported above is representative of data collected across all funding sources provided to NRCS, including, but not limited to Conservation Operations, Watershed Rehabilitation (Technical Assistance), Watershed and Flood Prevention Operations (Technical Assistance), Water Bank Program (Technical Assistance), and Farm Security and Rural Investment Program (Technical Assistance).

NRCS TECHNICAL ASSISTANCE

Table NRCS-17. NRCS Technical Assistance (millions of dollars)

NRCS Technical Assistance[1]	2020 Actual	2021 Enacted	2022[2] Budget
Discretionary:			
Conservation Operations (Technical Assistance):			
Conservation Technical Assistance	$730	$731	$774
Soil Surveys	75	79	84
Snow Surveys	9	9	16
Plant Materials	9	10	12
Watershed Projects	6	3	-
Total, Discretionary Programs	$829	$832	$886
Mandatory:			
Farm Bill Programs (Technical Assistance):			
Environmental Quality Incentives Program	533	617	518
Agricultural Conservation Easement Program	156	192	137
Regional Conservation Partnership Program	216	289	195
Conservation Stewardship Program	562	659	285
Agricultural Management Assistance [3]	1	1	1
Conservation Reserve Program Tech. Assist	123	236	276
Voluntary Public Access and Habitat Incentive Program	1	1	-
Feral Swine Eradication and Control Pilot	4	3	1
Agriculture Water Enhancement Program	5	5	1
Farm and Ranchland Protection Program	51	47	33
Grassland Reserve Program	23	20	18
Wetland Reserve Program	5	17	2
Wildlife Habitat Incentives Program	6	5	1
Chesapeake Bay Watershed Program	4	4	-
Healthy Forest Reserve Program	1	1	-
Total, Mandatory Programs	$1,691	$2,097	$1,468
Total, Technical Assistance	$2,520	$2,929	$2,354

[1] This table reflects the total staff resources necessary to implement private lands conservation programs administered by the Natural Resources Conservation Service. This table includes the total for discretionary technical assistance and associated science and technology programs provided through the Private Lands Conservation Operations account in addition to the total technical assistance necessary to implement Farm Bill programs.

[2] The 2022 Budget assumes estimated carryover of $324 million.

[3] NRCS is authorized to receive 50 percent of total AMA funding. The balance of the funds are allocated to the Risk Management Agency and the Agricultural Marketing Service.

STATUS OF PROGRAMS

CONSERVATION OPERATIONS

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

Discretionary 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
4. Natural Resource Technology Transfer

The fifth business line, Financial Assistance, is funded primarily through mandatory conservation programs that are authorized and funded through the Farm Bill.

Conservation Technical Assistance (CTA) Program

NRCS is the principal agency within USDA for providing conservation technical assistance to private landowners, conservation districts, Indian tribes, and other organizations. Through the Conservation Technical Assistance (CTA) Program, NRCS helps 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.

The CTA Program provides agricultural producers and others with the knowledge and conservation tools they need to conserve, maintain, and improve the natural resources on the lands they manage. Through the CTA Program, 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.

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

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

Conservation technical assistance addresses at the local level natural resource conservation issues that are of State and national concern. NRCS leadership establishes CTA Program national priorities and initiatives on an annual or multi-year basis to focus resources on specific program objectives. States may establish additional priorities and initiatives for the CTA Program. NRCS 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 through conservation planning;
- Allocating program funds to address natural resource needs;
- Establishing short-term and long-term performance measures and goals;
- Formulating, enhancing, and expanding partnerships;
- Developing and transferring new and innovative technologies;
- Delivering conservation planning and other technical assistance to help producers meet eligibility requirements for USDA programs and other Federal, State, and local conservation programs;
- Conducting technical and program evaluations and assessments;
- Conducting resource inventories and assessments;
- Developing and delivering training to support conservation planners and conservation planning activities;
- Providing tailored conservation planning and assistance to meet unique need of a diverse customer base;
- Expanding technical capacity, including the use of technical service providers; and
- Developing public information and outreach strategies.

Current Activities

In 2020, CTA Program continuing activities included:

- Using new technologies and conservation practices that addressed emerging challenges and opportunities such as organic production systems, on-farm energy management, air quality improvement, and enhancement of pollinator populations;
- Providing assistance to improve soil health and productivity in States impacted by the historic drought;
- Protecting wildlife through the Working Lands for Wildlife (WLFW), a partnership between NRCS and the U.S. Fish and Wildlife Service (FWS) to use technical assistance with financial assistance to combat the decline of wildlife species;
- Addressing a growing number of niche enterprises that include aquaculture, specialty crops, sustainable, and organic farming;
- Engaging producers who are new to production agriculture and have higher demands for technical assistance or have not previously participated in NRCS programs, but who are critical in solving the identified resource concerns in special initiative areas;
- Entering into agreements with conservation partnerships in order to leverage local funds and provide additional technical assistance;
- Accelerating focused technical assistance through landscape conservation initiatives such as the Great Lakes Restoration Initiative, Sage Grouse Initiative, and the Mississippi River Basin Healthy Watersheds Initiative;
- Addressing threats to drinking water, especially community water systems, targeting technical and financial assistance for source water protection;
- Addressing growing demand for pre-program conservation planning support for Farm Bill programs such as the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), and Regional Conservation Partnership Program (RCPP);
- Designing natural resource conservation systems to reduce the risk of loss and mitigate the effects of climatic events such as drought, fire, and flood;
- Leveraging the innovative technology and agribusiness applications of the private sector in a collaborative effort to improve the tailored products and assistance provided to customers;
- Bolstering the credibility and technical acumen of staff and partners by strengthening the conservation planner certification program; and
- Attending to the unique needs of urban agricultural customers across the Nation through the delivery of customized conservation planning and technical assistance.
- In 2020, NRCS developed conservation plans covering 25.7 million acres. In accordance with those plans and utilizing CTA Program support, conservation practices and systems designed to improve soil quality were applied to 6.4 million acres of cropland.
- CTA Program support also contributed to the owners and managers of grazing lands in applying conservation practices to improve 10.7 million acres.
- Over 15.9 million acres of agricultural land had conservation practices applied as designed by the agency to improve off-site water quality.
- Over 1.2 million acres had conservation practices applied to improve irrigation water use efficiency,

reducing costs to the producer, groundwater withdrawals, and surface runoff.
- Almost 5.5 million acres had conservation practices and systems applied to improve wildlife habitat.
- Creation, restoration, and enhancement of wetlands, which provide critical wildlife habitat, were implemented on over 5,000 acres.

There continues to be a growing demand for technical assistance, and 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. In addition, the agency continues work to improve and streamline internal business processes to accelerate service delivery; expand 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 the ability to develop innovative technology while addressing new and emerging conservation challenges.

Grazing Lands Conservation

Grazing lands comprise an economic resource base in all 50 States and provide food, fiber, clean air and water, wildlife habitat, and open space. According to the National Resource Inventory (NRI, 2020), the 525 million acres of privately-owned range and pasture lands make up 27 percent of the total acreage of the contiguous 48 States. These lands constitute the largest private land use category, exceeding both forestlands (21 percent) and cropland (19 percent). Properly managed grazing land has multiple benefits, including reduced storm water runoff, improved carbon storage in the soil, and continued availability of habitat for wildlife species. In 2020, conservationists helped ranchers and farmers understand the basic principles of rangeland and pastureland soil health. Installations included facilitating practices (such as pipelines, tanks, ponds, fences, and erosion control structures); accelerating practices (such as rangeland seeding, pasture and hay planting, brush management, herbaceous weed control, grazing land mechanical treatment, and prescribed fire); and management practices such as prescribed grazing and forage harvest management in order to conserve, protect, and properly utilize soil, water, plant and air resources. The following grazing conservation practices were updated in 2020: pasture and hay planting (512), forage harvest management (511), prescribed burning (338), and herbaceous weed control (315).

NRCS works with the Society for Range Management, American Forage and Grassland Council, and other range and grazing entities to assist in technology development and transfer, and infusion of discipline science into NRCS technical assistance. The agency partners with the National Grazing Lands Coalition, a nongovernmental nationwide consortium of individuals, organizations, and agencies working together to maintain and improve the management and the health of the Nation's grazing lands. This coalition spurred major increases in the knowledge and skills of conservationists with the planning and application of conservation of grazing land management, facilitating adoption of grazing conservation practices. In 2020, conservation practices were applied to over 26.2 million acres of grazing land. The agency partners with the National Cattlemen's Foundation to recognize outstanding ranch and farm managers and conservationists through the Environmental Stewardship Awards. This program encourages all producers in America to strive for better land management on their farm or ranch for future generations.

NRCS uses the NRI Grazing Land On-Site Data Survey to evaluate and document the environmental conditions of rangelands and pastureland across private lands in America. Our interagency agreement with the Bureau of Land Management (BLM) expands grazing lands NRI onto non-forested BLM lands to provide a statistically based sample design that is common to both agencies.

NRCS's ecological site descriptions (ESD) provide a framework of plant community States and transitions in response to various environmental factors, disturbances, and land management decisions. This technology improves land management planning capabilities for private landowners, agencies, and the public by providing blueprints for ecological improvement of grazing lands across the Nation and will have implications and applications in other countries. Joint policy between NRCS, BLM, and U.S. Forest Service pools the agencies' technical resources to support the development and use of ESDs to describe site characteristics, plant communities, and use interpretations for grazing land and forestland. Through this approach, agencies achieve consistency in classification, technology development, and conservation planning. ESD development training is ongoing and all three agencies provide staff support and participation. Ecological Site Information System (EDIT) provides the database for the development and sharing of the ecological site descriptions (ESDs).

NRCS continues to work closely with partners and universities to improve the grazing land training curriculum. In 2020, five new courses were developed for employees. They are Grazing Land Economics, Vegetation Monitoring and Data Interpretation, Rangeland Ecology II, Ecohydrology, and Prescribed Grazing.

Clean Water Activities

NRCS promotes the implementation of conservation practices on America's working lands to address key water quality issues and help safeguard the Nation's streams, lakes, rivers, aquifers, and coastal and ocean resources. These conservation practices help mitigate the potential environmental risks posed by agricultural operations and the impairment of water resources by nutrients, sediment, pathogens, and pesticides. NRCS works with the agricultural community to implement conservation actions to address water quality resource concerns at the field, farm, and watershed scales. The agency also provides the leadership needed to enhance coordination with the Environmental Protection Agency (EPA), U.S. Geological Survey, Army Corps of Engineers, National Oceanic and Atmospheric Administration, and other Federal agencies in areas of mutual interest. Specific areas in which the agency provides technical leadership include erosion control and sediment management; nutrient management; conservation practices, activities, and enhancements; tools for assessing and addressing agricultural water pollution; and technical knowledge transfer to producers, partners, and the public.

NRCS target efforts underway protect and conserve water quality, including several national and regional conservation initiatives. One effort, the National Water Quality Initiative (NWQI), began in 2012 to implement conservation practices in priority watersheds so that agriculture no longer contributes to water quality impairment, and stream segments may eventually be delisted from the EPA's 303(d) list of impaired streams. Each State has identified watersheds in which to concentrate NRCS efforts and coordinate with State water quality agencies. In 2020, the agency made financial assistance available to help farmers and ranchers implement conservation systems in 186 priority watersheds and provided technical assistance for development of watershed assessments in 110 watersheds. Also, in 2020, NRCS initiated a source water protection pilot working to address threats to public water supplies in ten States (22 projects). In 2020, the initiative increased emphasis on watershed assessment and planning to further target conservation efforts by requiring all watersheds receiving financial assistance to have a watershed assessment, that identifies critical treatment areas. Landowners and producers participating in the initiative receive conservation payments to work on the land in a sustainable way that provides cleaner water while keeping the land productive into the future. State water quality agency partners report that 27 percent of NWQI monitoring watersheds show an improvement in water quality in at least one of the NWQI- monitored pollutants (2016 data). Further, 81 percent of these improvements can be attributed to or associated with agriculture conservation practices implemented by farmers and ranchers.

The Mississippi River Healthy Watersheds Initiative (MRBI) is a similar initiative with a primary goal of assisting Hypoxia Task Force States in implementing their nutrient loss reduction strategies. There were 139 watersheds receiving financial assistance for practice implementation and an additional 87 watersheds developing watershed assessments. MRBI watersheds have watershed assessments and specific metrics designed to target and measure impacts of conservation practice implementation. Communities benefit by having clean waterways, safer drinking water, and healthy habitat for fish and wildlife.

In 2019, NRCS initiated efforts to address source water protection based on the 2018 Farm Bill provisions. NRCS State Conservationist worked with community water systems and other drinking water partners to develop local priority areas to address water quantity and quality threats to drinking water. During 2020, NRCS further refined the priority areas to better target threats to drinking water.

During 2020, the agency continued to provide leadership through the development, advancement, and demonstration of new and innovative approaches for water quality conservation. Below are some of these activities and advancements:

- NRCS serves as the lead USDA agency for providing conservation technical assistance for water quality improvement. A major component of this assistance is provided through the establishment of national conservation practice standards (CPSs). In 2020, NRCS completed updates to 58 CPSs that protect, maintain, or improve water quality, including Drainage Water Management (Code 554), Riparian Forest Buffer (Code 391), Saturated Buffer (Code 604), Denitrifying Bioreactor (Code 605), Grassed Waterway (Code 412) and Pest Management Conservation System (Code 595). Associated resources including technical notes are being updated to coordinate with new standards. For Pest Management, resources are being developed to coincide with the standard's new focus on prevention, avoidance, and monitoring activities in addition to mitigation for suppression strategies for tillage and/or pesticide use. Practice use is being analyzed and investigated to determine barriers to broader implementation. Training was provided throughout the year. New payment scenarios have been developed.
- Voluntary edge-of-field water quality monitoring enables agricultural producers and scientists to quantify the benefits of conservation to water quality. Through edge-of-field monitoring, NRCS works with producers and conservation partners to measure the amount of nutrients and sediment in water

runoff from a field and compare improvements under different conservation systems. During the first seven years of edge-of-field water quality monitoring, the agency provided about $6.5 million for over 40 monitoring projects collecting water quality data across the country.

- The release of nutrients from agricultural operations is a recognized source of contamination for the Nation's waterways. Comprehensive Nutrient Management Plans (CNMPs) are an effective voluntary tool for addressing these water quality problems associated with agriculture. In 2015, NRCS CNMP policy and procedures were revised to make the plan and its implementation more streamlined and useful to agricultural operations. In 2020, 723 CNMPs were written and funded by NRCS.
- NRCS released its 2018-2020 Chesapeake Bay Watershed Action Plan, describing its priority resource concerns of water quality, soil health, wildlife habitat, and principles for working with farmers and landowners to restore and improve the Chesapeake Bay Watershed using science-based conservation, partnerships and voluntary conservation programs.
- NRCS has a goal of putting conservation systems on four million acres in the Chesapeake Bay Watershed by 2025. Since 2010, NRCS has worked with farmers and ranchers to put conservation on over 2.3 million acres.
- Collaborations with agricultural groups, States, Universities, and other Federal agencies continued to provide aggregated data about voluntary conservation practice implementation by NRCS customers which is helping States meet Chesapeake Bay total maximum daily load goals.
- In 2020, NRCS provided technical and financial assistance to producers that had to react to changing market conditions related to the COVID-19 pandemic. NRCS provided producers with assistance on spreading of waste milk (due to industry changes caused by closure of schools), feeding livestock to slow growth and milk production (due to limited capacity at slaughter houses), and emergency animal mortality management (disposal of animal carcasses which could not be taken to market).

In collaboration with the Agricultural Research Service (ARS), NRCS continues to support, deploy, and expand the geographic range for the Agricultural Conservation Planning Framework (ACPF) planning tool. The ACPF is based on a holistic planning concept utilizing geographic information system tools and high-resolution geospatial data to determine suitable locations for conservation practices. ACPF analysis results provide an inventory of conservation opportunities in fields, below fields, and in riparian zones where water quality improvement and other ecosystem services can be realized. ACPF results provide a planning resource that enables local conservationists and landowners to identify preferred practices and locations suited to their own landscape and farms. In 2019, NRCS funded an agreement with ARS to provide NRCS the tools and recommendations necessary for field offices and watershed planning partners to use ACPF for watershed planning and outreach. Work continues on this project both within the Upper Midwest in States that are already in the ACPF database (Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin) as well as States representing new geographies (Arkansas, Maryland, Mississippi, and Oklahoma) in order to adapt the ACPF for use in other regions of the country.

In support of the EPA's priority to promote and finance water reuse and recycling projects through the Water Infrastructure Finance and Innovation Act, the USDA has committed to the collaborative efforts of the National Water Reuse Action Plan (WRAP), which was released in 2020. The WRAP features 11 strategic themes, 37 developed actions, 28 unique action leaders, 80 collaborating partners, and 200 implementation milestones geared towards better coordination and focus of taxpayer resources on national water resource concerns. Recognizing that data and information on the quality and quantity of available water can improve opportunities for water reuse, NRCS has committed to the action item of increasing water information availability. In 2020, NRCS fulfilled this action by fostering watershed-scale pilot projects to share water information to support water quality and reuse actions through the NRCS Conservation Innovation Grant Program. Further, in service of advancing policy coordination to encourage the reuse of water that adheres to fit for purpose water quality specification, NRCS has committed to the action item of leveraging existing USDA programs to encourage integration of agricultural water reuse. NRCS fulfilled this action in 2020 by providing increased incentives for conservation practices that relate to water quality and quantity and protect drinking water sources while also benefiting producers. The 2018 Farm Bill authorized these enhanced incentive rates.

National Resources Inventory (NRI) Program

NRCS collects, analyzes, interprets, and delivers data and information on natural resources through the NRI program and the Conservation Effects Assessment Project (CEAP). Several pieces of legislation authorize the NRI, but the Rural Development Act of 1972 (7 U.S.C. 1010a) is recognized as the statute that specifically articulates the

NRI program. CEAP is authorized under the Soil and Water Resources Conservation Act of 1977 (RCA) as amended.

The NRI compiles natural resources data and information, conservation program data, and data from other Federal and non-Federal sources. These data provide the basic scientific information necessary to inform sound natural resource planning and decision-making at many landscape levels. The NRI is a national assessment of natural resource conditions and trends on non-Federal lands, including privately-owned land, tribal and trust lands, and lands controlled by State and local governments. In all, the NRI provides information on over 80 percent of the Nation's land area. Data and analyses from the NRI are indispensable for developing appropriate and effective conservation programs, sound agricultural policy, and informing national farm policy discussion through the Farm Bill process. In addition, the data from the Grazing Land NRI Onsite Data Study are used in the CEAP-Grazing Lands conservation effects modeling efforts to further enhance optimization of conservation practice application on the Nation's grazing lands.

The NRI is a statistical survey that inventories scientifically selected sample sites in every county across the United States and locations in the Caribbean and Pacific Island areas. From 1977 to 1997, NRI was conducted on five-year cycles. Since 2001, a statistically sound subset of the 800,000 NRI sample sites nationwide has been selected every year for data collection. Collecting NRI data on an annual basis allows the agency the flexibility and capability to gather scientific information on emerging natural resource issues. The most valuable aspect of the NRI is its ability to capture long-term trends. This trending information is instrumental in evaluating the effects of conservation programs and policies over time. Major releases of NRI data are mandated by law and scheduled for every five years. The NRI is performed in cooperation with the Iowa State University Center for Survey Statistics and Methodology. The 2020 NRI activities included:

- NRI Production Work. The Remote Sensing Laboratories (RSLs) staff completed data collection on the 2018 NRI from images of 72,157 sample sites and approximately 216,000 points. The RSLs staff also processed 60 percent of the 71,833 images for the 2019 NRI. The contracts for acquiring aerial photography for over 72,000 segments for the 2020 NRI have been awarded.
- On-site Data Collection on Non-Federal Grazing Lands. The partnership with the National Employee Development Section (EDS) of the Farm Production and Conservation (FPAC) Business Center started to conduct NRI Grazing Land Train-the-Trainer courses in Tucson, AZ; however, due to COVID-19 restrictions, the remaining sessions were cancelled. Alternative methods for local training were conducted instead. In 2020, data collection was conducted on 1,600 non-Federal range sites and 750 non-Federal pasture sites.
- On-site Data Collection on Bureau of Land Management (BLM) Lands. In 2020, NRCS and BLM implemented their continuing interagency agreement to monitor rangeland resources by expanding NRI data collection on BLM lands with intensified sampling in core sage-grouse habitat. The five-year agreement that began in September 2019, continues the collaborative work that started in 2011. A survey system, developed with BLM funding, provides scientifically credible information on the status of non-forested BLM lands in 13 Western and Midwestern States. In 2020, NRCS collected data on over 1,500 sites on BLM lands. Adoption of standardized NRI protocols on BLM-managed landscapes enhances NRCS's leadership on grazing lands, benefits BLM surveys by providing a well-proven sampling framework, and enables compilation of a consistent and comprehensive database. Combining information derived from NRI data collected on BLM-managed lands with data obtained from NRI points on non-Federal lands provides a statistically sound, virtually seamless, area-wide representation of all grazing lands in the western U.S.

Conservation Effects Assessment Project (CEAP)

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

To build the science base necessary for effective conservation planning, CEAP collaborates with a number of partners from across the spectrum of the conservation research and planning community, including academic partners, NGOs, and government collaborators at the local, State, and Federal levels. CEAP projects are managed by five CEAP component leaders, with portfolios centered on cropland, grazing lands, wildlife, wetlands, and watershed assessments. Assessments of the effects of conservation practices and current agricultural management are carried out at national, regional, and watershed scales.

National assessments are conducted for cropland, grazing lands, wetlands, and wildlife. These assessments use a variety of methodologies to evaluate the impacts of conservation practices and to assess the potential of USDA conservation programs to meet the Nation's conservation goals, including modeling, monitoring and data collection, and geospatial analysis. The watershed assessment component focuses on studies that provide more detailed, in-depth assessments of smaller areas, developing science at the regional and watershed level to inform local decision-making and improve modeling capacities at multiple scales. To inform conservation planning strategies, CEAP-funded assessments have refined and developed models to evaluate the conservation impacts of current conservation implemented and of scenarios for additional conservation treatment to evaluate environmental change in response to practices.

Assessments conducted by all components of CEAP at various scales, from field to regional and watershed, inform the prioritization of conservation needs to enable the agency to focus resources in more effective ways to benefit the American public. CEAP-Watersheds and CEAP-Wildlife are working to support Conservation Initiatives within the agency to help identify and document measurable outcomes of on-the-ground conservation efforts. CEAP continues to provide assessments of the conservation efforts in various NRCS Initiative areas: the Mississippi River Basin Healthy Watersheds Initiative, the Chesapeake Bay Watershed Initiative and related Executive Order, the Great Lakes Restoration Initiative, the National Water Quality Initiative, the Lake Champlain Basin Initiative, the Sage-Grouse Initiative, the Lesser-Prairie Chicken Initiative, the Longleaf Pine Initiative, the Joint Chiefs Landscape Initiative, and Working Lands for Wildlife efforts. The Resource Analytics Lab in the Resource Assessment Branch is contributing critical geospatial information and analysis to these assessment efforts.

The 2020 CEAP activities included:

Cropland Assessment

CEAP-Cropland provides science-based estimates of the environmental benefits and effects of conservation practices applied to cropland and the need for additional practices. The main focus in 2020 was on modeling the effects of practices collected during the second CEAP-Cropland farmer survey (for CEAP-2). This survey, conducted by National Agricultural Statistics Service (NASS) enumerators, involved face-to-face surveys with producers across the country to collect detailed data on farm management and conservation practice adoption on 18,845 farms. Practice adoption and management practices used on cropland in CEAP-2 will be compared to those reported in the CEAP-1 farmer survey (conducted 2003-2006) to show trends that have emerged on cropland during the decade between the two survey periods.

A series of over a dozen national-level CEAP-2 reports, each on a different topic, will be released in 2021 to document changes in practice levels, differences in edge-of-field losses (reductions in sediment and nutrient losses), and the impacts on water quality metrics during the 10-year period. Topics will include structural practices and conservation tillage, crop rotations and cover crops, nutrient management, pesticides and pest management, irrigation, and more. Once completed, the national-level reports will be followed by a series of regional CEAP-2 reports. CEAP-2 estimates of sediment and nutrient loss reductions from conservation and management practices will also be used in State Landscape Planning Packages and in agency outcomes reports.

Major outcomes from both CEAP-1 and the CEAP-2 Farmer Survey have shaped CEAP-2's focus. Lessons learned include:

- The majority of U.S. cultivated cropland acres have at least one conservation practice in place; CEAP-2 plans to assess a variety of scenarios in which complementary practices and/or management are adopted to augment current conservation.
- Conservation practice adoption is most effective at meeting environmental targets when those targets are clearly delineated early in the process and effective metrics to determine success are agreed upon by a variety of stakeholders. Single and multi-approach simulations from past CEAP studies demonstrate that comprehensive conservation planning that addresses each field's unique conservation concerns in relation to specific conservation goals is the most effective best management practice.
- The use of precision agriculture, including global positioning systems (GPS) and variable rate technologies (VRT), is gaining momentum across the country; CEAP-2 will capture this emerging trend through refined modeling techniques. A model-ready soils database has been developed from SSURGO data, which will enable more sophisticated modeling of in-field soil variabilities.

A final CEAP-Cropland Special Study report is being developed, detailing field-level and watershed-level impacts of agricultural conservation practice adoption on nutrient and sediment dynamics in the Sacramento Bay Delta. This

report will assess changes in agricultural conservation and management since CEAP-1 (2003-2006) and will explore potential benefits of various conservation strategies in this unique region, thus improving the agency's capacity to deliver program benefits where they matter most.

In 2019-2020, the process-based, field-scale APEX model (Agricultural Policy/Environmental eXtender Model) continued to be improved from CEAP-1 and Special Studies findings. These ongoing improvements will enable more realistic comparisons between CEAP-1 and CEAP-2 outputs and will better ground evidence-based agency decision-making. Improvements included increased capacity to capture the impacts of grazing animals on nutrient and soil dynamics; improved soil carbon modeling capacity and representation of soil carbon response to tillage impacts; inclusion of the impacts of high temperature stresses on yields; improved nitrogen and phosphorus cycle simulation; and better capacity to simulate woody crops, including orchards, vineyards, timber, and nut trees.

The CEAP-Cropland component scientists participated in several collaborative efforts with interagency and university groups related to potential improvements in conservation efforts in the context of numerous initiatives, including the Greenhouse Gas Initiative, Mississippi River Basin Healthy Watersheds Initiative, the Conservation Assessment Ranking Tool (CART), and the National Water Quality Initiative. Both the Cropland and Watershed components also continue to inform interagency Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA) efforts.

Grazing Lands Assessment

As with other CEAP components, the Grazing Lands component relies on key partners in completing assessments. In 2020, these partners included the Agricultural Research Service (ARS), several universities, and specific non-profit organizations. Additionally, various NRCS Deputy Areas and State Offices are providing needed technical input and collaboration.

Primary CEAP-Grazing Lands component activities and accomplishments in 2020 include:

- Released and disseminated the results of the agency's first pilot study on Ecosystem Service Valuation on rangeland in the Central Great Plains (https://www.eartheconomics.org/conservation-and-communities). The study monetized 12 ecosystem services that occur with the implementation of NRCS rangeland conservation practices. A key finding revealed that the implementation of two predominant conservation practices (Brush Management and Prescribed Grazing) improved land health metrics and increased the estimated economic value of non-market ecosystem services by $2.28 to $4.93 per acre per year in the region. Main project goals include increasing awareness of the agroecological non-market benefits of conservation practices that are not currently being accounted for, potential for including ecosystem service-based incentive payments in NRCS programs, and illustrating the flow of conservation benefits from individual ranches to the broader social/ecological communities. The study, released in June 2020 (https://static1.squarespace.com/static/561dcdc6e4b039470e9afc00/t/5efe6769842cc9218e95e900/1593730939330/ConservationAndCommunities_EarthEconomics_r0620-1.pdf) clearly showed that conservation benefits extend beyond the fence line, which has been a key consideration for use of Farm Bill funds on grazing lands. An interactive website to illustrate the results was also developed and released in June 2020 (https://www.eartheconomics.org/conservation-and-communities). Incorporating these findings into the conservation planning process and extending our analysis area to other ecoregions of the U.S. are the next two phases, when approved by NRCS leadership, to this ground-breaking approach by CEAP-Grazing Lands. This project area included the Lesser-Prairie Chicken Initiative area.
- Completed and published the first project on forest conservation practice effectiveness and optimization on private and adjacent public forest and rangelands to support the Climate Change Building Block EQIP allocation (https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1660622.pdf). This unique project models the environmental effects of conservation practices on forest and adjacent rangelands. We used simulation modeling of different forest practice designs to reduce wildfire risk in the western U.S., particularly on dry forest landscapes. Quantifying risk reduction metrics and biodiversity metrics by designing NRCS forest conservation practices in a way that mimics nature shows we can increase landscape diversity, increase meadow patch-size and numbers, reduce soil erosion, reduce risk of wildfire ignition and spread, and improve water quality. This work provides the baseline for a forestland conservation treatment optimization strategy that will be further tested in additional Western forest/rangeland co-mingled landscapes. The results have been published in Landscape Ecology. All spatial layers from this project have potential use in the NRCS CART framework, to bring more informed conservation techniques to field office planners and their cooperators and expand the

CEAP-Grazing Lands assessment framework. This project was also part of the Joint Chiefs Landscape Initiative.

- Initiated development of the ArcGIS Online tool, RaBET, for use by conservation planners, ranchers, and others. The Rangeland Brush Estimation Toolbox (RaBET), developed with ARS-Tucson, provides MLRA-based remote sensing woody plant maps and canopy cover estimation using no-cost imagery. Beta-testing on RaBET, field data collection, and acquisition of high-resolution imagery for algorithm validation was done by CEAP-Grazing Lands staff in collaboration with NRCS staff in Arizona, Colorado, Utah, Texas, and Nebraska. Improvements and additional MLRA coverage will be ready for more field office testing in 2021. The RaBET team has joined forces with the CEAP-Grazing Lands VGS team and two USFWS Joint Ventures, resulting in more effective training sessions, data exchange, and ground-truthing of the canopy cover values generated via remotely sensed data. The USFWS is contributing $150,000 to conduct field data collections in support of RaBET in 2021, building from the partnership in Nebraska in 2020. This contribution will expand the validation of RaBET to potentially 12 MLRAs in five States. RaBET is useful for efficient and effective conservation planning, evaluation of conservation effects, documentation of Farm Bill funds to treat woody plant concerns, and helping States to develop statewide resource assessments.
- Developed a nationwide ArcGIS Online soil characteristics filter to aid in CEAP modeling efforts, soil survey and ecological site concepts and correlation, and conservation planning. The tool is called SSURGO-QT (Soil Survey Geographic Query Tool) and uses soil properties from the official NRCS soil data. Users select desired properties that then appear on the map and lead to effective conservation solutions. The SSURGO-QT will be deployed for use in November 2020.

Wetlands Assessment

The CEAP-Wetlands component supports on-going outcome-based assessment and modeling projects aimed at quantifying and interpreting effects and effectiveness of conservation practices and programs on ecosystem services provided by wetlands. Long-term assessments, conducted in partnership with US Geological Survey, ARS and universities, continue to be a significant element of these efforts. Results are used to document measurable outcomes of wetland restoration and conservation practices on water quality and storage, habitat values, and other ecosystem services in agricultural landscapes.

Two new assessments were initiated in 2020 to evaluate conservation outcomes of: (1) WRP and ACEP/WRE easements and wetlands restoration in the Lake Okeechobee watershed in Florida; and (2) forestry conservation practices on groundwater and hydrology of isolated wetlands of the longleaf pine ecoregion.

Four regional investigations initiated in prior years were continued in 2020, to evaluate the effects of wetland conservation practices and programs quantifying ecosystem services (e.g., water quality, flood control, biodiversity) provided by major wetland types. These include: (1) the Prairie Pothole Region, (2) the High Plains, (3) the California Central Valley, and (4) the Mid-Atlantic Rolling Coastal Plain and Coastal Flats. Data collection and model development for the major wetland types in regional assessments are focused on wetland ecosystem services, including floodwater storage, habitat quality, pollinators, biotic conservation and sustainability, erosion and sedimentation, nutrient rate and transport, carbon sequestration, and greenhouse gas emissions. In 2020, the CEAP-Wetlands National Assessment focused on:

- Developing CEAP-Wetlands modeling that provides NRCS with the capacity to simulate and forecast changes in wetland functions or ecosystem services provided by wetlands and associated lands resulting from conservation practices and programs, land treatments, climate change, and other factors.
- Calibrating and validating the depressional (prairie potholes, playas) and riverine wetland algorithms within the Integrated Landscape Model (ILM) linked to the primary CEAP model (APEX) and the NRI to improve the statistical reliability of model output at multiple scales and broaden its conservation application.
- Developing remote sensing-based protocols that document spatial and temporal changes and effects of wetland conservation practices and programs.
- Applying predictive regression models in the ILM to predict ecosystem services provided by playa wetlands and determine the effects that conservation practices have on those services. In addition, critical information from historic, current, and future condition estimates were shown to be useful to inform management of the important unique depressional wetlands in the High Plains region.
- Linking other CEAP-Wetlands findings with those of other CEAP components into the ILM and APEX models to address cumulative practice and program effects across multiple scales.
- Documenting the effectiveness of conservation practices and working lands treatments within the

broader regional study framework to improve modeling results and translate those results to improve on-the-ground conservation.
- Developing a sampling manual detailing CEAP-Wetlands data collection methods.

CEAP-Wetlands regional project reports and publications completed in 2020 include:

- Mushet, D.M., Roth, C.L. 2020. Modeling the Supporting Ecosystem Services of Depressional Wetlands in Agricultural Landscapes. Wetlands. https://doi.org/10.1007/s13157-020-01297-2.

Wildlife Assessment

The CEAP-Wildlife Component is an on-going effort to quantify the effects of USDA conservation practices and programs for fish and wildlife in landscapes influenced by agriculture in the United States. The component relies on cooperative partnerships with the fish and wildlife science and management communities to conduct priority regional assessments in support of Working Lands for Wildlife (WLFW) species to document outcomes and support the science base for more effective delivery. Some assessments initiated in prior years were continued in 2020, including assessments of the effects of conservation practices associated with the Working Lands for Wildlife (WLFW) effort involving golden-winged warblers, New England cottontails, southwestern willow flycatchers, bog turtles, and gopher tortoises. Additionally, work continued for producing science-based outcome reporting and technical tools for effective delivery of the Lesser Prairie-Chicken and Sage Grouse Initiatives (LPCI and SGI, respectively). Assessment studies were initiated for WLFW 2.0-featured species, including saltmarsh sparrows, black rails, whip-poor-wills, and Monarch butterflies. Assessments to address additional priorities were initiated in 2020, including: an assessment of the effects of various tillage practices on native ground-nesting bees; assessment of the implications of landscape-scale transitions from grasslands to woodlands in the Great Plains; grassland bird response to prescribed grazing and brush management in the Great Plains; and a multi-party assessment of the effects of cropland conservation treatment on in-stream fish community health throughout the Upper Mississippi Basin.

As part of CEAP-Wildlife's support of outcome-based monitoring and science support for the Sage Grouse Initiative in partnership with the University of Montana and others, CEAP Wildlife continued to support development and use of the Rangeland Analysis Platform (RAP), including initiating detailed assessments of the ecological and economic implications of encroached conifer treatment and removal across the West.

CEAP-Watershed Assessment Studies

Long-term watershed assessment projects, conducted in partnership with ARS and universities, continue to be a significant element of CEAP as they document measurable outcomes of conservation on water quality in small watersheds. The scale and detail of these small watershed assessments (HUC 10-12) are directly applicable to conservation planning and a watershed-based approach of targeted NRCS Area-wide Conservation Initiatives and programs. A major effort continues to be summarizing and extending lessons learned across the projects, adding value to the individual watershed case studies, and applying insights directly to NRCS core business elements. Emphasis continues to be on working collaboratively within NRCS on water quality conservation initiatives and the RCPP to provide support and translate key findings into program guidance and design.

Significant CEAP-Watershed Assessment impacts and accomplishments in 2020 include:

- A major accomplishment of CEAP-Watersheds was the final preparation, peer review, and release in May 2020 of a Special Issue of the Journal of Soil and Water Conservation on "Measuring and Understanding the Effects of Conservation within Watersheds." The issue includes 15 peer-reviewed research papers featuring results from CEAP assessments. All papers in the entire CEAP issue are available open access.
- Also included in that Special Issue are several feature papers including a significant synthesis paper detailing findings from across scales from CEAP-Watersheds over the past 17 years of work entitled, "Quantifying the Impacts of the Conservation Effects Assessment Project Watershed Assessments: The First Fifteen Years." One hundred nineteen research papers were reviewed and synthesized in the preparation of this overview paper highlighting key outcomes and reference tables on measured or modeled effects of conservation at the edge-of-field, sub-watershed, and watershed scales.
- Another feature paper discusses the impact of the CEAP STEWARDS database, and open database with watershed water quality, discharge, and supporting meteorological data collected from CEAP-Watershed sites. And an editorial paper on the importance of water outcomes was included from the Under Secretary of the Farm Production and Conservation Mission Area of USDA.

- Also, in January 2020, a Special Research Section of the Journal of Soil and Water Conservation was released in January 2020 along with a research introduction paper. In total, 6 papers, 5 of which are peer reviewed, were published and are available open access. The special research section discusses results of an evaluation of the NRCS Soil Vulnerability Index (SVI), developed by CEAP-Croplands and the RAB. Resource Analytics Lab, and then evaluated for validation and development needs identification across 13 CEAP-Watersheds using data and professional insight from CEAP-Watersheds projects. The evaluation study validated the utility of the SVI for use in conservation planning and recommended two possible development areas, which are now being investigated under a new agreement. SVI evaluation was helpful to document what the Index is in a brief paper, and validation against field and watershed data on runoff and leaching, as it was ultimately incorporated into NRCS' new CART tool to support vulnerability assessment for water quality concerns.
- Applied watershed assessment tools and lessons learned from CEAP-Watershed Assessments to the approach for the Mississippi River Basin Initiative, the National Water Quality Initiative (NWQI), and the Lake Champlain Basin Initiative.
- Efforts continued in 2020 to develop and evaluate innovative or existing conservation practice standards for water quality improvement. These include practices such as saturated riparian buffers, phosphorous removal structures, blind inlets, riparian buffers, bioreactors, drainage water management, cover crops, conservation crop rotation, irrigation water management, and specific nutrient management approaches within the 4Rs that are effective for no-till, tile drained, or cover cropped areas. A new technical tool, P-Trap software, to help with siting novel phosphorus removal structures was developed in 2020. Also, a webinar on "Managing Your Phosphorus on the Farm," featuring CEAP results and insights on conservation practices to reduce phosphorus losses from tile drainage and runoff, was hosted by the Sustainable Phosphorus Alliance in August 2020. Many of these practices evaluated or developed under CEAP-Watersheds are now included as part of USDA's Ag Innovation Agenda.
- Additional funds from NRCS ($5 million) were utilized in 2020 to support new or on-going projects for innovative phosphorous-reducing practices in HABs (harmful algal blooms) affected watersheds. These projects included on-going and new assessments of stacking conservation practices in systems to achieve greater reductions and address tradeoffs among practices; evaluating innovative practices for legacy sources of phosphorus; assessing legacy sources of phosphorous across fields and small watersheds; and developing and evaluating innovative technologies to reduce phosphorus in manure.
- Continued support for the development and evaluation of a new small watershed-scale conservation planning tool, the Agricultural Conservation Planning Framework (ACPF). This tool, developed by USDA ARS and others with funding from NRCS CEAP and CIG, is largely based on findings, insights, and assessment techniques developed as part of CEAP-Watersheds projects and data. Several additional CEAP-Watersheds are working to evaluate and develop this tool in 2020 to refine it under different physiographic and hydrologic conditions in priority regions of the U.S. as part of a new NRCS pilot project for MRBI and NWQI Watersheds as well as a companion CEAP-Watersheds agreement for ACPF evaluation for the Eastern States.
- Findings from CEAP-Watersheds continue to be utilized by Vermont State staff and conservation partners in the Lake Champlain Basin for more effective phosphorus reducing conservation strategies. The new Lake Champlain Basin CEAP-Watershed Assessment Study was announced in Vermont in October 2020. It has strong producer and partner support and will include outcome assessment both at the watershed and edge-of-field scales of innovative conservation practices.
- In 2020, a new assessment of managed aquifer recharge strategies to address aquifer depletion resource concerns was funded in the California Central Valley (CCV). The study will evaluate and document outcomes from using different managed aquifer recharge strategies on several key crops suitable for recharge, including almonds, tomatoes, grapes, and alfalfa, three of which are significant specialty crops in that region. The assessment, in partnership with the University of California-Davis, will focus on linkages between water quality and availability and linkages between surface water and groundwater and expand on our on-going CEAP-Watershed Assessments in the CCV.
- A new watershed assessment study was funded and is being planned with university, industry, and agency partners in south Florida to evaluate conservation effects and effective conservation options for sugar cane and rice crops in the Everglades Agricultural Area.
- Lessons learned and Conservation Insights from CEAP-Watersheds Assessments were used to inform the GLRI Action Plan 3, released in October 2019, including priorities for conservation as well as Measures of Progress to document outcomes, in support of NRCS conservation work for Nearshore Health and Adaptive Management. The method for estimating phosphorus reductions for GLRI, which is based on data from both CEAP-Watersheds and CEAP-Croplands, was fully documented, and Measure of Progress goals for

GLRI Action Plan 3 as well as methods documents for EPA were reviewed and revised. This is a direct implementation of CEAP findings to support the design and delivery of NRCS conservation programs and projects and the estimation of reductions from practices applied. Additionally, this provides transparency of how conservation benefits are accounted for and reported by NRCS. In 2020, a new method for reporting acres receiving technical or financial assistance on nutrient management in priority watersheds was documented in a methodology report and implemented for 2019 GLRI reporting. This new outcome metric, 3.1.2 for GLRI, has become part of the new Action Plan 3 for the next five years.

Natural Resource Technology Transfer

NRCS ensures field employees have the appropriate resources and necessary training to utilize the latest scientific research and technology for natural resources assessment, conservation planning, conservation system installation, and program delivery.

Key activities in 2020 included:

- As part of NRCS's goal of making the latest technology available to our field offices, staff from many areas of S&T develop or provide training on a wide range of topics.
- Biologists have expressed concern about larval and nectar food resources available to Monarch butterflies on privately owned rangeland. The NRCS National Resource Inventory (NRI) rangeland data was used to evaluate *Asclepias* species densities, geolocations, and environmental gradients thus providing a source of information to improve NRCS assistance to landowners and producers with respect to Monarch recovery efforts.
- Field assessments on range and pastureland continue to be integral steps in NRCS conservation planning and National Resource Inventory (NRI) field studies. In 2020, NRCS developed a new pastureland assessment tool, "Determining Indicators of Pasture Health (DIPH). DIPH utilizes a matrix of indicators to determine, through preponderance of evidence, three separate pastureland ecosystem attributes: biotic integrity, soil and site stability, hydrologic function, and a Livestock Management Quality Factor (LQMF). The three ecosystem attributes provide information about how well ecological processes such as the water cycle, energy flow, and nutrient cycling are functioning at a site, and the LQMF evaluates management impacts on livestock performance.
- The National Technology Specialist (NTS) provided year-long support for implementation of the Conservation Assessment Ranking Tool (CART). In particular, the NTS provided support to update the Conservation Practice Data Entry System (CPDES) to allow CART practice points to be assigned to practice narratives rather than just practices, allowing better refinement in describing the effects of practices in resolving resource concerns. This effort required coordination with the National Discipline Leads and established resource concern teams to both rewrite all national practice narratives and assign practice points for individual resource concern components and land use for each practice and narrative. Technical specialists from the West, Central, and East National Technology Centers participated on various teams to assign practice points to each narrative, resource concern component, and land use.
- CNTSC technical specialists provided over 500 instances of direct technical support to States with the Conservation Practice Document-Document Management System (CPD-DMS), including managing user permissions, troubleshooting errors, and solving program malfunctions. Technical staff administered crucial leadership during the national Field Office Technical Guide (FOTG) Section IV document migration project, including serving as a liaison between State NRCS staffs and the contractor, delivering training to State Technical Leads (STLs) and State Discipline Leads (SDLs), providing direct assistance, and collaborating with software developers to correct bugs and enhance program functionality. CNTSC technical specialists hosted or partnered with others to host six workshops for STLs, SDLs, and National Discipline Leads (NDLs) on writing conservation practice standards and using CPD-DMS to manage practice standards and associated practice documents. Technical staff also provided timely guidance and leadership to States with the new conservation practice variance request and interim conservation practice request processes in CPD-DMS.

Highly Erodible Land Conservation (HELC) Compliance

Highly erodible land is made up of soils that have a high vulnerability to increased erosion due to wind and water. This vulnerability is higher when the land is cropped, than when the land is in permanent vegetative cover. Participants in USDA programs (including Federal crop insurance subsidies) are required to protect their HEL cropland from excessive soil erosion in order to comply with the HELC regulations at 7 CFR Part 12 and statutory provisions of 16 U.S.C. Sections 3801, 3811, 3812, 3812a, and 3814. USDA program participants must implement a conservation plan or system on highly erodible cropped land that provides for a substantial reduction in soil erosion. In addition, when breaking out native vegetation after 1985, a program participant must implement a plan or system that results in no substantial increase in soil erosion. The agency classifies about 101.1 million acres, or approximately 27 percent of America's cropland, as HEL.

As part of the technical responsibilities of implementing the HELC provisions, NRCS conducts HEL determinations to identify cropland fields, that are highly erodible and subject to the provisions. In 2020, over 35,000 HEL determinations were conducted nationwide. The agency also provides conservation planning assistance on HEL.

Wetlands Conservation (WC) Compliance

NRCS's responsibilities for wetlands conservation compliance are detailed in Title XII of the Food Security Act of 1985 (16 U.S.C. Sections 3801 and 3821 to 3824). The agency responsibilities include making wetland determinations, resolving determination appeals, developing mitigation and restoration plans, determining minimal effect exemptions, and implementing scope and effect evaluations for the installation of new drainage systems and maintenance of existing systems.

One of the NRCS's significant responsibilities for WC involves conducting wetland determinations, to identify wetlands subject to the provisions, in violation of the provisions, or that are eligible for a specific exemption to the provisions. In 2020, over 24,000 wetland determinations were conducted nationwide.

A compliance status review is an inspection of a cropland tract to determine whether the USDA participant is in compliance with the HELC or WC provisions of the Food Security Act of 1985. Compliance status reviews are conducted annually in every State on farm and ranch lands that are associated with a person who has received USDA benefits and are subject to the HELC or WC provisions, or both. The compliance status review process requires employees to make an onsite determination when a violation of the HELC/WC provisions is suspected and ensures that only qualified employees report violations. In addition, the agency reviews HELC or WC tracts owned or operated by any NRCS or Farm Service Agency (FSA) employee who receives benefits at least once every three years.

Penalties for noncompliance with the HELC or WC provisions range from a Good Faith Exemption issued by the FSA, 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 31. The results of the 2019 reviews, which are displayed in the table below, show that a high percentage of program participants are following approved conservation plans or systems on HEL and complying with the WC requirements.

In 2019, compliance reviews were conducted on 18,206 tracts, which included approximately 3.5 million acres of cropland. A total of 261 tracts, or 1.4 percent of the total reviewed, were found to potentially not be in compliance: 161 tracts had HELC violations, and 100 tracts had potential WC violations. Of the 18,043 tracts that complied, approximately 1,068 tracts or 5.8 percent were deemed to be in compliance because they had been issued variances or exemptions as provided by statute or regulation. This indicates a low rate of noncompliance, with exemptions provided due to extenuating circumstances.

Data from the past four years suggest that conservation measures prescribed are being effectively implemented on our most vulnerable land (Note: the number of tract reviews in 2019 is lower due to NRCS forgoing reviews in most Federally declared disaster counties due to extreme weather events).

Table NRCS-18. Summary of Tract Reviews and Tracts Out of Compliance (HELC and WC):

	2016	2017	2018	2019
Total Tracts Reviewed	21,919	23,944	23,926	18,206
Tracts Out of Compliance	492	479	456	261
Percent out of Compliance	2.2	2.0	1.9	1.4
Number of States Recording Noncompliance	37	37	41	34

CTA Customer Assistance

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 financial assistance through mandatory (Farm Bill) programs.

In 2020, over 830,000 customers received abbreviated technical assistance, and over 108,000 customers received comprehensive planning assistance. Results from this assistance over all NRCS programs are:

- 27.8 million acres covered under written conservation plans;
- 39.6 million acres treated with conservation practices to improve water quality;
- 27.1 million acres of grazing lands conservation;
- 8.6 million acres of wildlife habitat improvement; and
- 17.7 million acres of conservation applied on cropland to improve soil quality.

NRCS's field staff work with State agencies and local partners to deliver conservation technical and financial assistance. Our clients invest in conservation to achieve results for their business and for the land. During 2020, these non-Federal partners contributed an estimated $79 million of in-kind goods, and services and over $145 million in financial assistance toward addressing local resource concerns. These voluntary arrangements allow NRCS, and its partners to get far more conservation on the ground than either entity could accomplish separately.

NRCS has continued to implement Conservation Desktop (CD) to support the Conservation Delivery Streamlining Initiative. CD is an internally-facing, map-based tool for field conservationists to efficiently develop science-based conservation plans, and practice schedules to support implementation. CD also helps field staff with the management of Farm Bill conservation program contracts. The first release of CD to NRCS field conservationists was in July 2017. In early October 2019, a completed CD release replaced and exceeded the current functionality of the Customer Service Toolkit.

In 2020, NRCS integrated CD with the Conservation Assessment Ranking Tool (CART). CART modernizes and streamlines NRCS's conservation planning and program delivery, reduces workload for field staff, and improves the customer experience by creating an efficient application process. NRCS planners can use CART to help address a variety of 47 resource concerns, across seven land uses, for 353 conservation practices, enhancements, and bundles, and clients can submit one application for many considerations of a program simultaneously. Along with targeted questions, CART also enables planners to take advantage of almost 90 geospatial layers of data to automate processing calculations during conservation planning. This enables the planner to move the client from program application to program contract much quicker than in past years. CART establishes a system that reduces the amount of paperwork on NRCS clients, and the amount of work on our field offices.

For NRCS, 2020 was a transition year requiring field staff and partners to learn a new system with CART. As of the end of 2020, there were over 5,000 users in CART. NRCS evaluated over 11.8 million resource concerns on over 79 million acres and completed over 127,000 ranked assessments. Through CART, NRCS has achieved 117.79 percent of the three-year average of assessments performed/conservation plans written, and 236.38 percent of the three-year average acres assessed/planned. As the staff's comfort level with CART continues to grow, NRCS will more fully realize efficiency gains, and expects to exceed those observed in 2020.

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. TSPs may be individuals or entities such as

private businesses, nonprofit organizations, Indian tribes, or State and local governments. TSPs provide participants in USDA conservation programs with convenient access to remove technical services, quality work, and professional one-on-one technical assistance. TSPs develop conservation plans; perform selected compliance studies; plan, design, and implement conservation practices; and evaluate completed conservation practices.

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

To become a certified TSP, individuals or entities must enter into a certification agreement with NRCS. TSPs must meet education, experience, and credential requirements that are established for each conservation practice and Conservation Activity Plan (CAP). This ensures that technical assistance is provided in accordance with the agency's statement of work associated with each conservation practice and plan development criteria for each CAP. All conservation practices and CAP criteria are reviewed and updated annually. The TSP website hosts a link to view and access certification criteria and hosts a publicly accessible registry of certified TSPs. The TSP website contains other important information about the TSP Program for TSPs and customers: http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/tsp

Currently, there are 1,250 individuals and more than 100 businesses serving as certified TSPs that are available to help program participants apply conservation efforts through programs such as the Environmental Quality Incentive Program, Agricultural Conservation Easement Program, Conservation Reserve Program, Conservation Stewardship Program, Conservation Technical Assistance Program, and Watershed programs.

TSPs continue to play the primary role in the planning and implementation of CAPs in EQIP. NRCS offered 16 approved CAPs during 2020.

International Conservation

Through the International Conservation Program, NRCS provides leadership to promote, enhance, and strengthen the conservation of natural resources globally. The program helps foreign governments develop, use, and protect their natural resources. NRCS shares scientific and technological information about conserving natural resources with other countries.

The agency cooperates with other Federal agencies in providing technical assistance in natural resource conservation to countries affected by disasters, conflicts, or mismanagement of natural resources. NRCS assists other Federal agencies by arranging meetings between agency specialists and foreign visitors, who are interested in how the agency provides technical and financial assistance to private landowners, and works with other countries on scientific and exchange projects that benefit both countries.

In 2020, a NRCS Soil Health Specialist spoke at the annual conference of the Regional Workshop of Agronomy and Sustainable Development in Alencon, France. The exchange of information on research data and on-the-ground practice application benefits participants, and is shared with NRCS employees and clients. The NRCS Soil and Plant Science Division Director attended the fifth Working Session of the International Network of Soil Information Institutions in Rome, Italy. The meeting focused on the harmonization of soil analysis and interpretations as prerequisite to make soil information comparable and interpretable across laboratories, countries, and regions. The NRCS National Leader for Soil Science Research participated in the International Black Soils Network in Chisinau, Moldova. The purpose of the network is to highlight the importance of these soils, how to protect them, and to share information about how best to manage them. Through scientific exchange, it is understood that many of these soils behave very similarly, while others have unique management challenges. NRCS participation aided cooperating institutions to gain a better understanding of U.S. Soil Taxonomy and the application of soil taxonomy as it pertains to land use and management.

Additionally, a NRCS Embassy Science Fellow traveled to the Republic of Palau to assist reforestation efforts to reduce erosion of exposed lands that contribute to sedimentation in streams that discharge to the ocean, and subsequently impair the ecosystems of mangrove forest, seagrass beds, and coral reefs. Technical assistance improved nursery operations, proper site selection for planting seedlings, and planning for tree planting events. As a result, staff and volunteers from many parts of the country, including high level government officials, foreign Ambassadors, and Traditional Chiefs were involved in scheduled events. On Earth Day, the group set a record in Palau with the participation of 120 volunteers to plant trees at one site.

During 2020, IPD arranged for 19 staff members to meet with 68 foreign visitors from eight countries. IPD aided 12 agency employees on international travel to 12 countries for foreign meetings. Two employees traveled to two

countries in support of Department of State Embassy Science Fellows Program assignments. Due to worldwide pandemic impact on international travel, IPD assisted six agency employees to participate in three international virtual workshops on topics supporting desert locust and Covid-19 impacts in Africa and Asia, agricultural production, water management systems, and conservation practices.

Scholarship/Internship Programs
In 2020, the FPAC Mission Area, NRCS, and FSA participated in the USDA 1890 National Scholars Program, a partnership between USDA and the 1890 Land-Grant Universities. This program is intended to increase the number of students enrolling in agriculture, food, natural resource sciences, and other related programs in pursuit of a bachelor's degree at any of the Nation's 1890 Land Grant Universities, all of which are Historically Black Colleges and Universities. In 2020, the agency obligated $1 million for these scholarships and career training for students enrolled in this program, referred to as "Scholars". Applicants include inbound freshmen and rising college sophomores and juniors. Students must maintain a minimum Grade Point Average of 3.0 and are required to work during the summers as conservation interns. Currently there are 62 Scholars (60 NRCS, two FSA). NRCS selected 26 in 2020.

In past years, NRCS participated in the USDA 1994 Tribal Scholars Program designed to strengthen the long-term partnership between USDA and the 1994 Land-Grant Institutions. The objective is to promote NRCS as an employer of choice for diverse populations, with an emphasis on American Indian/Alaska Native (AIAN) tribal students. The program offers a unique strategy for sharing information and ideas focused on best practices in outreach to American Indian/Alaska Natives interested in careers in Agriculture and Natural Resource management.

Outreach Partnerships
In 2020, NRCS entered into agreements with 44 different entities with an investment of approximately $23 million, to assist the agency in conducting program outreach to historically underserved populations. By strengthening existing partnerships and establishing new partnerships with public and private entities, NRCS extended its reach to a broader cross section of the American public.

Through these partnership efforts, the agency is successfully demonstrating how its many unique conservation programs play a vital role in helping address natural resource, economic and social challenges faced in rural, suburban, and urban landscapes. As a result, NRCS is:

1. Demonstrating the connection between food, agriculture, community, and a sustainable environment.
2. Expanding access to affordable fresh and local foods.
3. Stimulating economic development.

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

In 2020, NRCS programs, including the Environmental Quality Incentives Program, Conservation Stewardship Program, and the Agricultural Management Assistance Program provided assistance to Historically Underserved customers, which include beginning, limited resource, socially-disadvantaged, and veteran farmers and ranchers.

The following are contracts and financial assistance provided to the customers:

- $172.5 million in financial assistance on 4,409 contracts with socially disadvantaged farmers and ranchers to treat about 2,019,655 acres.
- $435.3 million in financial assistance on 12,506 contracts with beginning farmers and ranchers to treat about 2,296,331 acres.
- $25.8 million in financial assistance on 1,044 contracts with limited resource farmers and ranchers to treat about 218,158 acres.
- $25.3 million in financial assistance on 1,083 contracts with veteran farmers and ranchers to treat approximately 89,937 acres.

Assistance to American Indians and Alaskan Natives
In 2020, NRCS continued to increase American Indians and Alaskan Natives tribal participation in financial assistance programs among the 574 Federally-recognized tribal governments to strengthen conservation activities on

tribal lands. The agency's objectives are to: operate within a government-to-government relationship with Federally-recognized Indian Tribes; consult to the greatest extent practicable with Indian Tribal Governments before taking actions that affect Federally-recognized Indian Tribes; assess the impact of agency activities on tribal trust resources, and assure that interests are considered before the activities are undertaken; and remove procedural impediments to working directly with tribal governments on conservation activities that affect trust property or government rights of the Tribes.

Federally-recognized Tribes can work with NRCS to receive technical assistance through CTA and financial assistance through the mandatory programs. Assistance to Tribal governments is offered along with conservation planning, partnerships, grants, financial assistance programs, and training through the agency outreach efforts. Employees are trained in tribal culture and protocol. The agency has 50 offices, including 42 full-time and eight part-time offices, located on or near tribal lands. There are approximately 195 agency tribal liaisons assisting the 574 Federally-recognized Tribes.

Through the many technical and financial assistance programs, NRCS strives to meet tribal demands for improved agriculture and environmental quality, such as conservation of cropland, pastureland, and rangelands; improved wildlife habitat; restoration of wetlands; improved water and air quality; and food, fiber and timber production.

In 2020, NRCS partnered with 12 Tribal entities to provide assistance in reaching out to all the Tribes during the comment periods of the interim and final rules for the following programs: Environmental Quality Incentives Program, including Conservation Innovation Grants; Regional Conservation Partnership Program; Conservation Stewardship Program; and the Agricultural Conservation Easement Program.

NRCS and BIA partnership efforts to better serve Indian Country

NRCS continues to explore more conservation planning and financial assistance opportunities in Indian Country to ensure that all of the resource concerns of our Tribal Leaders and Tribal producers are addressed. NRCS is reviewing and discussing with the BIA their Agriculture Resource Management Planning (ARMP) process to see if NRCS can adopt it in lieu of our conservation plans.

Weather Stations to support agricultural operations on Tribal Lands

Native Americans are located across the U.S. (574 Federally recognized Indian Tribes in 34 States) and the majority of the Tribes are involved in agriculture. These Tribal farmers and ranchers require adequate decision support tools to maintain productive and profitable systems. Management of water availability is one of the primary issues surrounding agricultural production. Weather variables, such as rainfall, soil moisture, and soil temperature, are key to proper management and timing of operational decisions. In limited locations, Tribes have benefited from having access to advanced weather information from stations installed on their lands. In 2020, 23 Tribal Soil Climate Analysis Networks (TSCANs) have been purchased, and 18 have been installed and connected to NRCS Soil Climate Analysis Network (SCAN). Data is readily available to the Tribes and others in the surrounding region. The other remaining five TSCAN units are scheduled to be installed in 2021.

This joint agency project between the BIA and NRCS has increase capacity, broaden the network of advanced weather information critical to managing crops and evaluating environmental concerns, and enhance our partnership highlighted in the national MOU between the BIA, NRCS and FSA.

The weather stations will also serve as a focal point for education of tribal youth using the Science, Technology, Engineering and Mathematics (STEM) model. STEM is an interdisciplinary and applied learning approach to integrate these four disciplines into a cohesive and real-world application. Age-appropriate STEM K-12 education and demonstrations using the weather stations, and resulting data will be supported by the tribes Department of Natural and Water Resources (DNR / DWR), USDA, NRCS, BIA and USFS. The USDA Hubs can play a key outreach role in this area, and the Northeast Hub already has an active network with tribes in their region.

Program Activities/Participation

In 2020, American Indian and Alaska Natives were awarded the following:

- 625 Environmental Quality Incentives Program contracts totaling $35,707,676;
- 18 Regional Conservation Partnership Program proposals totaling $2,258,709;
- 59 Conservation Stewardship Program contracts totaling $6,586,421; and
- 2 Agriculture Management Assistance Program contracts totaling $34,347.

Tribal Conservation Districts (TCD)
There are 57 TCDs established under tribal laws, and are essential to delivering conservation planning and conservation programs assistance in Indian Country. These TCDs are recognized by the Secretary of Agriculture.

Accountability
NRCS regularly collects program performance data that provides information to support agency strategic and performance planning, budget formulation, workforce planning, and accountability activities. The Accountability Information Management System tracks and evaluates field and State level conservation planning efforts, and practice implementation through the Performance Results System (PRS). In addition to the Accountability Information Management System, the agency implements a suite of actions to monitor program compliance and improve accountability.

Compliance Activities

There were ten audits and 39 recommendations open at the start of this year with one audit and 14 recommendations added during the year, leaving a total of 53 recommendations in 2020. NRCS closed one of 11 active Office of Inspector General (OIG) and Government Accountability Office (GAO) offices for a year-end closure rate of nine percent, and closed ten of 53 recommendations, for a closure rate of 19 percent.

Soil Survey Program

Soil survey is an essential tool for regional and local conservation planning that allows people to manage natural resources. Understanding and managing soil as a strategic natural resource helps sustain the health and economy of the Nation. Scientists and policy makers use soil survey information in studying climate change and evaluating the sustainability and environmental effects 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. Planners, engineers, farmers, ranchers, developers, and homeowners use soil surveys to evaluate soil suitability and make management decisions for farms, home sites, subdivisions, commercial and industrial sites, and wildlife and recreational areas.

National Cooperative Soil Survey

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

Standards and Mechanisms for Soil Information

NRCS is responsible for developing the standards and mechanisms for soil information on national tabular and spatial data infrastructure required by Executive Order 12906. NRCS is continually enhancing the National Soil Survey Information System and producing publications that are accessible to the public through the internet at *http://soils.usda.gov*. The Soil Data Warehouse houses archived soil survey data. Web Soil Survey distributes published soil surveys, making it easier to keep soil information current for daily public access. The agency refreshes the official national soil survey data annually to better meet the needs of modelers and researchers in addition to meeting agency and Departmental compliance program requirements. The SoilWeb mobile application is becoming a popular tool for individuals to derive soil information at Global Positioning System (GPS) located points. Web-based delivery mechanisms that simplify the interpretation and delivery of soils data are evolving at a rapid pace.

Current Activities

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

Soils Inventory
Mapping procedures are based on physiographic rather than administrative boundaries. Soil surveys based on natural landscape 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 Indian Tribal land holdings and on public lands controlled by the Forest Service (FS), Fish and Wildlife Service (FWS), Bureau of Land Management (BLM), National Park Service, Department of Energy, and Department of Defense. 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. In 2020, the Soil and Plant Science Division began collecting Dynamic Soil Properties (DSP), which are those properties that change with land use and management. Dynamic soil properties are used to measure and predict the response of soils to disturbances caused by human and non-human factors. Dynamic soil properties link traditional soil inventories to advancing areas of soil health, conservation, and management practices. There is an increasing demand for dynamic soil property data to inform management activities, to better assess the effect of these ecosystem services, and to provide more detailed and site-specific information for model development and applications.

Ecological Inventory
Ecological sites (ES) are interpretive groups of soil survey map units. Each ES has a unique Ecological Site Description (ESD) that contains information that resource managers can use to verify the ES for their area of interest, conduct inventories of soil properties, vegetation dynamics and land use/management interpretations for conservation planning. All ESDs are stored and managed in a common platform, the Ecological Dynamics Interpretive Tool (EDIT).

Joint policy, in the form of Memorandum of Understanding and common Handbook guidance, among the BLM, NRCS, and the FS efficiently pools the agencies' technical resources for the development and use of ecological sites to describe site characteristics, plant communities, and land use interpretations for rangeland, grazing land, and forestland. This technology improves land management planning capabilities for agencies and the public by providing consistency among the agencies' classification, technology development, planning and accomplishment reporting.

To get ESDs to end users quickly, the Provisional Ecological Site (PES) initiative was established to organize all the existing soil survey map units across the continental United States into provisional ecological sites suitable to guide conservation planning decisions.

Progress: At the end of 2020, significant progress toward completing the Provisional Ecological Site Initiative had been accomplished. The western 2/3 of the U.S. is substantially complete, except for some areas, mostly Federal lands, in California and the Pacific Northwest. In the eastern 1/3 of the country, where there has not been a history of Ecological Site use, some areas are not yet completed, but most areas have made some progress. This effort will continue in 2021.

During 2020, database development was focused on connecting soil properties in the National Soils Information System (Web Soil Survey, SoilWeb) to the appropriate ESDs in EDIT, to allow for analysis and exploration. Currently, NASIS x EDIT connections are awaiting certification by the FPAC-BC before being deployed. The NRCS planning process was introduced into EDIT in 2020 via the use of Resource Concerns dropdown menus, connections to the Conservation Practice Standards Handbook and an interactive tool to include Rangeland Health worksheets.

In 2020, a new MOU with USDA FS was negotiated to better define the complimentary roles of ESs and the Terrestrial Ecosystem Unit Inventory (the FS ecological inventory). A collaboration with the FS research branch has commenced to develop a machine learning approach to State-and-transition model development.

Collaboration with BLM advanced significantly in 2020. The BLM National Training Center committed to funding a position at the Jornada Experimental Range to integrate the BLM Assessment, Inventory and Monitoring data into EDIT via the Landscape Commons Tool. This allows site specific information to be linked to the appropriate ESD and updated as new point information is acquired.

Kellogg Soil Survey Laboratory (KSSL)
In 2020, the KSSL conducted analysis and validation on 6,100 soil samples collected from individual soil horizons that represent 780 soil profiles (pedons). The soil samples analyzed in 2020 come from NRCS and other agency

clientele that include Soil Survey Field Offices, State Soil Scientists, Resource Soil Scientists, University Cooperators, NGOs, Plant Materials Centers, NRI Soil Monitoring Network, the National Ecological Observatory Network, and outreach activities such as collegiate soil judging and the United Nations-Food and Agriculture Organization (UN-FAO). During 2020, the KSSL recorded 99,200 analytical results on chemical, physical, mineralogical, and biological soil properties by more than 50 different analytical methods. This quantitative data is essential for the National Cooperative Soil Survey and NRCS programs such as Conservation Technical Assistance and Farm Bill Programs. National programs and research projects depend on KSSL data for soil classification, soil screening and assessment, soil health, and dynamic soil properties.

KSSL is the primary laboratory providing quantitative analyses to support National Cooperative Soil Survey and NRCS activities around the Nation. In addition, The KSSL develops and maintains standard soil laboratory procedures specifically applicable to Soil Survey and Soil Health programs, it provides technical consultation and reference samples to other soil laboratories and it participates in lab testing comparisons. In 2020, the KSSL provided leadership in the standardization of analytical methods through participation in the UN-FAO Global Soil Analysis Network (GLOSOLAN).

The quantitative soil data produced by the KSSL serves as input for models and interpretations for land use and management, baseline data to assess Soil Health, and measured values to determine effectiveness of conservation practices and programs (e.g., CEAP, Environmental Policy Integrated Climate model, Revised Universal Soil Loss Equation).

Over the last nine years, the KSSL has been assembling a mid-infrared (MIR) spectral library, similar to international efforts using soil spectrometry as a low-cost tool for the rapid prediction of soil carbon and other properties. The growing KSSL MIR spectral library represents over 81,000 legacy samples from the KSSL soil archive, the largest public collection in the United States with over 400,000 specimens. Geographically and taxonomically constrained calibration models are being developed for use by NRCS soil survey field offices for rapid prediction of organic carbon for soil health and soil resource assessment. The first pilot project calibration models were prepared from several thousand Mollisol samples from the Great Plains. Results show low error of prediction for soil organic carbon and other key soil properties. MIR spectrometry allows rapid data collection while assuring data quality and consistency with a tool that any NRCS field soil scientist can use for soil survey and soil health investigations. Based on its demonstrated capacity to produce quality measured data as well its open data policy, the NRCS Kellogg Soil Survey Laboratory (KSSL) was nominated by FAO-GLOSOLAN as a world hub for collecting measured and spectral data that would serve global efforts to predict soil properties from MIR spectra. This initiative serves the interests of progressive organized science around emerging technologies that will be useful in the U.S. and abroad.

The NCSS Characterization Database is maintained and delivered by the Kellogg Soil Survey Laboratory of the NRCS, Soil and Plant Science Division. It delivers a comprehensive soil laboratory dataset of chemical, physical, and mineralogical properties from over 64,000 sample sites, which are the result of 120 years of inventorying soils of the United States and Territories. The database is used by a wide range of customers, including farmers, ranchers, internal USDA staff, other Federal agencies, nonprofit organizations, local governments, and university partners.

National Soil Survey Center

In 2020, the Soil Survey Program entered into agreements with multiple NCSS partners to use their expertise in innovative research and new technology development to achieve efficiencies in assessing and delivering soil and ecological site information. These investments are the foundation for information delivery of the future.

Technical Soil Services

Technical Soil Services (TSS) provides five basic types of service: technical policy and program services; planning services; site-specific soil investigations, testing, interpretation, and evaluation; expert services for judicial requests; and information services. These services are primarily provided through the USDA Service Centers. TSS also supports new and innovative models of conservation delivery such as the Conservation Assessment and Ranking Tool (CART) and Conservation Desktop. In 2020, over 71,000 hours of TSS were delivered to internal and external customers; wetland and highly erodible land compliance, onsite investigations, technical consultations, and delivering maps, presentations, and training comprised over 75 percent of the services delivered.

Web Soil Survey

The Web Soil Survey website, http://websoilsurvey.nrcs.usda.gov/app/, provides soil data and information produced by the NCSS to the public. The agency operates the website that provides access to the largest natural resource information system in the world. NRCS' soil maps and data are available online for 96 percent of the continental

United States. The site is updated and maintained as the single authoritative source of soil survey information. The Web Soil Survey is used directly for conservation planning via Conservation Desktop.

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; vector and raster formation for SSURGO are available; and
- United States General Soil Map is used primarily for multi-county, State, river basin planning and resource management and monitoring.

Acres Mapped

During 2020, soil scientists mapped or updated 44.8 million acres; another 8,000 acres were mapped or updated by other Federal, State, and local agencies in cooperation with NRCS bringing the total of soil survey acres mapped to 1.98 billion. About 94 percent of private lands are completed and 67 percent of Federal lands have a soil survey inventory.

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.

Conservation planners use soils data to choose, implement, maintain, and evaluate conservation practices. In 2020, the value to producers as a result of soils data being used by conservation planners is estimated at $1.1 billion. The metric uses the obligation data from certified conservation practices, planned or implemented, that are dependent on soils data. Cover crops ($95 million), fence ($77 million), brush management ($71 million), sprinkler system ($60 million), and irrigation pipeline ($55 million) were the top five conservation practices in terms of dollars obligated.

Ecological Site Descriptions were developed and linked to an additional 388 million acres of soil survey information, including the Snake River Plains in Idaho (Major Land Resource Area (MLRA) 11); the Mojave Desert (MLRA 30) in Arizona, California, and Nevada; the Central Black Glaciated Plains (MLRA 55B) in North Dakota and South Dakota; and the Glaciated Alleghany Plateau and Catskill Mountains (MLRA 140) in New Jersey, New York, and Pennsylvania. Ecological Site Descriptions are a tool for conservation planners to understand how conservation practices can affect ecological sites and the necessary inputs to move ecological sites from one State to another.

Soils Information and Soil Surveys used interactively online

In 2020, soils information was the most requested information on the NRCS web site. The top information requests, by number of visits, are: Soil Surveys by State (452,100), general Soil Survey Information (306,400), Soil Texture Calculator (109,000), Soil Classification (99,000), and Official Series Descriptions (74,500).

Soil surveys used interactively online are accessed via Web Soil Survey, SoilWeb, Soil Data Explorer, Series Extent Explorer, and Soil Data Access. Users can view summaries of soil types for any geographic location where NRCS soil data exists. In 2020, the Web Soil Survey website logged over 2.6 million user visits and accessed data for over 3.2 million areas of interest. Customers generated over 1.3 million printed documents. Customers downloaded data over 97,600 soil datasets. Users can view summaries of soil types for any geographic location where NRCS soil data exists.

SoilWeb was developed in collaboration with the University of California-Davis Soil Resource Lab and NRCS. The website is available at http://casoilresource.lawr.ucdavis.edu/soilweb. The SoilWeb interface received about 230,700 visits. Soil Data Access (SDA) is the name of a suite of web services and applications whose purpose is to meet requirements for requesting and delivering soil survey spatial and tabular data that are not met by the Web Soil Survey and Geospatial Data Gateway websites. Customers queried soil data using SDA over 72.3 million times. Combine this with Web Soil Survey and SoilWeb applications and soil data has been supplied over 98 million times in 2020.

NRCS leadership recognizes the foundational role soils information is for the agency to continue to efficiently and effectively provide technical assistance and support to landowners. The increasing availability of geospatially referenced natural resource data (e.g. soil, climate, land cover) and the expansion of computing resources and web feature services does allow the opportunity to provide field staff with an unprecedented amount of information to

help support and inform their discussions with landowners. The Conservation Assessment Ranking Tool (CART) modernizes and streamlines NRCS's conservation planning and program delivery, reduces workload on field staff, and improves the customer experience by creating an efficient assessment and application process. The tool combines and analyzes geospatially-referenced data and site-specific information provided by the landowner within a decision support system framework.

Soils information is used in the assessment part of CART; documentation for soils data inputs into CART are at https://jneme910.github.io/CART/.

Snow Survey and Water Supply Forecasting (SSWSF) Program

SSWSF collects high-elevation snow data in the Western U.S. and produces snowpack information, water supply forecasts, and other climatic data useful for water users and managers. Snowmelt in the West delivers approximately 75 percent of its regional water supply which is vital to continued success of Western agriculture. NRCS field staff and cooperators gather snow depth, snow water equivalent (SWE), and other parameters such as precipitation, temperature, and soil conditions from thousands of remote mountain sites. Further analysis provides estimates for water supply and usefulness related to drought, flooding, fire, and avalanche.

Customers and partners include: farmers; ranchers; irrigation and conservation districts; municipal and industrial water providers; individual providers; hydroelectric power companies; fish and wildlife management; water masters; reservoir management; recreationists; Tribal Nations; Federal, State, and local government; and Canada and Mexico. Users and use cases continue to grow. Federal partners and users include the U.S. Army Corps of Engineers (USACE), Bureau of Reclamation (USBR), Federal Emergency Management Agency (FEMA), National Weather Service (NWS) River Forecasting Centers, National Oceanic and Atmospheric Administration (NOAA), U.S. Geological Survey (USGS), U.S. Forest Service (USFS), and Bureau of Land Management (BLM). Google Analytics reports indicate use of SNOTEL (Snow Telemetry) data and associated products make up more than 50 percent of all NRCS web traffic.

SSWSF furnishes water and climate information and direct assistance 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 backing for NRCS State Offices supporting field equipment, data collection, database management, and water supply forecast delivery.

Because snowmelt is the greatest source of water supply in the semi-arid West, information provided by SSWSF is critical. Demographic, physical, and political landscapes in the Western U.S. are rapidly changing due in large part, to population growth, increased urbanization, and land use change. Recent high temperatures, prolonged droughts, and more intense fires further stress this valuable resource. Competition continues to intensify over water for irrigation, municipal and industrial use, and in-stream requirements such as river-based recreation, aesthetic enjoyment, fish and wildlife habitat, and hydroelectric power generation. Increasing water demands require more precise management starting with snowpack evaluation.

NRCS Snow Survey data are routinely used in matters of commerce and public safety, in addition to Western water supply management. Road closure determinations, flooding or drought potential, avalanche mitigation, fire prediction and mitigation, NOAA weather modeling, and streamflow forecasting all rely on SSWSF data. For example, extreme drought across the Southwest and high seasonal snowpack observed in agricultural lowlands of Washington last year resulted in extensive use of SSWSF data, products, and forecasts. Drought impacts or flood damages are often mitigated with early preparation based on snowpack information and streamflow forecasts.

Established in 1935, the cooperative SSWSF Program is widely recognized for its historical record of high-elevation snow data. SSWSF provides consistent and accurate water supply and hydrograph timing forecasts. The Program accomplishes this by operating and maintaining a world-renowned snowpack monitoring system with over 1,200 manually measured snow courses, aerial markers, and cooperator sites in the U.S., and in watersheds draining into the U.S. SSWSF also maintains 926 automated SNOTEL, SnoLite, and hydromet sites. In addition, the NWCC operates 217 automated Soil Climate Analysis Network (SCAN) stations across the U.S. Although most of the funding and field efforts occur through the agency, partners and cooperators provide a share of financial burden and contribute to data-collection activities.

Snow courses are locations where snow is manually measured typically on a monthly schedule during winter months. SNOTEL sites automatically collect a suite of hydrometeorological data in high-elevation settings reporting real-time information on hourly intervals via telemetry. Sensor measurements typically include: SWE, snow depth, precipitation, and air temperature. Soil moisture sensors are being added at many SNOTEL sites. SnoLite sites have fewer sensors. Automated telemetered sites provide up-to-date information reducing costs and safety concerns versus using field personnel for manual measurements in remote locales. SCAN stations focus on gathering soil and climate information. A limited number of SCAN stations collect SWE and snow depth in addition to the typical suite of sensors. Valuable data play a key role in flood and drought forecasting, water supply determination, understanding fire and avalanche risks and behaviors, and evaluating climate change.

Snow Survey information and water supply forecasts are used extensively in hydroelectric power operations, reservoir management, to project water quantity available for crops, to project probability of flooding, in determining available water for aquifer recharge, to predict flows for wildlife and recreation, and to inform the public about conditions in remote areas such as snow conditions and avalanche forecasting. No other products in the Western U.S. fulfill these informational needs. Past assessment of SSWSF Program economic and societal values are outlined in an agency-released report "A Measure of Snow." For a summary of the report:

https://www.wcc.nrcs.usda.gov/ftpref/downloads/factpub/MeasureofSnowSummary.pdf.

Current Activities

Water Supply Forecasts

Water supply forecasts predict snowmelt runoff volume and are issued from January-June in collaboration with the NWS and other Federal and State agencies. Seasonal forecasts for 600+ streamflow locations were delivered during 2020. SSWSF also distributed peak flow, recession, and threshold forecasts with surface water availability index values. Additionally, automated forecasting models ingesting SNOTEL climate data tracked daily forecast trends for 322 points providing up-to-date guidance for water resource managers, for water users, and for augmenting official volume forecasts. Despite pandemic conditions that limited fieldwork for some data collection, the program published 6,649 water supply forecasts during the 2020 water year.

Site Upgrades and Installations in Snow Survey

Regardless of 2020's adverse conditions related to increased safety precautions and some travel restrictions due to the pandemic, four new SNOTEL sites were installed in Alaska, Montana, Utah, and Washington. Alaska's install was a collaborative effort with USACE's Cold Regions Research and Engineering Laboratory (CRREL). Oregon's Data Collection Office (DCO) installed the new site in Washington. Also, Oregon's DCO installed a new SnoLite site related to relocation of a SNOTEL site to meet wilderness regulations. Idaho installed three new SnoLite sites replacing aerial markers. Other additions included five new aerial markers in Alaska replacing snow courses and one new Tribal SCAN site in Arizona. Arizona has two SCAN sites planned for 2021.

Due to the pandemic and numerous wildfires, summer maintenance for SNOTEL sites was prioritized to verify sensor calibrations, reset precipitation gages, and perform site upkeep. Despite 2020 conditions, a relatively large amount of summer maintenance was accomplished for data loggers, radios, transducers, sensors, plumbing, electrical wiring, and snow pillow replacement. Hazardous trees that could potentially damage stations were removed at many sites.

Significant headway was achieved for telemetry upgrades. Moving away from Meteor Burst telemetry to alternative telemetry options at sites across the West reduces equipment costs and increases reliability. Current expectation is for all telemetry upgrades to be completed well in advance of an original 2027 projection. Many sites were switched to cellular, GOES, or Iridium modems. Montana with 99 percent of its sites using GOES telemetry completed both telemetry and data logger upgrades for all sites in the Montana DCO region. Oregon's DCO upgraded 50 sites from Meteor Burst telemetry and upgraded 48 data loggers. Oregon's DCO is 65 percent complete for conversion of Meteor Burst to Iridium, cellular, and GOES and plans to be 100 percent converted to alternatives by the end of 2021. Utah's DCO converted four sites to GOES and 42 sites to cellular. Utah also replaced 50+ sensors at SNOTEL sites this year. Alaska already uses Iridium but has undertaken conversions to GOES where possible and may move more to cellular further reducing costs. Both the Colorado and Idaho DCOs are also rapidly moving toward converting Meteor Burst telemetry to Iridium, cellular, or GOES alternatives. A large number of SCAN sites were updated and maintained across the country this past year and plans are to expand the network.

Investigative Research at Sites

Examples include assessing methods and sensors for air temperature measurements, evaluating pillow colors and effect on snow accumulation and ablation, comparing snow pillows and snow scales, testing snow depth sensors, and expanding best telemetry methods. Heated tipping buckets for measuring precipitation were added at sites for comparison to cumulative storage gages. A super-site concept is under development to test sensors with partners and researchers for evaluating best available technology and methods for SSWSF, partner, and researcher needs. Alaska is investigating a potential SNOTEL site supporting multiagency landslide investigations. Montana set up a snow temperature profile experiment measuring temperatures at various depths to observe if prediction of timing of snowmelt onset and streamflow peaks may be improved.

SNOTEL Sites Affected by Disasters, Vandalism, Land Ownership

Ongoing Western U.S. wildfires resulted from severe August thunderstorms igniting numerous wildfires across California, Oregon, and Washington. Additional ignitions across the West followed starting in early September. Over 2,675,000 hectares burned this season from more than 100 fires. Over 43 fatalities occurred with over 7,500 buildings destroyed. California had a SNOTEL site burn, and the California Department of Water Resources' (CDWR) snow survey program likely lost more. A Colorado SNOTEL site burned and likely there are others. Five Colorado DCO area snow courses burned. Two of those were in Wyoming. Fire season is still developing in Colorado and within the Colorado DCO region. Idaho lost a SNOTEL site to fire with another Idaho SNOTEL site surrounded by fire still reporting at this time. The Oregon DCO lost a SNOTEL site in Oregon and a SNOLite site in California. Utah was able to rebuild a site that burned. Wyoming's recent Mullen Fire likely burned two manual snow courses and possibly a SNOTEL site. Full verification has not been possible in many areas as site visit risks remain high. Finally, many States report breathing smoky air as a part of this field season.

Fire, including those from past years, alters land use and land cover effecting snow accumulation, snowmelt, and resulting streamflow runoff. Snow and streamflow's historical relationship is the foundation for water supply forecasts. It takes many years in most cases to restore equilibrium through secondary succession or regrowth due to fires, logging, or beetle kill. Secondary succession may be observed at a SNOTEL site in Washington due to a site land manager's recent clear cut or at two Oregon DCO SNOTEL sites due to clear cuts from the past decade.

Both vandalism and animal damage concerns remain. Vandals took a knife to a snow pillow in Montana and destroyed another snow pillow in Washington. Bear damage occurred at two SNOTEL sites in Alaska, a SNOTEL site in Oregon, and a SNOTEL site in Washington. Across the West, bears, moose, and rodents damaged snow pillows, precipitation plumbing, wiring, and sensors.

Plant Materials Centers (PMC)

NRCS' Plant Materials Centers (PMCs) develop vegetative solutions to critical natural resource concerns. PMCs focus on priorities such as soil stabilization, soil health and productivity, water and air quality, enhancement of pollinator habitat to support agricultural production, habitat for at-risk species such as sage grouse, and restoring productivity to degraded landscapes. PMCs directly support the agency mission by providing scientifically sound plant information and tools used by conservation planners, partners, producers, and private landowners.

PMCs develop technology and information for the use, establishment, and maintenance of plants for a wide variety of natural resource conservation practices; provide training and education to staff, partners, and the public; assess and characterize plant attributes to provide data and information important in the operation of predictive models and effective management of climate impacted plant resources; and assemble, evaluate, and release seed and plants to provide for the commercial production of plant materials that protect and conserve our natural resources.

The Field Office Technical Guide (FOTG) delivers Plant Materials Program information directly to field staff and partners in conservation planning. PMC staff tailor vegetative information to the unique conditions of the areas they serve and provide extensive training to field staff and partners on the selection and establishment of vegetation adapted to specific resource concerns. Program information is available to the public at https://www.plant-materials.nrcs.usda.gov.

Plant Materials Program information improves the condition of natural resources on private and public lands. On private lands, program information supports the successful implementation of Farm Bill programs such as the EQIP, CSP, and CRP administered by Farm Service Agency (FSA).

The Plant Materials Program uses a multidisciplinary approach to solving natural resource problems, drawing from staff expertise in agronomy, biology, soils, forestry, and horticulture. Plant Materials Program activities are coordinated with NRCS technical specialists, other governmental agencies, nongovernment organizations, and the

private sector. The program regularly cooperates with the Agricultural Research Service, the Forest Service, the Department of Interior's Bureau of Land Management, and State and local departments of transportation, wildlife, and natural resource agencies. Nongovernmental organizations include universities, native plant societies, wildlife organizations, and industry partners such as commercial seed and plant growers. These partnerships enhance the development of plant materials information, accomplishing work that would not be possible for PMCs or their partners acting alone. These partnerships also provide a conduit for sharing technical information developed by PMCs to audiences well beyond NRCS.

NRCS' network of PMCs is the only national organization that develops and tests vegetation to address our Nation's natural resource challenges. The agency operates 25 PMCs and works closely with other entities for the development of plant materials products needed by the agency. Each PMC addresses the high-priority conservation concerns within unique ecological areas. When appropriate, PMCs coordinate among locations to evaluate vegetative technology and solutions that influence large regions of the United States.

Current Activities
In 2020, NRCS continued its efforts to improve the operations and mission of PMCs to produce products needed by field staff and conservation partners. The following are highlights of PMC activities:

Technology Development and Transfer. PMCs provide agency staff, conservation partners, and the public with information needed to successfully get natural resource conservation on the ground. Plant Materials Program studies resulted in over 183 new technical documents to the plant materials website. PMCs continue to increase efforts to tailor plant materials information for specific conservation purposes and to support the agency initiatives. PMCs transferred the results of studies, 41 new study reports, the application of PMC vegetative information in 37 new technical notes or conservation practice implementation requirements, and information on the use, establishment, and management of conservation plants in 19 new or revised plant guides. The program continues its efforts to reduce redundancy in technical materials through the development of regional plant materials technical notes released under the NRCS National Technology Support Centers (NTSC). Seven new regional technical notes on the results of a nationwide study at PMCs to evaluate the adaptation and performance of 58 varieties of commercially available cover crops were completed in 2020. These technical notes, along with other reports from PMCs, are highlighted on a new webpage for cover crop adaptation trials and provide better information for field staff and farmers on appropriate cover crops to use to improve soil health and the resiliency of cropland.

At the end of 2020, there were over 2,960 documents available and access to detailed information on over 420 conservation plants on the PMCs' website. The website enhancement continues, with special features, improved linkages to technical topics, national and regional program documents, and connections with other NRCS websites. Plant Materials updates, released as GovDelivery emails to over 93,000 subscribers, continue to disseminate new information monthly. These actions are improving the accessibility and usefulness of the plant materials website for all users.

Plant Materials Program staff conducted 30 technical training sessions for over 800 field staff and conservation partners. Training included: 1) selecting, planting, and managing cover crops; 2) improving soil health; 3) selecting and establishing conservation plants; 4) plant identification; 5) planning a conservation planting; 6) enhancing pollinator habitat; 7) improving the productivity of range and pasture land; 8) planting windbreaks and hedgerows; 9) importance of vegetative covers for preventing erosion; and 10) use of farm equipment. Technical knowledge of the NRCS field staff is improved by holding many of these PMC trainings in conjunction with Conservation Planner Certification training sessions. PMCs provided field days, tours and presentations to 2,000 participants including NRCS employees, Federal and State government employees, farmers, ranchers, and the public. PMC trainings, field days, and tours were significantly impacted in 2020 by COVID-19 restrictions, though many PMCs held virtual events to continue to reach their customers.

Conservation Plants
PMCs have selected and released 751 conservation plants over the past 80 years, of which 578 are active and commercially available today. These plants are tools used to support conservation practices that stabilize soil, improve pollinator and wildlife habitat, provide livestock forage, and increase the diversity in conservation plantings. All PMC plant releases support NRCS conservation activities on private lands as well as the National Seed Strategy, a Federal interagency effort to select appropriate plants for restoration and conservation on both public and private lands.

In 2020, PMCs released six new conservation plants to the public:

- West Bay Germplasm gulf cordgrass (*Spartina spartinae*) was released by the Galliano, Louisiana PMC.

West Bay Germplasm is a native, perennial grass recommended for use in coastal stabilization and restoration projects in coastal marshes and coastal saline prairies of the north central Gulf of Mexico basin.

- Tober Germplasm Virginia wildrye (*Elymus virginicus*) was released by the Bismarck, North Dakota PMC. Tober Germplasm is a native, cool-season, perennial bunchgrass recommended for conservation cover, pasture and hayland, wildlife habitat, prairie revegetation, riparian plantings, and rangeland seeding throughout North Dakota, South Dakota, and Minnesota.
- Fuego Germplasm Indian blanket (*Gaillardia pulchella*) was released by the Kingsville, Texas PMC in cooperation with the Texas Natives Seeds program of Texas A&M University-Kingsville. Fuego Germplasm is a native wildflower recommended for pollinator habitat plantings, upland wildlife plantings, highway right-of-way revegetation, reclamation plantings, and for inclusion in range seeding mixes in the southern and coastal plains of Texas.
- Guadalupe Germplasm white tridens (*Tridens albescens*) was released by the Knox City, Texas PMC in cooperation with the Texas Natives Seeds program of Texas A&M University-Kingsville and other partners. Guadalupe Germplasm is a warm season perennial grass recommended for critical area revegetation, erosion control, rights-of-way plantings, inclusion in range seed mixes, and wildlife plantings throughout the southern, coastal plain, and central Texas and into west Texas and southern New Mexico.
- Menard Germplasm purple threeawn (*Aristida purpurea*) was released by the Knox City, Texas PMC in cooperation with the Texas Natives Seeds program of Texas A&M University-Kingsville and other partners. Menard Germplasm is a perennial bunchgrass recommended for upland wildlife plantings, critical site revegetation, right-of-way plantings, and inclusion in range seeding mixes throughout the southern, coastal plain, and central Texas.
- Pineywoods Germplasm thickspike gayfeather (*Liatris pycnostachya*) was released by the Nacogdoches, Texas PMC. Pineywoods Germplasm is a native, long lived perennial wildflower recommended for wildlife and pollinator habitat and other native plantings in eastern Texas, northern Louisiana, and southern Arkansas.

ACCOUNT 2: WATERSHED AND FLOOD PREVENTION OPERATIONS

APPROPRIATIONS LANGUAGE

The appropriations language follows (new language underscored; deleted matter enclosed in brackets):

For necessary expenses to carry out preventive measures, including but not limited to surveys and investigations, engineering operations, works of improvement, and changes in use of land, in accordance with the Watershed Protection and Flood Prevention Act (16 U.S.C. 1001–1005 and 1007–1009) and in accordance with the provisions of laws relating to the activities of the Department, $175,000,000, to remain available until expended: Provided, That for funds provided by this Act or any other prior Act, the limitation regarding the size of the watershed or subwatershed exceeding two hundred and fifty thousand acres in which such activities can be undertaken shall only apply for activities undertaken for the primary purpose of flood prevention (including structural and land treatment measures): Provided further, That of the amounts made available under this heading, $65,000,000 shall be allocated to projects and activities that can commence promptly following enactment; that address regional priorities for flood prevention, agricultural water management, inefficient irrigation systems, fish and wildlife habitat, or watershed protection; or that address authorized ongoing projects under the authorities of section 13 of the Flood Control Act of December 22, 1944 (Public Law 78–534) with a primary purpose of watershed protection by preventing floodwater damage and stabilizing stream channels, tributaries, and banks to reduce erosion and sediment transport.[: Provided further, That of the amounts made available under this heading, $10,000,000 shall remain available until expended for the authorities under 16 U.S.C. 1001–1005 and 1007–1009 for authorized ongoing watershed projects with a primary purpose of providing water to rural communities]

Change Description

The change (line 14-16) deletes the language providing funding for authorized ongoing watershed projects with a primary purpose of providing water to rural communities.

LEAD-OFF TABULAR STATEMENT

Table NRCS-19. Lead-Off Tabular Statement (In dollars)

Item	Amount
2021 Enacted	$175,000,000
Change in Appropriation	-
Budget Estimate, 2022	$175,000,000

PROJECT STATEMENTS

Table NRCS-20. Project Statement by Appropriations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	Chg Key	FTE	2022 Budget	FTE
Discretionary Appropriations:											
Small Watershed P.L. 83-566:											
Technical Assistance	$15,000	16	$15,750	17	$15,000	16	+$1,500		+1	$16,500	17
Financial Assistance	85,000		89,250	-	85,000	-	+8,500		-	93,500	-
Subtotal Small Watershed P.L. 83-566	100,000	16	105,000	17	100,000	16	+10,000		+1	110,000	17
Flood Prevention Operations P.L. 78-534:											
Technical Assistance	7,500	-	10,500	1	9,750	1	-		-	9,750	1
Financial Assistance	42,500	-	59,500	-	55,250	-	-		-	55,250	-
Subtotal Flood Prevention Operations P.L. 78-534	50,000	-	70,000	1	65,000	1	-		-	65,000	1
Emergency Watershed Protection Program:											
Technical Assistance	75,718	52	-	87	-	87	-		-87	-	-
Financial Assitance	359,282	-	-	-	-	-	-		-	-	-
Subtotal Emergency Watershed Protection Program	435,000	52	-	87	-	87	-		-87	-	-
Rural Water Operations Program:											
Technical Assistance	-	-	-	-	1,500	1	-1,500		-1	-	-
Financial Assistance	-	-	-	-	8,500	-	-8,500		-	-	-
Subtotal Rural Water Operations Program	-	-	-	-	10,000	1	-10,000		-1	-	-
Total Discretionary Appropriation	585,000	68	175,000	105	175,000	105	-	(1)	-87	175,000	18
Mandatory Appropriations:											
Watershed Flood and Prevention Operations:											
Technical Assistance	15,558	-	14,640	2	16,502	2	-		-	16,502	2
Financial Assistance	34,442	-	32,410	-	30,648	-	-		-	30,648	-
Total Mandatory Appropriation	50,000	-	47,050	2	47,150	2	-		-	47,150	2
Total Adjusted Appropriation	635,000	68	222,050	107	222,150	107	-		-87	222,150	20
Add back:											
Sequestration	-	-	2,950	-	2,850	-	-		-	2,850	-
Total Appropriation	635,000	68	225,000	107	225,000	107	-		-87	225,000	20
Sequestration	-	-	-2,950	-	-2,850	-	-	-	-	-2,850	-
Recoveries, Other	30,603	-	102,739	-	-62,190	-	+62,190		-	-	-
Bal. Available, SOY	790,974	-	1,049,891	-	924,904	-	-924,904		-	-	-
Total Available	1,456,577	68	1,377,630	107	1,087,714	107	-862,714	-	-87	225,000	20
Lapsing Balances	-548	-	-278	-	-	-	-		-	-	-
Rescinded Balances	-	-	-	-	-	-	-		-	-	-
Bal. Available, EOY	-1,049,891	-	-924,904	-	-	-	-		-	-	-
Total Obligations	406,138	68	452,448	107	1,087,714	107	-862,714		-87	225,000	20

Note: The project statement and Max discrepancy is due to MAX reporting reimbursable funding and FTEs, which are not included in the project statement.

Table NRCS-21. Project Statement by Obligations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	FTE	2022 Budget	FTE
Discretionary Obligations:										
Small Watershed P.L. 83-566:										
Technical Assistance	$16,711	16	$52,765	17	$69,691	16	-$53,191	+1	$16,500	17
Financial Assistance	8,335	-	57,142	-	225,053	-	-131,553	-	93,500	-
Subtotal Small Watershed P.L. 83-566	25,046	16	109,907	17	294,744	16	-184,744	+1	110,000	17
Flood Prevention Operations P.L. 78-534:										
Technical Assistance	-	-	2,149	1	25,645	1	-15,895	-	9,750	1
Financial Assistance	-6	-	35,940	-	123,319	-	-68,069	-	55,250	-
Subtotal Flood Prevention Operations P.L. 78-534	-6	-	38,089	1	148,964	1	-83,964	-	65,000	1
Emergency Watershed Protection Program:										
Technical Assistance	40,048	52	33,646	87	112,450	87	-112,450	-87	-	-
Financial Assistance	291,598	-	220,807	-	471,556	-	-471,556	-	-	-
Subtotal Emergency Watershed Protection Program	331,646	52	254,453	87	584,006	87	-584,006	-87	-	-
Rural Water Operations Program:										
Technical Assistance	-	-	-	-	1,500	1	-1,500	-1	-	-
Financial Assistance	-	-	-	-	8,500	-	-8,500	-	-	-
Subtotal Rural Water Operations Program	-	-	-	-	10,000	1	-10,000	-1	-	-
Total Discretionary Obligations	356,686	68	402,449	105	1,037,714	105	-862,714	-87	175,000	18
Mandatory Obligations:										
Watershed Flood and Prevention Operations										
Technical Assistance	15,522	-	16,636	2	16,502	2	-	-	16,502	2
Financial Assistance	33,930	-	30,413	-	30,648	-	-	-	30,648	-
Subtotal Mand Oblig	49,452	-	47,049	2	47,150	2	-	-	47,150	2
Total Obligations	406,138	68	449,498	107	1,084,864	107	-862,714	-87	222,150	20
Add back:										
Lapsing Balances	548	-	278	-	-	-	-	-	-	-
Balances Available, EOY:										
Small Watershed	217,883	-	244,703	-	-	-	-	-	-	-
Flood Prevention Operations	55,742	-	87,832	-	-	-	-	-	-	-
Emergency Watershed Protection Program	776,266	-	592,369	-	-	-	-	-	-	-
Total Bal. Available, EOY	1,049,891	-	924,904	-	-	-	-	-	-	-
Total Available	1,456,577	68	1,374,680	107	1,084,864	107	-862,714	-87	222,150	20
Less:										
Sequestration	-	-	2,950	-	2,850	-	-	-	2,850	-
Recoveries, Other	-30,603	-	-102,739	-	62,190	-	-62,190	-	-	-
Bal. Available, SOY	-790,974	-	-1,049,891	-	-924,904	-	924,904	-	-	-
Total Appropriation	635,000	68	225,000	107	225,000	107	-	-87	225,000	20

Note: The project statement and Max discrepancy is due to MAX reporting reimbursable funding and FTEs, which are not included in the project statement.

JUSTIFICATION

(1) No change in funding the appropriation and a decrease of 87 staff years in the Emergency Watershed Protection Program ($175,000,000 and 105 staff years available in 2021).

The FY 2022 Budget proposes funding for the Small Watersheds P.L.-566 ($110,000,000) and Flood Prevention Operations P.L. 534 ($65,000,000).

No funding and a reduction of 87 staff years are requested in the 2022 Budget for the Emergency Watershed Protection Program. All funding for the program is estimated to be fully utilized in FY 2021. Funding for the Emergency Watershed Protection Program is typically provided through Emergency Supplemental Appropriations in response to needs following actual disasters. Emergency activities vary from year-to-year depending on the number of natural disasters that occur, making emergency funding needs difficult to predict. Emergency assistance will be evaluated and addressed as disasters arise.

PROPOSED LEGISLATION

Watershed and Flood Prevention Operation Program

Proposal

Under the Watershed and Flood Prevention Operations program, NRCS provides technical and financial assistance to local organizations to install measures for watershed protection and flood prevention. As part of the American Jobs Package, the 2022 Budget proposes to increase funding for the Watershed and Flood Prevention Operations program by $100 million per year (totaling $1 billion over ten years).

Budget Impact

Table NRCS-22. Change in Funding and Outlays
(Change in Funding and Outlays (thousands of dollars)

Item	2022	2023	2024	10 Year Total
Increase Watershed Protection and Flood Prevention Program by $100 million per year				
Budget Authority	+$100,000	+$100,000	+$100,000	+$1,000,000
Outlays	+$5,000	+$30,000	+$90,000	+$820,000

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTE

Table NRCS-23. Geographic Breakdown of Obligations and FTE (thousands of dollars, FTE)

State/Territory/Country	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	2022 Budget	FTE
Alabama	$53	-	$19,270	-	$46,509	-	$9,524	-
Alaska	874	2	845	1	2,039	1	418	-
Arizona	26	-	4,228	-	10,204	-	2,089	-
Arkansas	2,631	2	34,482	2	83,221	2	17,041	1
California	4,185	-	12,254	1	29,575	1	6,056	-
Colorado	23,907	6	5,036	3	12,153	3	2,489	1
Connecticut	1,803	1	826	2	1,994	2	408	-
Delaware	-	-	687	-	1,657	-	339	-
District of Columbia	3,711	2	8,743	8	21,101	8	4,321	2
Florida	16,641	3	11,763	2	28,389	2	5,813	-
Georgia	2,613	-	3,777	1	9,117	1	1,867	-
Hawaii	5,314	-	18	-	44	-	9	-
Idaho	-	-	1,539	-	3,713	-	760	-
Illinois	61	1	7,980	-	19,260	-	3,944	-
Indiana	2,776	-	1,773	-	4,280	-	876	-
Iowa	27	-	18,320	8	44,214	8	9,054	1
Kansas	748	-	7,729	3	18,655	3	3,820	1
Kentucky	-3	-	2,590	1	6,251	1	1,280	-
Louisiana	16,060	1	13,373	1	32,277	1	6,609	-
Maine	-	-	454	-	1,095	-	224	-
Maryland	6,770	-	6	-	14	-	3	-
Massachusetts	2,364	1	4,618	2	11,145	2	2,282	-
Michigan	83	1	441	-	1,065	-	218	-
Minnesota	-	-	106	1	256	1	52	-
Mississippi	36,325	4	62,836	5	151,654	5	31,055	1
Missouri	2,772	8	38,220	14	92,242	14	18,889	3
Montana	-	-	5	-	13	-	3	-
Nebraska	1,550	2	19,020	5	45,904	5	9,400	1
Nevada	300	-	860	-	2,075	-	425	-
New Hampshire	999	-	1,355	-	3,270	-	670	-
New Jersey	135	1	88	1	214	1	44	-
New Mexico	770	-	1,219	-	2,943	-	603	-
New York	16,527	3	1,527	3	3,686	3	755	1
North Carolina	1,252	-	26,170	1	63,161	1	12,934	-
North Dakota	2,237	-	225	-	542	-	111	-
Ohio	786	-	3,175	-	7,663	-	1,569	-
Oklahoma	1,850	-	4,491	2	10,840	2	2,220	-
Oregon	1,895	4	34,288	2	82,755	2	16,946	1
Pennsylvania	6,471	1	2,253	3	5,438	3	1,113	1
Puerto Rico	4,051	7	3,112	1	7,510	1	1,538	-
Rhode Island	846	1	1,351	1	3,260	1	668	-
South Carolina	2,304	-	673	-	1,624	-	333	-
South Dakota	99	-	391	1	944	1	193	-
Tennessee	5,487	2	8,885	4	21,444	4	4,391	1
Texas	195,416	9	33,135	14	79,970	15	16,376	3
Utah	30,220	4	30,690	5	74,070	5	15,168	1
Vermont	1,406	-	1,285	-	3,102	-	635	-
Virginia	-	-	341	-	823	-	169	-
Washington	-17	-	20	-	47	-	10	-
West Virginia	128	-	3,566	2	8,607	2	1,763	-
Wisconsin	286	-	2,623	5	6,329	5	1,296	1
Wyoming	1,401	2	6,839	1	16,506	1	3,380	-
Obligations	406,138	68	449,498	107	1,084,864	107	222,150	20
Lapsing Balances	548	-	278	-	-	-	-	-
Bal. Available, EOY	1,049,891	-	924,904	-	-	-	-	-
Total, Available	$1,456,577	68	$1,374,680	107	$1,084,864	107	$222,150	20

CLASSIFICATION BY OBJECTS

Table NRCS-24. Classification by Objects (thousands of dollars)

Item No.	Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
	Personnel Compensation:				
	Washington D.C.	$253	$1,066	$1,077	$251
	Personnel Compensation, Field	7,362	10,214	10,316	2,403
11	Total personnel compensation	7,615	11,280	11,393	2,654
12	Personal benefits	2,467	4,134	4,175	956
	Total, personnel comp. and benefits	10,082	15,414	15,568	3,610
	Other Objects:				
21.0	Travel and transportation of persons	1,070	463	1,738	43
22.0	Transportation of things	132	1	3	1
23.3	Communications, utilities, and misc. charges	-	-	1	-
25.1	Advisory and assistance services	9,691	32,246	87,534	30,363
25.2	Other services from non-Federal sources	55,992	75,309	173,426	32,699
25.3	Other goods and services from Federal sources	-	1	-	-
25.4	Operation and maintenance of facilities	6,382	14,387	31,138	6,905
25.5	Research and development contracts	93	327	4,422	-
25.7	Operation and maintenance of equipment	20	21	75	-
26.0	Supplies and materials	53	45	293	4
31.0	Equipment	333	1,494	5,558	149
32.0	Land and Structures	7,291	15,647	38,854	-
41.0	Grants, subsidies, and contributions	314,999	294,143	726,253	148,376
43.0	Interest and Dividents	1	-	1	-
	Total, Other Objects	396,057	434,084	1,069,296	218,540
99.9	Total, new obligations	406,138	449,498	1,084,864	222,150
	DHS Building Security Payments (included in 25.3).....	$ -	$1	$ -	$ -
	Position Data:				
	Average Salary (dollars), ES Position	$177,705	$182,514	$184,339	$187,104
	Average Salary (dollars), GS Position	$72,038	$72,229	$72,951	$74,045
	Average Grade, GS Position	10.0	10.0	10.0	10.0

Note: The position data reported above is representative of data collected across all funding sources provided to NRCS, including, but not limited to Conservation Operations, Watershed Rehabilitation (Technical Assistance), Watershed and Flood Prevention Operations (Technical Assistance), Water Bank Program (Technical Assistance), and Farm Security and Rural Investment Program (Technical Assistance).

STATUS OF PROGRAMS

WATERSHED AND FLOOD PREVENTION OPERATIONS

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

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, the agency prepares detailed sub-watershed plans that outline soil and water management problems and proposals to alleviate the problems. Proposals can include estimated benefits and costs, cost-sharing arrangements, and operation and maintenance arrangements.

Watershed and Flood Prevention Operations

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.

Current Activities

In 2020, the Agency received $175 million in discretionary funding and $50 million in mandatory funding ($27.1 million was obligated through the Watershed and Flood Prevention Operations Program). NRCS provided funding to 41 new and 12 backlog projects in 24 States. In selecting projects for funding, the agency balanced the needs of remedial, backlog and new projects.

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 agency staff and submitted for approval with requests for Federal funding authorization. The Consolidated Appropriations Act, 2018 included provisions that increased the threshold for requiring authorization by Congressional committee from $5 million to $25 million. 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. The Consolidated Appropriations Act, 2018 also included provisions that the limitation of 250,000 acres only applies for activities undertaken for the primary purpose of flood prevention.

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. Over the life of the program, 495 loans have been made at a value of almost $176 million.

Emergency Watershed Program (EWP)

The Emergency Watershed Program (EWP) is authorized by Section 216 of the Flood Control Act of 1950 P.L. 81-516 (33 U.S.C. 701b-1), and Sections 403-405 of the Agricultural Credit Act of 1978 P.L. 95-334 (16 U.S.C. 2203-2205). EWP implements recovery measures for watershed emergencies created by floods, wildfires, windstorms, and other natural occurrences that threaten life and property. However, it is not necessary for a national emergency to be declared to provide EWP assistance.

EWP work is not limited to a set of prescribed practices, but is planned and designed on a case-by-case basis. EWP emergency measures include 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.

EWP projects (except for the purchase of floodplain easements) must be sponsored by a State or local unit of government, or a Native American tribe or tribal organization. Sponsors are responsible for contributing their share

of the project costs, obtaining land rights and regulatory permits, and providing operation and maintenance of the completed emergency measures.

NRCS provides the necessary technical assistance for planning and design, and may provide up to 75 percent of the construction cost of eligible emergency measures (or up to 90 percent within limited resource areas).

In 2020, NRCS entered into over 420 agreements with local sponsors to implement cooperatively emergency recovery measures, and $251 million of EWP funds were obligated. Responses to 55 watershed emergencies have been initiated in 2020, including; Hurricanes Hanna, Isaias, Laura and Sally; western wildfires in Arizona, Utah, Nevada, Colorado, Washington, and California; the Iowa Derecho event; and the major flooding in Michigan.

In addition to responding to major disaster declarations, EWP also provides assistance for local flooding, tornados, and significant weather events. For example, in 2020, NRCS completed EWP projects that protected the properties of historically underserved Alaskan communities, and projects that preserved critical infrastructure of rural Iowa counties.

EWP Floodplain Easements

NRCS may purchase Emergency Watershed Program Floodplain Easements (EWP-FPE) on floodplain lands that have been impaired or impacted within the last 12 months, have a history of repeated flooding (i.e., flooded at least twice during the past ten years), or have been damaged by a specific natural disaster, for which Congress allocated funding. Under the floodplain easement option, a landowner voluntarily sells a permanent conservation easement to NRCS that provides NRCS the full authority to restore and enhance the floodplain's natural functions and values. Since the program's inception in 1996, most of the purchased floodplain easements involved undeveloped agricultural lands, but a small portion of the purchased easements involved rural land with residences or other structures present. In recent years, the number of easement transactions involving urban and suburban lands with homes present has dramatically increased. Floodplain easements are only available as part of a larger strategy intended to minimize future flood damage, by removing valuable infrastructure from flood prone areas while prohibiting their future development and restoring the floodplain function.

This type of easement purchase requires a local sponsor that will purchase the underlying land, in fee title, once the floodplain easement is acquired by NRCS.

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

Upon enrollment in EWP-FPE, landowners retain certain rights to the property, including quiet enjoyment, controlled public access, and undeveloped recreational use such as hunting and fishing. A landowner may obtain authorization from the agency to engage in other activities, through the Compatible Use Authorization Process, provided the agency determines the activities will further the protection and enhancement of the floodplain easements.

Current Activities

The table below reports the number of easements enrolled in EWP-FPE from 1997 through the end of 2020.

Table NRCS-25. Cumulative Program Activity (1997 Through End of 2020)

Enrolled Easements (Permanent)	**Cumulative**
Number of Easements	1,682
Number of Acres	189,116
Closed Easements (Permanent)	**Cumulative**
Number of Easements	1,663
Number of Acres	185,480
Restored Easements	**Cumulative**
Number of Easements	1,553
Number of Acres	184,435

Dogtooth Bend, Alexander County, Illinois

The Dogtooth Bend area of Southern Illinois located at the confluence of the Mississippi and Ohio Rivers has suffered catastrophic flooding from levee breaches in over the last three decades. Following the flood events of 1993, 2005, and 2011, the levee was repaired by the Len Small Levee and Drainage District with assistance from the U.S. Army Corps of Engineers. The landowners and operators in the Dogtooth Bend area have fields that are no longer economically viable to continue to farm, even if the levees were to be repaired. Currently, there are 31 landowners interested in EWP-FPE totaling to 7,240 acres, for an estimated easement purchase cost of $29 million. Due to limited funds, priority areas were created based on the distance each parcel was from the levee breach. The environmental benefit leverages the work of partners and adjacent landowners including The Nature Conservancy, Ducks Unlimited, Illinois Department of Natural Resources-Horseshoe Lake, and USFWS-Cypress Creek National Wildlife Refuge. Enrolling this land in EPP-FPE will reduce habitat fragmentation, improve water quality by reducing the sediment load in the Mississippi River which can lead to Hypoxia concerns in the Gulf of Mexico. In addition, this area also includes a culturally significant area known as the Dogtooth Bend Mound Center. Dogtooth Bend EWP-FPE efforts have been leveraged with the implementation of other NRCS programs including the Wetland Reserve Enhancement Partnership (WREP) on nearby parcels. This strategy has allowed NRCS to address effectively critical resource concerns and realize compounded environmental and economic benefits.

ACCOUNT 3: WATERSHED REHABILITATION PROGRAM

APPROPRIATIONS LANGUAGE

The appropriations language follows:

Under the authorities of section 14 of the Watershed Protection and Flood Prevention Act, $10,000,000 is provided.

LEAD-OFF TABULAR STATEMENT

Table NRCS-26. Lead-Off Tabular Statement (In dollars)

Item	Amount
2021 Enacted	$10,000,000
Change in Appropriation	-
Budget Estimate, 2022	10,000,000

PROJECT STATEMENTS

Table NRCS-27. Project Statement by Appropriations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	Chg Key	FTE	2022 Budget	FTE
Discretionary Appropriations:											
Watershed Rehabilitation Program:											
Technical Assistance	$5,000	1	$5,000	1	$5,000	1	-		-	$5,000	1
Financial Assistance	5,000	-	5,000	-	5,000	-	-		-	5,000	-
Subtotal	10,000	1	10,000	1	10,000	1	-		-	10,000	1
Mandatory Appropriations:											
Small Watershed Rehabilitation Program:*											
Technical Assistance	-	5	-	4	-	4	-		-4	-	-
Subtotal	-	5	-	4	-	4	-		-4	-	-
Total Appropriation	10,000	6	10,000	5	10,000	5	-	(1)	-4	10,000	1
Recoveries, Other	46,091	-	4,419	-	-11,789	-	+11,789		-	-	-
Bal. Available, SOY	38,855	-	68,369	-	64,327	-	-64,327		-	-	-
Total Available	94,946	6	82,788	5	62,538	5	-52,538		-4	10,000	1
Lapsing Balances	-93	-	-	-	-	-	-		-	-	-
Bal. Available, EOY	-68,369	-	-64,327	-	-	-	-		-	-	-
Total Obligations	26,484	6	18,461	5	62,538	5	-52,538		-4	10,000	1

Note: The project statement and MAX discrepancy is due to MAX reporting reimbursable funding and FTEs, which are not included in the project statement.

*No funding is requested in the 2022 Budget. All mandatory Small Watershed Rehabilitation Program funding is estimated to be fully utilized in 2021.

Table NRCS-28. Project Statement by Obligations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	FTE	2022 Budget	FTE
Discretionary Obligations:										
Watershed Rehabilitation Program:										
Technical Assistance	$5,964	1	$1,266	1	$8,791	1	-3,791	-	$5,000	1
Financial Assistance	5,000	-	5,000	-	5,591	-	-591	-	5,000	-
Subtotal Disc oblig	10,964	1	6,266	1	14,382	1	-4,382	-	10,000	1
Mandatory Obligations:										
Small Watershed Rehabilitation Program:										
Technical Assistance	7,654	5	5,330	4	10,652	4	-10,652	-4	-	-
Financial Assistance	7,866	-	6,865	-	37,504	-	-37,504	-	-	-
Subtotal M and Oblig	15,520	5	12,195	4	48,156	4	-48,156	-4	-	-
Total Obligations	26,484	6	18,461	5	62,538	5	-52,538	-4	10,000	1
Add back:										
Lapsing Balances	93	-	-	-	-	-	-	-	-	-
Balances Available, EOY:										
Watershed Rehabilitation Program	-53,145	-	4,829	-	-	-	-	-	-	-
Small Watershed Rehabilitation	121,514	-	59,497	-	-	-	-	-	-	-
Total Bal. Available, EOY	68,369	-	64,327	-	-	-	-	-	-	-
Total Available	94,946	6	82,788	5	62,538	5	-52,538	-4	10,000	1
Less:										
Recoveries, Other	-46,091	-	-4,419	-	11,789	-	-11,789	-	-	-
Bal. Available, SOY	-38,855	-	-68,369	-	-64,327	-	+64,327	-	-	-
Total Appropriation	10,000	6	10,000	5	10,000	5	-	-4	10,000	1

Note: The project statement and MAX discrepancy is due to MAX reporting reimbursable funding and FTEs, which are not included in the project statement.

JUSTIFICATION

(1) No change in funding and a decrease of four staff years in the Mandatory Small Watershed Rehabilitation Program ($10,000,000 and 5 staff years available in 2021).

The FY 2022 Budget proposes $10,000,000 and one staff year for the Watershed Rehabilitation Program. This funding will address critical public health and safety concerns with aging dams reaching the end of their design lives.

No funding and a reduction of 4 staff years are requested in the 2022 Budget for the Mandatory Small Watershed Rehabilitation Program. All funding for the program is estimated to be fully utilized in FY 2021.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTE

Table NRCS-29. Geographic Breakdown of Obligations and FTE (thousands of dollars, FTE)

State/Territory/Country	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	2022 Budget	FTE
Arizona	-	-	$2,022	1	$6,848	1	$1,095	1
Arkansas	-	-	405	-	1,371	-	219	-
California	-	-	597	-	2,021	-	323	-
Colorado	$43	-	16	-	54	-	9	-
Connecticut	189	1	34	-	116	-	19	-
District of Columbia	331	1	264	1	894	1	143	-
Georgia	5,551	1	5,336	-	18,075	-	2,890	-
Idaho	1	-	25	-	86	-	14	-
Illinois	-	-	75	-	256	-	41	-
Indiana	-	-	131	-	442	-	71	-
Kansas	402	-	96	-	327	-	52	-
Kentucky	802	-	187	-	634	-	101	-
Louisiana	826	-	-	-	-	-	-	-
Massachusetts	1,414	-	61	-	207	-	33	-
Minnesota	-	-	1	-	2	-	0	-
Mississippi	221	-	91	1	307	1	49	-
Nebraska	552	-	337	-	1,143	-	183	-
Nevada	-	-	2,820	-	9,552	-	1,527	-
New Hampshire	40	-	20	-	68	-	11	-
New Jersey	723	-	60	-	205	-	33	-
New Mexico	-	-	435	-	1,473	-	236	-
North Dakota	1,258	-	389	-	1,317	-	211	-
Oklahoma	2	-	2,416	-	8,183	-	1,308	-
Pennsylvania	327	-	548	-	1,857	-	297	-
South Dakota	-1	-	1	-	2	-	0	-
Tennessee	446	1	148	1	503	1	80	-
Texas	11,147	2	1,424	1	4,823	1	771	-
Utah	2,196	-	471	-	1,596	-	255	-
Vermont	-	-	33	-	112	-	18	-
Virginia	-	-	7	-	25	-	4	-
Washington	-1	-	1	-	2	-	0	-
West Virginia	-	-	3	-	10	-	2	-
Wyoming	15	-	9	-	29	-	5	-
Obligations	26,484	6	18,461	5	62,538	5	10,000	1
Lapsing Balances	93		-	-	-	-	-	-
Rescinded Balances	-	-	-	-	-	-	-	-
Bal. Available, EOY	68,369	-	64,327	-	-	-	-	-
Total, Available	$94,946	6	$82,788	5	$62,538	5	$10,000	1

CLASSIFICATION BY OBJECTS

Table NRCS-30. Classification by Objects (thousands of dollars)

Item No.	Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
	Personnel Compensation:				
	Washington D.C.	$117	$171	$188	$15
	Personnel Compensation, Field	627	710	779	64
11	Total personnel compensation	744	881	967	79
12	Personal benefits	254	308	342	31
	Total, personnel comp. and benefits	998	1,189	1,309	110
	Other Objects:				
21.0	Travel and transportation of persons	2	5	11	-
22.0	Transportation of things	-	1	3	-
23.1	Rental payments to GSA	2	6	-	-
23.2	Rental payments to others	-	1	-	-
23.3	Communications, utilities, and misc. charges	-2	-4	-	-
25.1	Advisory and assistance services	958	89	209	-
25.2	Other services from non-Federal sources	9,918	3,238	13,223	4,878
25.3	Other goods and services from Federal sources	-	1	-	-
25.4	Operation and maintenance of facilities	1,846	3,004	6,880	12
25.5	Research and development contracts	-	18	39	-
26.0	Supplies and materials	1	-	1	-
31.0	Equipment	-6	80	186	-
32.0	Land and structures	188	-	-	-
41.0	Grants, subsidies, and contributions	12,579	10,833	40,677	5,000
	Total, Other Objects	25,486	17,272	61,229	9,890
99.9	Total, new obligations	26,484	18,461	62,538	10,000
	DHS Building Security Payments (included in 25.3).....	$ -	$1	$ -	$ -
	Position Data:				
	Average Salary (dollars), ES Position	$177,705	$182,514	$184,339	$187,104
	Average Salary (dollars), GS Position	$72,038	$72,229	$72,951	$74,045
	Average Grade, GS Position	10.0	10.0	10.0	10.0

Note: The position data reported above is representative of data collected across all funding sources provided to NRCS, including, but not limited to Conservation Operations, Watershed Rehabilitation (Technical Assistance), Watershed and Flood Prevention Operations (Technical Assistance), Water Bank Program (Technical Assistance), and Farm Security and Rural Investment Program (Technical Assistance).

STATUS OF PROGRAMS

WATERSHED REHABILITATION PROGRAM

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

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 11,849 watershed dams with assistance from NRCS. Local sponsors provide leadership in the program and secure land rights and easements needed for construction. NRCS provided technical assistance and cost sharing for construction. Local sponsors assumed responsibility for the operation and maintenance of the structures once they were completed. These dams protect America's communities, infrastructure, 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 protected by these watershed dams are now vulnerable to flooding since many dams have reached, or will soon reach, the end of their design life. By December 2021, approximately 5,948 watershed dams will have reached the end of their originally designed lifespan. That total will increase to approximately 6,793 by December 2025. More than half of the 11,849 watershed dams in the Nation are beyond their design life. Over time, dam spillway pipes have deteriorated, and reservoirs have filled with sediment. More significantly, the area around many dams have changed as homes and businesses have been constructed on what was once agricultural land. Thus, a dam failure could pose a serious threat to the health and safety of those living downstream and to the communities that depend on the reservoir for drinking water. Dam failure could also cause serious adverse environmental effects.

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

Dams installed through 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 are eligible for rehabilitation assistance.

The Watershed Rehabilitation Program provides up to 65 percent of the total cost for dam rehabilitation projects, which includes the acquisition of land, easements, rights-of- way, project administration, non-Federal technical assistance, and construction. The agency 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 four phases, all of which require a request from a local public sponsor: 1) conduct a dam assessment to evaluate the condition of the dam, including safety hazards, and provide preliminary alternatives for rehabilitation; 2) prepare project plans; 3) prepare designs for implementation; and 4) implement the dam rehabilitation plan. Partnerships among local communities, State governments, and NRCS leverage services and funds to allow many projects to move quickly through the planning and implementation stages.

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

The Architectural and Engineering (A&E) Service contract awarded in 2013 expired in January 2018. The agency solicited for a new national contract in 2017 for A&E firms to perform dam assessments, rehabilitation planning, engineering designs, and construction inspection services under the agency’s guidance. In 2018, the agency awarded

four regional contracts with A&E firms. Also, some sponsors have used their own professional technical staff or acquired technical services as part of their "in-kind" contribution to meet their 35 percent cost-share requirement.

Sponsors have used many innovative means to obtain the funds necessary to address the rehabilitation of 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.

Current Activities

In 2020, the Watershed Rehabilitation Program received $10 million in discretionary funding and $19.9 million in mandatory funding. This investment in watershed rehabilitation recognizes the critical role of these watershed structures in flood management, water supply, erosion control, agricultural productivity, recreation, and wildlife habitat. This funding helps to repair aging infrastructure, creates jobs and commerce, and protects homes and families.

The agency continued to provide funding and promoted assessments of high-hazard potential dams, monitored costs, and examined the rehabilitation program to ensure equitable delivery in economically disadvantaged areas. The agency utilized $1.1 million to fund 50 dam assessments. Projects funded for assessments, planning, design, and construction are included in the chart below.

Table NRCS-31. Summary of Watershed Rehabilitation Projects and Allocations as of September 30, 2020

State	Total Number of Funded Dam Rehabilitation Projects 2000 - 2020	Number of Dams Rehabilitated	2020 Federal Allocations of Mandatory Funds	2020 Federal Allocations of Discretionary Funds a/
Alabama	1	1	-	-
Arizona	11	3	-	-
Arkansas	7	1	-	-
California	1	-	$650,000	-
Colorado	5	1	470,000	$10,000
Connecticut	4	-	42,500	-
Georgia	38	7	809,700	5,000,000
Illinois	1	-	600,000	178,730
Indiana	-	1	-	130,000
Iowa	4	4	-	-
Kansas	8	3	-	-
Kentucky	4	1	1,139,000	-
Louisiana	3	-	24,000	-
Massachusetts	9	1	2,246,792	71,599
Maryland	1	-	-	-
Mississippi	27	17	1,200,000	-
Missouri	2	2	-	-
Nebraska	16	10	958,300	200,000
Nevada	1	-	-	-
New Hampshire	5	-	877,912	-
New Jersey	2	-	-	-
New Mexico	9	3	720,000	104,000

State	Total Number of Funded Dam Rehabilitation Projects 2000 - 2020	Number of Dams Rehabilitated	2020 Federal Allocations of Mandatory Funds	2020 Federal Allocations of Discretionary Funds a/
New York	8	-	960,000	134,860
North Carolina	7	-	-	-
North Dakota	8	1	-	-
Ohio	14	8	951,566	-
Oklahoma	62	38	228,435	1,901,100
Oregon	3	-	1,286,000	50,000
Pennsylvania	15	1	28,500	389,050
Tennessee	7	3	-	-
Texas	46	24	2,610,000	1,117,000
Utah	24	10	2,033,000	9,000
Vermont	4	-	-	-
Virginia	17	13	341,000	-
Washington	-	-	-	85,000
West Virginia	12	1	1,750,000	-
Wisconsin	11	11	-	-
Wyoming	1	1	-	-
Total	**398**	**166**	**$19,926,705**	**$9,380,339**

a/ Discretionary funds include carryover funds, prior year recoveries, and annual funds for project planning, design, and implementation.

In 2020, 50 assessments of high hazard dams were funded. These assessments provided communities with technical information about the condition of their dams, and alternatives for rehabilitation of dams that do not currently meet Federal dam safety standards.

Project Status and Benefits

From 2000 through 2020, 398 dams have been funded for rehabilitation. Of the 398 dams, 254 dams in 25 States were authorized for rehabilitation. There are 122 dams in the planning phase that are subject to funding priorities. Of the 254 dams that were authorized for rehabilitation, 166 have been rehabilitated and 67 are in the design and construction phase.

The following table summarizes the benefits for both agricultural and non-agricultural lands provided by the completed projects:

Table NRCS-32. Benefits for lands provided by the completed projects

Average annual floodwater damage reduction benefits	$9,383,748
Average annual non-floodwater damage reduction benefits	$7,754,549
Number of people with reduced risk downstream from the dams	45,302
Number of people who benefit from project action	519,652
Number of homes and businesses benefiting from project action	18,755
Number of farms and ranches benefiting from project action	1,037
Number of bridges downstream which benefit from project action	401

ACCOUNT 4: WATER BANK PROGRAM

LEAD-OFF TABULAR STATEMENT

Table NRCS-33. Lead-Off Tabular Statement (In dollars)

Item	Amount
2021 Enacted	$4,000,000
Change in Appropriation	-4,000,000
Budget Estimate, 2022	-

PROJECT STATEMENTS

Table NRCS-34. Project Statement by Appropriations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	Chg Key	FTE	2022 Budget	FTE
Discretionary Appropriations:											
Water Bank Program											
Technical Assistance	$400	1	$400	1	$120	1	-$120		-1	-	-
Financial Assistance	3,600	-	3,600	-	3,880	-	-3,880		-	-	-
Total Appropriation	4,000	1	4,000	1	4,000	1	-4,000	(1)	-1	-	-
Recoveries, Other	17	-	122	-	-	-	-		-	-	-
Bal. Available, SOY	394	-	1,035	-	133	-	-133		-	-	-
Total Available	4,411	1	5,157	1	4,133	1	-4,133		-1	-	-
Bal. Available, EOY	-1,035	-	-133	-	-	-	-		-	-	-
Total Obligations	3,376	1	5,024	1	4,133	1	-4,133		-1	-	-

Table NRCS-35. Project Statement by Obligations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	FTE	2022 Budget	FTE
Discretionary Obligations:										
Water Bank Program										
Technical Assistance	$131	1	$106	1	$120	1	-$120	-1	-	-
Financial Assistance	3,245	-	4,918	-	4,013	-	-4,013	-	-	-
Total Obligations	3,376	1	5,024	1	4,133	1	-4,133	-1	-	-
Balances Available, EOY	1,035	-	133	-	-	-	-	-	-	-
Total Available	4,411	1	5,157	1	4,133	1	-4,133	-1	-	-
Recoveries, Other	-17	-	-122	-	-	-	-	-	-	-
Bal. Available, SOY	-394	-	-1,035	-	-133	-	+133	-	-	-
Total Appropriation	4,000	1	4,000	1	4,000	1	-4,000	-1	-	-

JUSTIFICATION

A decrease of $4,000,000 and 1 staff year for the Water Bank Program ($4,000,000 and 1 staff year available in 2021).

No funds are requested in the 2022 Budget for this program.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTE

Table NRCS-36. Geographic Breakdown of Obligations and FTE (thousands of dollars, FTE)

State/Territory/Country	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	2022 Budget	FTE
Minnesota	$231	-	$234	-	$193	-	-	-
North Dakota	2,767	1	4,331	1	3,562	1	-	-
South Dakota	379	-	459	-	378	-	-	-
Obligations	3,376	1	5,024	1	4,133	1	-	-
Lapsing Balances	-		-	-	-	-	-	-
Rescinded Balances	-	-	-	-	-	-	-	-
Bal. Available, EOY	1,035	-	133	-	-	-	-	-
Total, Available	$4,411	1	$5,157	1	$4,133	1	-	-

CLASSIFICATION BY OBJECTS

Table NRCS-37. Classification by Objects (thousands of dollars)

Item No.	Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
	Personnel Compensation:				
	Personnel Compensation, Field	$77	$76	$77	-
11	Total personnel compensation	77	76	77	-
12	Personal benefits	31	30	31	-
	Total, personnel comp. and benefits	108	106	108	-
	Other Objects:				
25.1	Advisory and assistance services	-	-8	-	-
25.4	Operation and maintenance of facilities	-613	8	12	-
31.0	Equipment	23	-	-	-
32.0	Land and Structures	-	1	1	-
41.0	Grants, subsidies, and contributions	3,858	4,917	4,012	-
	Total, Other Objects	3,268	4,918	4,025	-
99.9	Total, new obligations	3,376	5,024	4,133	-
	Position Data:				
	Average Salary (dollars), ES Position	$177,705	$182,514	$184,339	-
	Average Salary (dollars), GS Position	$72,038	$72,229	$72,951	-
	Average Grade, GS Position	10.0	10.0	10.0	-

Note: The position data reported above is representative of data collected across all funding sources provided to NRCS, including, but not limited to Conservation Operations, Watershed Rehabilitation (Technical Assistance), Watershed and Flood Prevention Operations (Technical Assistance), Water Bank Program (Technical Assistance), and Farm Security and Rural Investment Program (Technical Assistance).

STATUS OF PROGRAMS

WATER BANK PROGRAM

Section 748 of the Water Bank Act (16 U.S.C. 1301-1311) authorized the Water Bank Program (WBP). The purposes of the WBP include: 1) preserving and improving major wetlands as habitat for migratory waterfowl and other wildlife; 2) conserving surface waters; 3) reducing soil and wind erosion; 4) contributing to flood control; 5) improving water quality; 6) improving subsurface moisture; and 7) enhancing the natural beauty of the landscape. The intent of the program is to keep water for the benefit of migratory wildlife.

WBP contracts are non-renewable, ten-year rental agreements to compensate landowners for maintaining lands as wetlands in lieu of draining the lands for agricultural production. Rental payments are made annually. WBP agreements for each participating farm or ranch become effective on January 1, of the calendar year in which the agreement is approved. Financial assistance is not available for conservation practices through WBP. Participants who wish to establish or maintain conservation practices may apply for financial assistance through other NRCS or State financial assistance programs.

WBP participants are not subject to the Farm Bill payment eligibility requirements, including the highly erodible land and wetland conservation provisions, or the adjusted gross income limitations. The rental rates, for the 2020 program, were as follows:

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

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

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

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

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

An annual status review is performed to note the progress in maintaining designated wetland acreage, and the need for technical assistance. Failure to maintain the designated wetland acreage may result in noncompliance or a reduction in rental payments.

Current Activities

In 2020, $5 million in financial and technical assistance was available for approval of new WBP ten-year rental agreements. Over $4.8 million was obligated to 100 agreements covering 10,828 acres.

ACCOUNT 5: HEALTHY FORESTS RESERVE PROGRAM

APPROPRIATIONS LANGUAGE

The appropriations language follows (new language underscored; deleted matter enclosed in brackets):

Under Title V of the Healthy Forest Restoration Act of 2003 (16 U.S.C. 6571-6578), $20,000,000, to remain available until expended is provided to acquire and make available to carry out the Healthy Forests Reserve Program.

Change Description

The change **ADDS APPROPRIATION LANGUAGE FOR THE HEALTHY FOREST RESERVE PROGRAM.**

LEAD-OFF TABULAR STATEMENT

Table NRCS-38. Lead-Off Tabular Statement (In dollars)

Item	Amount
2021 Enacted	-
Change in Appropriation	+$20,000,000
Budget Estimate, 2022	20,000,000

PROJECT STATEMENTS

Table NRCS-39. Project Statement by Appropriations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	Chg Key	FTE	2022 Budget	FTE
Discretionary Appropriations:											
Healthy Forests Reserve Program:											
Technical Assistance	-	-	-	-	-	-	+$6,600		+1	$6,600	1
Financial Assistance	-	-	-	-	-	-	+13,400		-	13,400	-
Total Appropriation	-	-	-	-	-	-	20,000	(1)	+1	20,000	1
Total Available	-	-	-	-	-	-	20,000		+1	20,000	1
Total Obligations	-	-	-	-	-	-	+20,000		+1	20,000	1

Table NRCS-40. Project Statement by Obligations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	FTE	2022 Budget	FTE
Discretionary Obligations:										
Healthy Forests Reserve Program:										
Technical Assistance	-	-	-	-	-	-	+$6,600	+1	$6,600	1
Financial Assistance	-	-	-	-	-	-	+13,400	-	13,400	-
Total Obligations	-	-	-	-	-	-	+20,000	+1	20,000	1
Total Available	-	-	-	-	-	-	+20,000	+1	20,000	1
Total Appropriation	-	-	-	-	-	-	+20,000	+1	20,000	1

JUSTIFICATION

(1) An increase of $20,000,000 and 1 staff year for the Healthy Forests Reserve Program (no funding available in 2021).

The budget proposes $20,000,000 for the Healthy Forest Reserve Program to enroll private lands and acreage owned by Indian Tribes on a voluntary basis for the purpose of restoring, enhancing, and protecting forestland to promote recovery of endangered and threatened species under the Endangered Species Act. Funds will be prioritized to projects that increase plant and animal biodiversity and enhance carbon sequestration.

PROPOSED LEGISLATION

Healthy Forests Reserve Program

Proposal

The 2022 Budget proposes to increase funding for the Healthy Forest Reserve Program by $50 million a year for four years beginning in 2024 to further encourage land and species protection and restoration efforts (totaling $200 million over four years). These funds would allow NRCS to enroll up to 400,000 acres in long-term conservation agreements.

Budget Impact

Table NRCS-41. Change in Funding and Outlays

(Change in Funding and Outlays (thousands of dollars)

Item	2022	2023	2024	10 Year Total
Increase Healthy Forests Reserve Program by $50 million per year over 4 years for Net-Zero Ag Technology Initiative				
Budget Authority	-	-	+$50,000	+$200,000
Outlays	-	-	+$9,000	+$192,000

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTE

Table NRCS-42. Geographic Breakdown of Obligations and FTE (thousands of dollars, FTE)

State/Territory/Country	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	2022 Budget	FTE
Distribution Unknown	-	-	-	-	-		$20,000	1
Obligations	-	-	-	-	-	-	20,000	1
Lapsing Balances	-	-	-	-	-	-	-	-
Rescinded Balances	-	-	-	-	-	-	-	-
Bal. Available, EOY	-	-	-	-	-	-	-	-
Total, Available	-	-	-	-	-	-	$20,000	1

CLASSIFICATION BY OBJECTS

Table NRCS-43. Classification by Objects (thousands of dollars)

Item No.	Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
	Personnel Compensation:				
	Personnel Compensation, Field	-	-	-	$49
11	Total personnel compensation	-	-	-	49
12	Personal benefits	-	-	-	21
	Total, personnel comp. and benefits	-	-	-	70
	Other Objects:				
25.2	Other services from non-Federal sources	-	-	-	6,530
32.0	Land and Structures	-	-	-	8,300
41.0	Grants, subsidies, and contributions	-	-	-	5,100
	Total, Other Objects	-	-	-	19,930
99.9	Total, new obligations	-	-	-	20,000
	Position Data:				
	Average Salary (dollars), ES Position	-	-	-	$187,104
	Average Salary (dollars), GS Position	-	-	-	$74,045
	Average Grade, GS Position	-	-	-	10.0

Note: The position data reported above is representative of data collected across all funding sources provided to NRCS, including, but not limited to Conservation Operations, Watershed Rehabilitation (Technical Assistance), Watershed and Flood Prevention Operations (Technical Assistance), Water Bank Program (Technical Assistance), and Farm Security and Rural Investment Program (Technical Assistance).

ACCOUNT 6: URBAN AGRICULTURE AND INNOVATIVE PRODUCTION PROGRAM

APPROPRIATIONS LANGUAGE

The appropriations language follows:

For necessary expenses to carry out the Urban Agriculture and Innovative Production Program under section 222 of Subtitle A of the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6923) as amended by section 12302 of Public Law 115–334, there is hereby appropriated $9,458,000.

Change Description

The change adds appropriation language for the Urban Agriculture and Innovative Production Program.

LEAD-OFF TABULAR STATEMENT

Table NRCS-44. Lead-Off Tabular Statement (In dollars)

Item	Amount
2021 Enacted*	-
Change in Appropriation	+$9,458,000
Budget Estimate, 2022	9,458,000

*The 2021 Enacted Appropriation was funded as a General Provision under the Farm Security and Rural Investment Programs Account.

PROJECT STATEMENTS

Table NRCS-45. Project Statement by Appropriations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	Chg Key	FTE	2022 Budget	FTE
Discretionary Appropriations:											
Urban Agriculture and Innovative Production:											
Technical Assistance	-	-	-	-	-	-	+$9,458		+2	$9,458	2
Total Appropriation	-	-	-	-	-	-	9,458	(1)	+2	9,458	2
Total Available	-	-	-	-	-	-	9,458		+2	9,458	2
Total Obligations	-	-	-	-	-	-	+9,458		+2	9,458	2

The 2020 and 2021 Enacted Appropriations were funded as a General Provision in the Farm Security and Rural Investment Programs Account.

Table NRCS-46. Project Statement by Obligations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	FTE	2022 Budget	FTE
Discretionary Obligations:										
Urban Agriculture and Innovative Production:										
Technical Assistance	-	-	-	-	-	-	+$9,458	+2	$9,458	2
Total Obligations	-	-	-	-	-	-	+9,458	+2	9,458	2
Total Available	-	-	-	-	-	-	+9,458	+2	9,458	2
Total Appropriation	-	-	-	-	-	-	+9,458	+2	9,458	2

The 2020 and 2021 Enacted Appropriations were funded as a General Provision in the Farm Security and Rural Investment Programs Account.

JUSTIFICATIONS

(1) An increase of $9,458,000 and two staff years for the Urban Agriculture Innovative Production Program (no funding available in 2021) and this was funded previously as a general provision in the Farm Security and Rural Investment Programs Account.

The funding increase will allow NRCS to continue critical activities to support full implementation of the Office as directed by statute. These include expanding grant opportunities to Historically Underserved and Socially Disadvantaged communities, leveraging existing authorities within USDA agencies to amplify ongoing programs, managing the needs of the Federal Advisory Committee, and supporting pilot Farm Service Agency Urban / Sub-Urban County Office Committees. The Office will also establish a communication and partnership framework across the Federal government to promote a coordinated approach to delivering assistance in communities.

The Office activities advance the Administration's priorities of establishing racial and economic equity and combatting climate change. Grant opportunities support innovative approaches to reclaiming distressed urban land, creating local jobs, and providing reliable and resilient food sources.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTE

Table NRCS-47. Geographic Breakdown of Obligations and FTE (thousands of dollars, FTE)

State/Territory/Country	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	2022 Budget	FTE
District of Columbia	-	-	-	-	-	-	$9,458	2
Obligations	-	-	-	-	-	-	9,458	2
Lapsing Balances	-	-	-	-	-	-	-	-
Rescinded Balances	-	-	-	-	-	-	-	-
Bal. Available, EOY	-	-	-	-	-	-	-	-
Total, Available	-	-	-	-	-	-	$9,458	2

CLASSIFICATION BY OBJECTS

Table NRCS-48. Classification by Objects (thousands of dollars)

Item No.	Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
	Personnel Compensation:				
	Personnel Compensation, Field	-	-	-	$283
11	Total personnel compensation	-	-	-	283
12	Personal benefits	-	-	-	103
	Total, personnel comp. and benefits	-	-	-	386
	Other Objects:				
21.0	Travel and transportation of persons	-	-	-	25
25.2	Other services from non-Federal sources	-	-	-	9,047
	Total, Other Objects	-	-	-	9,072
99.9	Total, new obligations	-	-	-	9,458
	Position Data:				
	Average Salary (dollars), ES Position	-	-	-	$187,104
	Average Salary (dollars), GS Position	-	-	-	$74,045
	Average Grade, GS Position	-	-	-	10.0

Note: The position data reported above is representative of data collected across all funding sources provided to NRCS, including, but not limited to Conservation Operations, Watershed Rehabilitation (Technical Assistance), Watershed and Flood Prevention Operations (Technical Assistance), Water Bank Program (Technical Assistance), and Farm Security and Rural Investment Program (Technical Assistance).

The 2020 and 2021 Enacted Appropriations were funded as a General Provision in the Farm Security and Rural Investment Programs Account.

ACCOUNT 7: FARM SECURITY AND RURAL INVESTMENT PROGRAMS

PROJECT STATEMENTS

Table NRCS-49. Project Statement by Appropriations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	FTE	2022 Budget	FTE
Discretionary Appropriations:										
Wetlands Mitigation Banking Program	-	-	$5,000	-	$5,000	1	-$5,000	-1	-	-
Urban Agriculture and Innovative Production	-	-	5,000	2	7,000	2	-7,000	-2	-	-
Subtotal	-	-	10,000	2	12,000	3	-12,000	-3	-	-
Mandatory Appropriations:										
Environmental Quality Incentive Program	$1,610,763	2,642	1,616,013	2,425	1,666,663	4,501	+47,150	-103	$1,713,813	4,398
Conservation Stewardship Program (2018)	580,004	93	661,041	640	686,066	1,166	+47,150	-15	733,216	1,151
Conservation Stewardship Program (2014)	893,743	1,302	1,727,069	811	-	35	-	+1	-	36
Agricultural Conservation Easement Program	413,793	321	415,143	321	416,043	598	-	-13	416,043	585
Regional Conservation Partnership Program	281,400	65	282,300	69	282,900	112	-	+2	282,900	114
Conservation Reserve Program (TA Only)	89,218	515	89,503	700	220,770	817	-	+233	220,770	1,050
Agricultural Management Assistance	4,690	7	4,705	6	4,715	6	-	-	4,715	6
Voluntary Public Access and Habitat Incentive Prg	50,000	-	-	-	-	2	-	-	-	2
Feral Swine Eradication and Control Pilot Program	37,500	-	-	1	-	4	-	-	-	4
Agricultural Water Enhancement Program	-	1	-	1	-	1	-	-	-	1
Chesapeake Bay Watershed Program	-	5	-	7	-	7	-	-7	-	-
Farm and Ranch Lands Protection Program	-	1	-	-	-	-	-	-	-	-
Grassland Reserve Program	-	-	-	-	-	-	-	-	-	-
Wetlands Mitigation Banking Program	-	4	-	1	-	1	-	-1	-	-
Wetlands Reserve Program	-	27	-	2	-	2	-	-	-	2
Wildlife Habitat Incentives Program	-	13	-	9	-	9	-	-5	-	4
Subtotal	3,961,111	4,996	4,795,774	4,993	3,277,157	7,261	+94,300	+92	3,371,457	7,353
Total Adjusted Approp	3,961,111	4,996	4,805,774	4,995	3,289,157	7,264	+82,300	+89	3,371,457	7,353
Add back:										
Rescission, Transfers In and Out	60,228	-	60,228	-	60,228	-	-	-	60,228	-
Sequestration	260,019	-	304,468	-	201,730	-	+5,700	-	207,430	-
Total Appropriation	4,281,358	4,996	5,170,470	4,995	3,551,115	7,264	+88,000	+89	3,639,115	7,353
Transfers Out: FPAC Business Center										
NRCS/ACEP	-8,307	-	-8,307	-	-8,307	-	-	-	-8,307	-
NRCS/CSP	-21,184	-	-21,184	-	-21,184	-	-	-	-21,184	-
NRCS/EQIP	-30,737	-	-30,737	-	-30,737	-	-	-	-30,737	-
Total Transfers Out	-60,228	-	-60,228	-	-60,228	-	-	-	-60,228	-
Sequestration	-260,019	-	-304,468	-	-201,730	-	-5,700	-	-207,430	-
Recoveries, Other	272,675	-	335,389	-	-	-	-	-	-	-
Bal. Available, SOY	1,549,768	-	1,985,801	-	2,334,039	-	-1,273,646	-	1,060,393	-
Total Available	5,783,554	4,996	7,126,964	4,995	5,623,196	7,264	-1,191,346	89	4,431,850	7,353
Lapsing Balances	-287	-	-327	-	-	-	-	-	-	-
Bal. Available, EOY	-1,985,801	-	-2,334,039	-	-1,060,393	-	+337,049	-	-723,344	-
Total Obligations	3,797,466	4,996	4,792,598	4,995	4,562,803	7,264	-854,297	+89	3,708,506	7,353

Note: The project statement and MAX discrepancy is due to MAX reporting reimbursable funding and FTEs, which are not included in the project statement.

Table NRCS-50. Project Statement by Obligations Details (thousands of dollars, FTE)

Item	2019 Actual	FTE	2020 Actual	FTE	2021 Enacted	FTE	Inc. or Dec.	FTE	2022 Budget	FTE
Discretionary Obligations:										
Wetlands Mitigation Banking Program	-	-	-	-	$10,000	1	-$10,000	-1	-	-
Urban Agriculture and Innovative Production	-	-	$4,881	2	7,000	2	-7,000	-2	-	-
Subtotal Disc oblig	-	-	4,881	2	17,000	3	-17,000	-3	-	-
Mandatory Obligations:										
Environmental Quality Incentive	$1,757,328	2,642	1,813,242	2,425	2,105,431	4,501	-391,618	-103	1,713,813	4,398
Conservation Stewardship Program (2018)	515,024	93	626,347	640	627,361	1,166	+81,122	-15	708,483	1,151
Conservation Stewardship Program (2014)	924,168	1,302	1,593,082	811	443,466	35	-387,012	+1	56,454	36
Agricultural Conservation Easement Program	428,147	321	492,909	321	627,572	598	-211,529	-13	416,043	585
Regional Conservation Partnership Program	48,503	65	52,722	69	470,881	112	+29,798	+2	500,679	114
Conservation Reserve Program (TA Only)	77,899	515	110,201	700	181,165	817	94,553	+233	275,718	1,050
Agricultural Management Assistance	4,403	7	4,497	6	4,715	6	-	-	4,715	6
Voluntary Public Access and Habitat Incentive	250	-	49,524	-	548	2	-379	-	169	2
Feral Swine Eradication and Control Pilot Prg	-	-	16,898	1	13,182	4	-6,958	-	6,224	4
Agricultural Water Enhancement Program	262	1	153	1	5,503	1	-4,732	-	771	1
Chesapeake Bay Watershed Program	558	5	881	7	8,273	7	-8,273	-7	-	-
Farm and Ranch Lands Protection Program	10,486	1	11,205	-	21,293	-	-3,246	-	18,047	-
Grassland Reserve Program	222	-	5,580	-	5,165	-	-706	-	4,459	-
Wetlands Mitigation Banking Program	526	4	153	1	881	1	-881	-1	-	-
Wetlands Reserve Program	28,342	27	8,662	2	16,086	2	-14,095	-	1,991	2
Wildlife Habitat Incentives Program	1,367	13	1,416	9	6,083	9	-5,143	-5	940	4
Healthy Forest Reserve Program	54	-	202	-	7,711	-	-7,711	-	-	-
Conservation Security Program	-73	-	43	-	487	-	-487	-	-	-
Subtotal Mand Oblig	3,797,466	4,996	4,787,717	4,993	4,545,803	7,261	-837,297	+92	3,708,506	7,353
Total Obligations	3,797,466	4,996	4,792,598	4,995	4,562,803	7,264	-854,297	+89	3,708,506	7,353
Add back:										
Lapsing Balances	287	-	327	-	-	-	-	-	-	-
Balances Available, EOY:										
Mandatory Farm Security and Rural Investment Program	1,985,801	-	2,329,039	-	1,060,393	-	-337,049	-	723,344	-
Discretionary Farm Security and Rural Investment Program	-	-	5,000	-	-	-	-	-	-	-
Total Bal. Available, EOY	1,985,801	-	2,334,039	-	1,060,393	-	-337,049	-	723,344	-
Total Available	5,783,554	4,996	7,126,964	4,995	5,623,196	7,264	-1,191,346	+89	4,431,850	7,353
Less:										
Total Transfers Out	60,228	-	60,228	-	60,228	-	-	-	60,228	-
Sequestration	260,019	-	304,468	-	201,730	-	+5,700	-	207,430	-
Recoveries, Other	-272,675	-	-335,389	-	-	-	-	-	-	-
Bal. Available, SOY	-1,549,768	-	-1,985,801	-	-2,334,039	-	+1,273,646	-	-1,060,393	-
Total Appropriation	4,281,358	4,996	5,170,470	4,995	3,551,115	7,264	+88,000	+89	3,639,115	7,353

Note: The project statement and MAX discrepancy is due to MAX reporting reimbursable funding and FTEs, which are not included in the project statement.

Farm Security and Rural Investment Programs

The Agriculture Improvement Act of 2018 amended Title XII of the Food Security Act of 1985, reauthorizing some programs, and creating the Feral Swine Eradication and Control Pilot Program that is administered jointly by NRCS and APHIS. A number of conservation programs were extended in the 2022 Budget's baseline based upon scorekeeping conventions.

Total available budget authority is shown net of sequester, and transfers. FY 2019 sequestration was applied at 6.2 percent, FY 2020 sequestration was applied at 5.9 percent, FY 2021 sequestration was applied at 5.7 percent, and FY 2022 sequestration is applied at 5.7 percent.

PROPOSED LEGISLATION

Farm Security and Rural Investment Account

Proposal

The 2022 Budget includes two proposals within this account as part of the American Jobs Plan:

- The Budget proposes to increase funding for the Environmental Quality Incentives Program by $50 million per year (totaling $500 million over ten years).

- The Budget proposes to increase funding for the Regional Conservation Partnership Program by $100 million over four years (totaling $400 million).

Budget Impact

Table NRCS-51. Change in Funding and Outlays
(Change in Funding and Outlays (thousands of dollars)

Item	2022	2023	2024	10 Year Total
Increase Regional Conservtion Partnership Program by $100 million per year over 4 years for Net-Zero Ag Technology Initiative				
Budget Authority	+$100,000	+$100,000	+$100,000	+$400,000
Outlays	+$2,000	+$26,000	+$51,000	+$400,000
Increase Technology to Increase Drought Resilience for Ag. Producers by $50 million per year				
Budget Authority	+$50,000	+$50,000	+$50,000	+$500,000
Outlays	+$18,000	+$32,000	+$40,000	+$432,000

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTE

Table NRCS-52. Geographic Breakdown of Obligations (thousands of dollars)

Farm Security and Rural Investment Programs – 2020 Actuals

State/Territory/Country	ACEP	AMAP	AWEP	CBWP	CRPG	CSPG	CSTP	EQIP	FRPP	FSCP	GRPG	HFRP	RCPP	UAIP	VPAP	WHIP	WMBP	WRPG	BCAP
Alabama	$3,229	-	-	-	$1,199	-	$19,047	$32,904	-	$3,748	-	-	$1,028	-	-	-	-	-	-
Alaska	294	-	-	-	68	-	1,003	11,369	-	-	-	-	56	-	-	$20	-	$1	-
Arizona	2,124	-	-	-	44	-	3,096	19,693	-	-	-	-	599	-	$1,175	-	-	-	-
Arkansas	34,061	-	$5	-	850	-	188,936	61,774	-	3,490	-	-	3,838	-	2,100	91	-	-	-
California	28,529	-	120	-	333	-	14,246	121,571	-	-	-	-	2,419	-	-	87	-	-	-
Colorado	13,267	-	-	-	1,882	-	32,404	50,261	-	-	-	-	1,285	-	1,221	-	-	116	-
Connecticut	3,856	$182	-	-	55	-	643	7,229	-	-	-	-	65	-	-	44	-	-	-
Delaware	6,030	122	-	-	120	-	2,382	8,064	-	-	-	-	16	-	-	12	-	-	-
District of Columbia	49,430	-	-	-	8,947	-	79,764	177,698	$11,204	-	$5,520	$171	12,592	$4,881	697	-	$154	3,344	-
Florida	37,372	-	-	-	231	-	9,215	30,256	-	1,496	-	-	2,273	-	-	24	-	-	-
Georgia	6,474	-	-	-	808	-	85,271	54,450	-	1,500	-	-	2,801	-	1,919	34	-	-	-
Hawaii	1,695	21	-	-	76	-	1,826	13,701	-	-	-	-	139	-	-	-	-	-	-
Idaho	7,612	-	-	-	942	-	13,381	31,303	-	-	-	-	245	-	906	40	-	96	-
Illinois	9,265	-	-	-	10,926	-	87,263	21,947	-	-	-	-	197	-	2,009	24	-	175	-
Indiana	11,691	-	-	-	6,811	-	24,072	34,636	-	-	-	-	372	-	753	-	-	16	-
Iowa	14,122	-	-	-	15,809	-	61,179	40,931	-	-	-	-	121	-	1,513	-	-	4	-
Kansas	4,724	-	-	-	4,274	-	74,312	49,077	-	-	45	-	1,165	-	2,101	1	-	20	-
Kentucky	23,704	-	-	-	2,107	-	18,903	27,239	-	-	5	16	638	-	850	-	-	17	-
Louisiana	29,647	-	-	-	325	-	69,897	34,848	-	1,537	-	-	45	-	-	1	-	3,267	-
Maine	214	1,045	-	-	98	-	1,358	15,802	-	-	-	-	326	-	-	31	-	-	-
Maryland	1,134	379	-	$136	1,685	-	2,942	14,467	-	-	-	-	641	-	-	-	-	-	-
Massachusetts	4,109	31	-	-	50	-	1,174	7,079	-	-	-	-	163	-	-	40	-	-	-
Michigan	6,091	-	21	-	1,291	-	21,167	23,672	-	-	-	-	3,958	-	1,590	44	-1	-	-
Minnesota	2,678	-	5	-	7,848	-	170,705	34,687	-	-	-	-	1,504	-	2,518	-	-	335	-
Mississippi	18,694	-	-	-	2,677	-	171,280	63,180	-	1,500	-	-	567	-	-	-	-	-	-
Missouri	12,129	-	-	-	4,466	-	66,519	42,253	-	-	-	-	117	-	2,233	48	-	5	-
Montana	24,278	-	-	-	1,544	$42	78,569	42,480	-	-	-	-	1,064	-	1,901	-	-	-	-
Nebraska	9,020	-	2	-	3,876	-	97,842	34,986	-	-	-	-	617	-	3,000	-	-	-13	-
Nevada	199	201	-	-	36	-	1,262	9,733	-	-	-	-	49	-	-	10	-	-10	-
New Hampshire	4,496	9	-	-	39	-	1,368	6,702	-	-	-	-	37	-	-	30	-	-	-
New Jersey	1,983	87	-	-	149	-	796	7,851	-	-	-	-	47	-	-	100	-	22	-
New Mexico	5,398	-	-	-	405	-	33,049	29,318	-	-	-	-	60	-	1,007	-	-	-	-
New York	1,921	224	-	437	1,223	-	9,986	17,149	-	-	-	-	162	-	-	57	-	238	-
North Carolina	9,654	-	-	-	758	-	12,102	29,569	-	563	-	-	4,862	-	-	-	-	-	-
North Dakota	3,377	-	-	-	3,681	-	148,833	27,017	-	-	-	-	668	-	-	-	-	-	-
Ohio	6,089	-	-	-	6,767	-	14,564	32,717	-	-	-	-	197	-	1,832	-	-	-	-
Oklahoma	3,082	-	-	-	1,014	-	68,527	33,357	-	1,045	-	16	46	-	3,000	48	-	331	-
Oregon	4,829	-	-	-	834	-	52,940	34,222	-	-	-	-	654	-	2,850	26	-	3	-
Pennsylvania	2,006	457	-	224	1,541	-	15,634	34,578	-	-	7	-	325	-	668	48	-	38	-
Puerto Rico	92	-	-	-	22	-	755	13,302	-	-	-	-	19	-	-	-	-	-	-
Rhode Island	2,316	142	-	-	29	-	819	4,694	-	-	-	-	714	-	-	40	-	-	-
South Carolina	2,232	-	-	-	314	-	19,647	42,802	-	535	-	-	32	-	470	146	-	137	-
South Dakota	7,838	-	-	-	3,840	-	203,369	26,106	-	-	-	-	69	-	2,186	18	1	-3	-
Tennessee	6,579	-	-	-	1,106	-	21,589	48,788	-	-	-	-	683	-	-	-	-	-7	-
Texas	21,216	-	-	-	3,476	-	72,897	120,131	-	1,484	-	-	2,158	-	1,841	80	-	106	-
Utah	7,842	24	-	-	159	-	14,756	32,530	1	-	1	-	392	-	-	2	-	-	-
Vermont	6,367	399	-	-	106	-	1,297	17,019	-	-	-	-	275	-	-	-	-	295	-
Virginia	2,499	-	-	2	857	-	17,793	35,509	-	-	-	-	337	-	3,005	-	-	-	-
Washington	1,083	-	-	-	1,492	-	39,283	31,965	-	-	-	-	1,409	-	2,736	129	-	4	-
West Virginia	2,819	766	-	82	134	-	7,408	15,658	-	-	-	-	460	-	-	143	-	4	-
Wisconsin	16,201	-	-	-	2,670	-	54,952	35,469	-	-	-	-	162	-	1,906	-	-	-	-
Wyoming	7,320	411	-	-	210	-	7,410	19,498	-	-	1	-	57	-	1,538	-	-	120	-
Obligations	492,909	4,497	153	880	110,201	42	2,219,429	1,813,242	11,205	16,898	5,580	202	52,722	4,881	49,524	1,416	153	8,662	-
Lapsing Balances	-	208	-	-	-	-	-	-	-	-	-	-	-	119	-	-	-	-	-
Rescinded Balances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bal. Available, EOY	212,595	-	6,274	8,272	15,341	7,181	686,959	460,856	127453	20602	29939	7711	712718	-	4271	7023	5881	18077	2886
Total, Available	$705,504	$4,705	$6,427	$9,152	$125,542	$7,223	$2,906,388	$2,274,098	$138,658	$37,500	$35,519	$7,913	$765,440	$5,000	$53,795	$8,439	$6,034	$26,739	$2,886

Note: The Conservation Stewardship Program (CSTP) includes obligations and end of year balances for CSTP (2014) and CSTP (2018).

CLASSIFICATION BY OBJECTS

Table NRCS-53. Classification by Objects (thousands of dollars)

Item No.	Item	2019 Actual	2020 Actual	2021 Enacted	2022 Budget
	Personnel Compensation:				
	Washington, D.C.	$19,845	$21,158	$32,401	$32,012
	Personnel Compensation, Field	345,623	367,141	562,237	607,236
11	Total personnel compensation	365,468	388,299	594,638	639,248
12	Personal benefits	141,040	159,277	244,611	264,510
13.0	Benefits for former personnel	-	60	60	61
	Total, personnel comp. and benefits	506,508	547,636	839,309	903,819
	Other Objects:				
21.0	Travel and transportation of persons	7,458	8,040	8,160	2,038
22.0	Transportation of things	1,427	2,078	2,109	528
23.1	Rental payments to GSA	17,033	17,192	18,951	21,719
23.2	Rental payments to others	39,341	37,344	43,374	43,742
23.3	Communications, utilities, and misc. charges	3,104	-43	-	-
24.0	Printing and reproduction	258	32	32	8
25.1	Advisory and assistance services	1,566	96	97	24
25.2	Other services from non-Federal sources	181,980	263,564	679,046	212,753
25.3	Other goods and services from Federal sources	1,643	2,238	1,812	1,961
25.4	Operation and maintenance of facilities	17,977	149,438	154,486	40,543
25.5	Research and development contracts	1,697	2,165	2,197	550
25.6	Project Services	33	-	-	-
25.7	Operation and maintenance of equipment	679	1,097	1,114	279
26.0	Supplies and materials	4,552	4,510	4,579	1,147
31.0	Equipment	25,824	27,141	27,540	6,895
32.0	Land and structures	235,357	285,952	218,448	192,568
41.0	Grants, subsidies, and contributions	2,750,918	3,444,113	2,561,534	2,278,929
42.0	Insurance Claims and Indemnities	82	-	-	-
43.0	Interest and Dividents	29	6	15	3
44.0	Refunds	-	-1	-	-
	Total, Other Objects	3,290,958	4,244,962	3,723,494	2,803,687
99.9	Total, new obligations	3,797,466	4,792,598	4,562,803	3,707,506
	DHS Building Security Payments (included in 25.3)	$1,643	$2,238	$1,812	$1,961
	Information Technology Investments:				
	FBC-1001 Cust Engagement & Mgmt Svcs				
11	External Labor (Contractors)	5,226	11,060	9,116	9,116
25.2	Outside Services (Consulting)	7,120	-	-	-
	Subtotal FBC-1001 Cust Engagement & Mgmt Svcs	12,346	11,060	9,116	9,116
	FSA-125 Farm Programs				
25.2	Outside Services (Consulting)	3	-	-	-
	Subtotal FSA-125 Farm Programs	3	-	-	-
	FSA-127 Geospatial Services				
11	External Labor (Contractors)	2,034	1,030	31,046	30,591
25.2	Outside Services (Consulting)	124	-	-	-
	Subtotal FSA-127 Geospatial Services	2,158	1,030	31,046	30,591
	FSA-129 Program Financial Services				
11	External Labor (Contractors)	42	39	44	44
	Subtotal FSA-129 Program Financial Services	42	39	44	44
	NRCS-CDSI Conservation Delivery Streamline Initiative				
11	Internal Labor	149	-	-	-
	External Labor (Contractors)	20,371	3,830	3,612	3,612
25.2	Outside Services (Consulting)	1,702	333	-	-
	Subtotal NRCS-CDSI	22,222	4,163	3,612	3,612
	Total Major Investments	36,771	16,292	43,818	43,363
	Mission Area Non-Major Investment Totals	127,869	66,090	94,821	97,601
	Mission Area Standard Investment Totals	4,669	26,934	25,716	25,739
25.3	Mission Area WCF Transfers	-	111,340	102,479	104,616
	Information Technology Investments Total:	169,309	220,656	266,834	271,319
	Position Data:				
	Average Salary (dollars), ES Position	$177,705	$182,514	$184,339	$187,104
	Average Salary (dollars), GS Position	$72,038	$72,229	$72,951	$74,045
	Average Grade, GS Position	10.0	10.0	10.0	10.0

Note: The position data reported above is representative of data collected across all funding sources provided to NRCS, including, but not limited to Conservation Operations, Watershed Rehabilitation (Technical Assistance), Watershed and Flood Prevention Operations (Technical Assistance), Water Bank Program (Technical Assistance), and Farm Security and Rural Investment Program (Technical Assistance).

STATUS OF PROGRAMS

FARM SECURITY AND RURAL INVESTMENT PROGRAMS

Agricultural Conservation Easement Program (ACEP)

The Agricultural Conservation Easement Program (ACEP) is authorized by subtitle H of title XII of the Food Security Act of 1985, as amended by Section 2301 of the 2014 Farm Bill (P. L. 113- 79) and sections 2601-2605 of the Agricultural Improvement Act of 2018 (2018 Farm Bill). ACEP consolidates the purposes and functions of three former easement programs that are no longer authorized: Farm and Ranch Lands Protection Program (FRPP), the Grassland Reserve Program (GRP), and the Wetlands Reserve Program (WRP). Lands enrolled under these former easement programs are enrolled in ACEP. ACEP is funded by the Commodity Credit Corporation (CCC) and administered by NRCS. ACEP is a voluntary program through which NRCS provides financial and technical assistance to help conserve agricultural lands and wetlands, and their related benefits by directly acquiring or funding the acquisition of conservation easements on private or tribal lands. ACEP has two components - ACEP-Agricultural Land Easements (ACEP-ALE) and ACEP-Wetland Reserve Easements (ACEP-WRE).

ACEP-ALE helps farmers and ranchers keep their land in agriculture and continue as working lands. The program also protects grazing uses and related conservation values by conserving grassland, including rangeland, pastureland, and shrubland. ACEP-ALE easements require partnership with cooperating entities, which include Indian Tribes, State and local governments, or nongovernmental organizations (NGOs) that are committed to the long-term conservation of agricultural lands.

ACEP-ALE protects the Nation's most valuable lands for production of food, feed, and fiber by providing matching funds to ensure productive farmlands and ranchlands remain in agricultural use. By enrolling in ACEP-ALE, farmlands and ranchlands under commercial development pressures can remain productive and sustainable. Keeping land in agricultural use also reduces the amount of urban pollution (nitrogen, phosphorus, and sedimentation) from land that would otherwise be converted to lawns and impervious surfaces such as pavement and buildings. Ultimately, this assists with efforts in managing the Total Maximum Daily Load (TMDL) of nutrients flowing into public waters such as the Chesapeake Bay and the Mississippi River.

Through ACEP-WRE, NRCS provides technical and financial assistance directly to private landowners and Indian Tribes who voluntarily agree to restore, protect, and enhance wetlands through the sale of a permanent or 30-year wetland reserve easement to NRCS, or through a 30-year contract (tribes only). These wetland easements/contracts provide numerous benefits to the public that extend well beyond the footprint of the protected area. Wetlands provide habitat for fish and wildlife, including threatened and endangered species, improve water quality by filtering sediments and chemicals, reduce flooding, recharge groundwater, protect biological diversity, and provide opportunities for outdoor education, scientific, and recreational activities. The goal of ACEP-WRE is to achieve the greatest wetlands functions and values, along with optimum wildlife habitat, on every acre enrolled in the program, which is accomplished by restoring wetlands and associated habitats that were converted for agricultural use and have a high likelihood of successful restoration.

Over 50 percent of the Nation's wetlands in the lower 48 States have been lost since colonial times, and the greatest potential for restoration exists on private lands, which make up 70 percent of the land ownership in the country.

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

To enroll land through ACEP-ALE, NRCS enters into agreements with cooperating eligible entities.

NRCS requires certain terms and conditions under which the cooperating entity is eligible to receive NRCS ACEP cost-share assistance. For example, each agricultural land easement must be subject to easement deed terms that promotes the long-term agricultural viability of the land.

To enroll land through ACEP-WRE, NRCS enters into purchase agreements with eligible private landowners or Indian tribes that include the right for NRCS to develop and implement a wetland restoration plan. The plans are designed to restore, protect, and enhance the wetlands functions and values of the land. NRCS may authorize wetland reserve easement lands to be used for compatible economic uses, including activities such as hunting and

fishing, managed timber harvesting, or periodic haying or grazing if such uses are consistent with the long-term protection and enhancement of the wetland resources for which the easement was acquired.

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

- ACEP-ALE - cropland, rangeland, grassland, pastureland, and nonindustrial private forest land. NRCS prioritizes applications that protect agricultural uses and related conservation values of the land and those that maximize the protection of contiguous acres devoted to agricultural use; and
- ACEP-WRE - farmed or converted wetlands that can be successfully and cost- effectively restored. NRCS prioritizes applications based on the land's potential for protecting and enhancing wetland habitat for migratory birds and other wildlife.

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

ACEP-WRE: To apply for ACEP-WRE, landowners may submit applications at any time to their local USDA Service Center. NRCS determines landowner and land eligibility, ranks each application using ranking criteria developed with input from the State Technical Committee, and makes tentative funding selections. NRCS priorities for ACEP-WRE include the extent to which ACEP-WRE purposes would be achieved on the land, the significance of the wetland functions, and values that would be restored and protected, (including the value of the easement for protecting and enhancing habitat for migratory birds and other wildlife, the conservation benefits of obtaining an easement, the cost-effectiveness of enrolling the land to maximize environmental benefit per dollar expended, and whether Federal funds are being leveraged).

ACEP-ALE: NRCS and eligible entities sign a parcel cost-share agreement to obligate ACEP funds. The cooperating, eligible entities acquire the conservation easements and then hold, monitor, manage, and enforce the acquired easements. Generally, the Federal share for any easement acquisition cannot exceed 50 percent of the appraised market value of the conservation easement. Where NRCS determines that grasslands of special environmental significance will be protected, NRCS may contribute up to 75 percent of the market value of the agricultural land easement. Each conservation easement deed must include a provision granting the United States the right of enforcement to protect the Federal investment.

CEP-WRE: NRCS and an eligible landowner sign an Agreement to Purchase a Conservation Easement to enroll land and obligate ACEP funds. NRCS acquires and holds the easement and is responsible for the restoration, monitoring, and enforcement of that easement. NRCS may enroll eligible land through various ACEP-WRE enrollment options:

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

For ACEP-WRE, all costs associated with recording the easement in the local land records office, including recording fees, charges for abstract, survey and appraisal fees, and title insurance, are paid by NRCS, as part of its acquisition of the wetland reserve easement.

ACEP-ALE: In addition to helping landowners and eligible entities develop conservation easement deeds 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 agreements; review of deeds, title, and appraisals; and payment processing.

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

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

Current Activities

In 2020, $334 million in ACEP financial assistance funding was used to enroll an estimated 231,190 acres of farmland, grasslands, and wetlands through 437 new ACEP enrollments.

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. The agency also closed 388 ACEP easements which protected 148,653 acres during 2020.

ACEP-ALE Enrollment. NRCS processed ACEP-ALE applications on over 269,163 acres, including applications for ACEP-ALE on acres of grasslands of special environmental significance. Available funding allowed for the enrollment of applications for ACEP- ALE. Enrollment is defined as the point at which the cooperating entity, and NRCS enter into the cooperative agreement authorizing the cooperating entity to proceed with the purchase of the easement.

In 2020, NRCS enrolled a total of 173,834 acres in 225 new ACEP-ALE parcel contract enrollments through 106 program agreements (see table below). This includes 204 general agricultural land easements and 21 agricultural land easements on grasslands of special environmental significance. The average project size was 414 acres in general ALE, and 4,252 acres in ALE on grasslands of special environmental significance.

Table NRCS-54. Agreement Types

Agreement Type	2020 Parcel Contracts	2020 Acres Enrolled
ALE	225	173,834
Total	225	173,834

Since the inception of ACEP in 2014, NRCS has cumulatively enrolled 1,201 parcels in the ALE component of ACEP on 784,849 acres and has closed 688 easements on 425,409 acres. The table below shows ACEP-ALE cumulative enrollments and closings.

Table NRCS-55. Agreement Types

2014-2020	Parcels Enrolled – Cumulative Number	Parcels Enrolled - Cumulative Acres	Easements Closed – Cumulative Number	Easements Closed – Cumulative Acres
ACEP-ALE	1,201	784,849	688	425,409

ACEP-WRE Enrollment. In 2020, NRCS processed ACEP-WRE applications for over 516,546 acres. NRCS estimates the funding needed for enrollment of new acres in a given year by projecting the number of acres by enrollment option (i.e. permanent easements, 30-year easements, or 30- year contracts with Indian Tribes), and the geographic rate cap for the location of the acres to be enrolled.

In 2020, the agency enrolled a total of 57,355 acres in 212 new ACEP-WRE enrollments, or approximately seven percent of the demand for ACEP-WRE enrollment (see table below). The average project size was 271 acres.

Table NRCS-56. Contracts

2020	2020 Agreements	2020 Acres Enrolled
Contracts		
30-year contracts with Tribes	-	-
Total (Contracts Only)	-	-
Easements		
30-year easement	9	1,950
Permanent easement	203	55,405
Total	**212**	**57,355**

Since the inception of ACEP in 2014, NRCS has cumulatively enrolled 1,783 applications in the WRE component of ACEP on 335,419 acres and closed 1,273 easements on 231,311 acres. The below table shows ACEP- WRE cumulative enrollments and closings.

Table NRCS-57. 2014-2020 ACEP-WRE Cumulative Enrollments and Closings

2014 - 2020	Applications Enrolled Cumulative Number	Applications Enrolled Cumulative Acres	Easements Closed Cumulative Number	Easements Closed Cumulative Acres
Contracts				
30-year contracts with Tribes	2	447	N/A	N/A
Total (Contracts Only)	2	447	N/A	N/A
Easements				
30-year easement	155	32,632	134	29,012
Permanent easement	1,626	302,340	1,139	202,299
Total	**1,781**	**334,972**	**1,273**	**231,311**

Agricultural Management Assistance

Agricultural Management Assistance (AMA), authorizes the Secretary of Agriculture to use $10 million of Commodity Credit Corporation (CCC) funds for financial assistance in selected States where participation in the Federal Crop Insurance Program is historically low. Section 524(b) identifies the following States as 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. AMA is administered jointly by NRCS, the Risk Management Agency (RMA), and the Agricultural Marketing Service (AMS).

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. By statute, the agency receives 50 percent of the funds apportioned to AMA each year. 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.

AMA addresses the following national priorities:

- Reducing non-point source pollution, such as nutrients, sediment, pesticides, or excess salinity in impaired watersheds consistent with total maximum daily loads, where available;
- Reducing surface and groundwater contamination;
- Promoting conservation of ground and surface water resources;
- Reducing emissions, such as particulate matter, nitrogen oxides, volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards;
- Reducing unacceptably high levels of soil erosion and sedimentation on agricultural land; and
- Promoting at-risk species habitat conservation.

Like other financial assistance programs, AMA implementation is derived from a contract based on a conservation plan containing highly effective conservation practices to help mitigate the negative effects of resource concerns on the landscape and to the environment.

The practices most frequently utilized in conservation plans and AMA contracts include:

- Seasonal high tunnels to control the growing environment and improve plant health;
- Irrigation pipelines to convey irrigation water in an efficient and effective manner;
- Irrigation water management to assist clients in more effective and efficient management of water;
- Micro irrigation systems to deliver water more consistently;
- Cover crops to help improve soil health, reduce erosion, and improve air quality;
- Fencing installation to assist in the management of livestock grazing; and
- Brush management to control invasive species and increase land productivity.

The conservation provisions developed by the agency 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, ranking processes, and cutoff dates for ranking applications. States are responsible for within-State fund allocations, payment methods, and public outreach and information activities. Participants may use AMA in conjunction with other USDA conservation programs.

Applicants must own or control the land, which must be within a State in which the program is authorized and comply with the adjusted gross income limitation provisions of the Food Security Act of 1985. 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.

Participation in AMA is voluntary, and the agency works with the applicant to develop the required conservation plan. A contract may be for a period not to exceed ten years, and participants must agree to maintain cost-shared practices for the life of the practice. In addition, 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.

Current Activities

In 2020, over $7 million in CCC funds for financial assistance was obligated for 449 AMA contracts covering 6,608 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) due to the eligibility requirement that land must have been irrigated for two of the previous five years to receive EQIP funding. A number of these EQIP-ineligible producers are small-acreage or specialty-crop farming operations that provide high dollar value products to the public. By helping to mitigate the risks associated with these kinds of agricultural enterprises, AMA helps agriculture remain a valuable segment of local economies.

Agricultural Water Enhancement Program

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

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

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

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

- Included a high percentage of agricultural land and producers in the region or other appropriate area;
- Resulted in high levels of applied agricultural water quality and water conservation activities;
- Significantly enhanced agricultural activity;
- Allowed for monitoring and evaluation;
- Assisted agricultural producers in meeting a regulatory requirement that might otherwise reduce the economic scope of the producer's operation;
- Projected achieving the project's land and water treatment objectives within no more than five years;
- Included conservation practices supporting conversion of agricultural land from irrigated to dryland farming;
- Leveraged AWEP funds with funds provided by partners; and
- Assisted producers in areas with high-priority water quantity concerns in the following regions: Eastern Snake Plains Aquifer, Puget Sound, Ogallala Aquifer, Sacramento River Basin, Upper Mississippi River Basin, Red River, or Everglades.
- AWEP contracts provided technical and financial assistance directly to eligible producers to do the following:
- Construct or improve irrigation systems and increase irrigation efficiency; and
- Implement conservation practices to improve water quality and mitigate the effects of drought by conversion to less water-intense agricultural commodities or to dryland farming.

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

Total conservation payments are limited to $300,000 per person or legal entity during any six year period, regardless of the number of farms or contracts. Applicants must be an agricultural producer, have control of the land for the life of the contract, develop an AWEP plan of operations, and be compliant 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.

Current Activities

The 2014 Farm Bill repealed the authority to enter into new AWEP agreements and contracts. As a result, NRCS is assisting producers to implement existing contracts. In 2020, the assistance provided to the producers helped to implement more than 14 practices for $62,645 in payments for the completed practices. Currently, nine AWEP contracts on 2,666 acres remain active.

Chesapeake Bay Watershed Program

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

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

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

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

Section 2709 of the 2014 Farm Bill authorizes NRCS to use any funds made available for CBWP prior to October 1, 2013, to carry out contracts, agreements, and easements entered into prior to February 7, 2014, the date of enactment of the 2014 Farm Bill. Therefore, financial assistance under CBWP is used to support existing contracts.

All remaining technical assistance through CBWP is used to help agricultural producers implement their existing contracts.

Current Activities

In 2020, all activities focused on implementing existing contracts. The assistance provided to producers helped to implement 38 practices for $572,902 in payments for the completed practices. Currently, five CBWP contracts on 324 acres remain active.

Implementation of existing CBWP contracts continues to play an important role in the improvement of water quality by addressing numerous natural resource concerns:

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

Conservation Stewardship Program

The 2018 Farm Bill reauthorized CSP through 2023 and changed the program from acre-based to a cash-based program. In addition, the Grassland Conservation Initiative (GCI) was added to CSP. The Commodity Credit Corporation funds CSP.

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

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

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

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

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. NRCS evaluates applications that face similar natural resource problems using a competitive ranking process.

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. Even though the program is national in scope, the agency did not establish national targeted resource concerns. Instead, States determine five targeted resource concerns that are of respective specific concern or for geographic areas within the State.

To be eligible for CSP, an applicant must meet each of the following three components - applicant, land, and stewardship threshold eligibility. 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 within the FSA records system. An operator of record waiver can be approved by NRCS where sufficient evidence of control exists. Eligible lands include cropland, pastureland, rangeland, non-industrial private forestland, associated agricultural land, farmstead, agricultural land under the jurisdiction of an Indian tribe, and other private agricultural land on which resource concerns related to agricultural production could be addressed.

Once applicant and land eligibility are determined, NRCS uses a science-based stewardship threshold for each resource concern to assess an applicant's existing and planned conservation activities. These activities must meet or exceed the stewardship threshold for at least two resource concerns at the time of the application, as well as one additional resource concern by the end of the CSP contract. In 2019, NRCS began using new tools to evaluate applications, including Conservation Assessment and Ranking Tool (CART) to assist customers and planners with the specific land use evaluations of the overall land use management systems that are part of the agricultural operations. NRCS uses CART to determine eligibility for the program, and to document customer decisions to adopt conservation activities. The evaluations provide estimates of the applicant's current and future conservation levels. The tool also increases awareness of which conservation activities can be adopted to meet additional resource concerns of the operation. Eligible applications are then ranked using CART.

CSP provides participants with two possible types of payments. An annual payment is available for installing new conservation activities and maintaining existing conservation activities. A supplemental payment may be earned by participants already receiving an annual payment who also adopt or improve a resource-conserving crop rotation. CSP pays participants for conservation performance of existing activities in place at the time of supplemental payment enrollment based on resource concerns met at the time of enrollment, the higher the performance, the higher the payment. Payment rates and estimated costs incurred for new conservations activities are documented in the developed and approved NRCS payment schedules. New conservation activities adopted through CSP must meet NRCS technical standards and nationally developed enhancement job sheets to earn program payment. States develop supplements to the job sheets to address additional local conditions and resource concerns. CSP contracts are for a five-year period, and payments are made as soon as practicable after October 1 of each year for contract activities installed and maintained in the previous year. Contract terms for CSP establish that payments to a person

or legal entity may not exceed $40,000 in any year, and $200,000 during any five-year period. However, joint operations may qualify for up to $400,000 over the term of the initial contract period.

CSP offers technical assistance to producers to address resource concerns in a comprehensive manner. Through the planning process, the agency helps producers, including forestry landowners, identify natural resource problems in their operation and provide technical and financial assistance to solve those problems in an environmentally beneficial and cost-effective manner.

Partnerships have been created with Federal, State, and local entities, including the National Association of Conservation Districts, State Associations of Conservation Districts, and local conservation districts to deliver a program beneficial to participants and the environment.

Cooperation is formed 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.

Current Activities

In 2020, CSP provided more than $507.2 million in financial assistance funding for new enrollments, as shown in the three State distribution tables below. These funds will be used to treat over 9.3 million acres. CSP funds also support conservation initiatives focused on targeted areas through the following land conservation initiatives: Lesser Prairie Chicken Initiative, Longleaf Pine Initiative, Sage Grouse Initiative, and Mississippi River Basin Initiative.

Table NRCS-58. 2020 CSP - Classic Enrollment

State	Acres Treated	Financial Assistance ($ Obligated)
Alabama	77,956	$7,881,451
Alaska	11	27,271
Arizona	73,336	363,276
Arkansas	97,069	14,585,998
California	369,556	6,953,259
Caribbean Region	1,012	130,594
Colorado	91,223	2,934,281
Connecticut	191	72,254
Delaware	3,676	226,428
Florida	43,885	1,897,997
Georgia	61,495	11,651,501
Idaho	141,811	4,288,348
Illinois	182,720	14,587,723
Indiana	67,443	7,334,893
Iowa	123,508	11,508,976
Kansas	131,187	10,703,107
Kentucky	47,803	5,706,152

State	Acres Treated	Financial Assistance ($ Obligated)
Louisiana	101,066	11,921,428
Maine	54,455	161,994
Maryland	12,487	1,064,011
Massachusetts	2,793	655,077
Michigan	143,794	10,590,517
Minnesota	90,419	11,491,560
Mississippi	87,979	13,863,670
Missouri	139,245	13,397,567
Montana	302,250	8,858,977
Nebraska	319,400	12,465,788
Nevada	6,004	428,768
New Hampshire	6,116	243,468
New Jersey	246	56,493
New Mexico	933,753	11,527,591
New York	18,561	1,895,174
North Carolina	64,530	6,011,198
North Dakota	185,924	11,294,539
Ohio	45,686	3,839,663
Oklahoma	102,679	4,097,279
Oregon	469,438	14,901,250
Pacific Island Area	2,205	419,389
Pennsylvania	40,440	4,618,863
Rhode Island	1,221	298,948
South Carolina	87,281	6,351,337
South Dakota	197,671	13,015,745
Tennessee	81,417	9,209,195
Texas	250,911	12,013,853
Utah	563,636	4,380,502
Vermont	10,442	612,378
Virginia	48,268	5,808,293
Washington	188,122	11,433,775

State	Acres Treated	Financial Assistance ($ Obligated)
West Virginia	15,806	1,429,084
Wisconsin	140,728	10,965,770
Wyoming	197,778	1,495,654
Grand Total	**6,426,633**	**$321,672,307**

Source: NRCS Protracts October 2020, official end-of-year dataset.

Table NRCS-59. 2020 CSP - Renewal Enrollment

State	Acres Treated	Financial Assistance ($ Obligated)
Alabama	10,709	$1,033,142
Arkansas	107,731	13,119,291
California	16,107	472,049
Colorado	20,406	1,678,031
Connecticut	2	18,236
Delaware	869	141,155
Florida	42,577	1,563,428
Georgia	53,603	9,735,062
Idaho	42,906	747,853
Illinois	199,902	14,079,866
Indiana	6,284	775,736
Iowa	50,582	4,072,645
Kansas	46,392	3,317,248
Kentucky	8,615	1,080,108
Louisiana	71,986	9,020,073
Maine	775	34,539
Maryland	891	50,434
Massachusetts	17	12,879
Michigan	24,089	1,229,235
Minnesota	100,140	11,113,825
Mississippi	33,706	5,374,943
Missouri	68,949	5,188,832

State	Acres Treated	Financial Assistance ($ Obligated)
Montana	192,783	4,577,493
Nebraska	179,053	7,837,247
New Hampshire	2,638	72,783
New Jersey	133	23,230
New Mexico	81,497	1,220,386
New York	18,555	1,087,980
North Carolina	4,642	213,229
North Dakota	103,003	7,234,153
Ohio	8,698	854,385
Oklahoma	54,683	1,288,089
Oregon	122,211	3,865,568
Pacific Island Area	1,454	57,357
Pennsylvania	10,487	1,613,105
South Carolina	31,608	2,149,742
South Dakota	409,975	17,274,412
Tennessee	21,655	1,202,673
Texas	113,209	2,843,016
Utah	106,355	1,017,070
Vermont	342	34,979
Virginia	12,592	1,190,998
Washington	30,949	2,065,986
West Virginia	4,667	442,063
Wisconsin	97,311	8,287,775
Grand Total	**2,515,738**	**$150,312,329**

Source: NRCS Protracts October 2020, official end-of-year dataset.

Table NRCS-60. 2020 CSP – GCI

State	Acres Treated	Financial Assistance ($ Obligated)
Alabama	4,849	$436,152
Alaska	102	9,180

State	Acres Treated	Financial Assistance ($ Obligated)
Arizona	437	39,360
Arkansas	3,947	355,340
California	4,834	435,110
Colorado	11,152	1,003,820
Florida	2,045	184,115
Georgia	5,678	507,735
Idaho	4,008	360,805
Illinois	184	16,560
Indiana	391	35,255
Iowa	1,790	161,240
Kansas	39,941	3,595,780
Kentucky	699	62,925
Louisiana	11,110	998,139
Maine	30	2,730
Maryland	236	21,250
Massachusetts	155	13,955
Michigan	61	5,460
Minnesota	1,076	96,905
Mississippi	3,724	334,940
Missouri	11,804	1,062,805
Montana	22,099	1,989,200
Nebraska	10,426	938,665
New Jersey	103	9,290
New Mexico	6,250	562,580
New York	832	74,905
North Carolina	1,882	169,551
North Dakota	8,963	806,900
Ohio	643	57,928
Oklahoma	84,653	7,580,640
Oregon	1,369	123,215
Pennsylvania	471	42,166

State	Acres Treated	Financial Assistance ($ Obligated)
South Carolina	2,017	181,570
South Dakota	9,421	848,073
Tennessee	4,964	447,015
Texas	120,513	10,840,175
Utah	1,174	105,650
Virginia	3,729	335,805
Washington	260	23,410
West Virginia	564	50,775
Wisconsin	331	29,825
Wyoming	3,949	355,415
Grand Total	**392,866**	**$35,312,314**

Source: NRCS Protracts October 2020, official end-of-year dataset.

Environmental Quality Incentives Program

Sections 2301-2309 of the 2018 Farm Bill reauthorized and revised the Environmental Quality Incentives Program (EQIP) (16 U.S.C. 3839aa).

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

EQIP is carried out in a manner that optimizes conservation benefits. EQIP provides:

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

National Priorities - EQIP statutory provisions require that at least 50 percent of the financial assistance funds for EQIP be targeted to livestock-related operations, including both confined livestock operations and grazed lands. With input from the public, agricultural and environmental organizations, Conservation Districts, agencies, and other partners, NRCS has the following national priorities for EQIP:

- Reduction of nonpoint source pollution, such as nutrients, sediment, pesticides, or excess salinity in impaired watersheds consistent with TMDLs, where available;
- Reduction of contamination from agricultural point sources, such as concentrated animal feeding

operations;
- Reduction of surface and groundwater contamination and conservation of surface and groundwater resources;
- Reduction of emissions, such as particulate matter, nitrogen oxides, volatile organic compounds, and ozone precursors and depleters, that contribute to air quality impairment violations of National Ambient Air Quality Standards;
- Reduction in soil erosion and sedimentation;
- Promotion of at-risk species habitat conservation; and
- Promotion of energy conservation.

To participate in EQIP, both the land and the applicant must be eligible. Eligible land includes cropland, rangeland, pastureland, private nonindustrial forestland, Tribal land, and other farm or ranch lands. The land must have an identified natural resource concern that poses a serious threat to soil, water, air, or related resources by reason of agricultural production activities with respect to soil type, terrain, climatic conditions, topography, flooding, saline characteristics, or other natural resource factors. Publicly-owned land is eligible when the land is under the control of an eligible producer for the contract period, is included in the participant's operating unit, and the participant has written authorization from the government agency to apply conservation practices. For irrigation-related practices, the land must have been irrigated for two out of the last five years. However, a limited waiver to this irrigation history requirement is available for limited resource and socially disadvantaged farmers and ranchers (including Tribal entities) when the land has not been irrigated for reasons that are beyond the producer's control.

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

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

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

EQIP payment rates may be up to 75 percent of the estimated incurred costs and up to 100 percent of income foregone related to implementing 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 the estimated incurred costs and up to 100 percent of income foregone. Payment rates and estimated incurred costs are documented in agency developed and approved payment schedules. Contracts have a maximum term of not more than ten years.

Total EQIP conservation payments are limited to $450,000 in financial assistance per person or legal entity for contracts entered into between 2018 through 2022, regardless of the number of contracts. Tribal entities themselves are not subject to payment limitations provided they certify that no individual tribal member exceeds their individual payment limitation.

The agency cooperates with Federal, State, and local partners to address local and national conservation issues, and to complement their conservation programs. Partners include the National Association of Conservation Districts, State Associations of Conservation Districts, and local conservation districts in an effort to deliver a program beneficial to program participants and the environment. Through interactive communication between the local

community, local interest groups, and State and Federal agencies, EQIP provides the partners with information and resources needed to address local priorities and implement State and national programs.

Joint Chiefs' Landscape Restoration Partnership – Through the Joint Chiefs' Landscape Restoration Partnership (LRP), NRCS and Forest Service are combining resources and coordinating activities to restore landscapes across ownership boundaries. The aim of the partnership is to reduce wildfire threats to communities and landowners, protect water quality and supply, and improve habitat for at-risk species seamlessly across public and private lands. By working across agency lines on adjacent public and private lands, conservation work in the project areas will be more efficient and effective. Projects selected for the Joint Chiefs' LRP demonstrate strong collaborations with local partners and readiness to implement the restoration work. These cross-boundary projects address priority conservation needs in that landscape while delivering benefits to local communities. Sixteen new three-year-long projects in fourteen States were selected in 2020. Currently, 36 projects across 23 States and United States territories are being implemented.

Current Activities

In 2020, EQIP financial assistance obligations totaled over $1.2 billion in 33,701 active or completed contracts covering an estimated 10.5 million acres. In addition to regular EQIP projects, these funds also supported projects in initiatives focused on environmental benefit and agricultural production as compatible goals, such as air quality, on-farm energy conservation, migratory bird habitat in the Mississippi River Basin, organic production, and high tunnel systems.

Air Quality – 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.

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

EQIP is popular among producers, and demand for the program is high across the country. Nationally, 44 percent of qualifying projects (valid applications which met all program requirements) were funded in 2020, as the table below shows.

Table NRCS-61. 2020 Total EQIP Program Demand

State	Total Applications Received	Number of Active and Completed Contracts	Unfunded Valid Applications	Valid Applications Funded (Percent)	2020 Average Contract Amount (Dollars)	Estimated Unfunded Application Amount (Dollars)
Alabama	3,849	1,379	1,030	57.2%	$17,734	$18,266,028
Alaska	116	72	5	93.5	127,490	637,449
Arizona	440	134	194	40.9	118,253	22,941,121
Arkansas	8,658	1,212	4,590	20.9	37,527	172,248,032
California	4,244	1,473	1,480	49.9	64,004	94,725,345
Colorado	1,686	526	719	42.2	71,472	51,388,193
Connecticut	160	81	14	85.3	66,455	930,377
Delaware	474	132	247	34.8	51,563	12,735,950
Florida	1,768	597	388	60.6	39,656	15,386,558

State	Total Applications Received	Number of Active and Completed Contracts	Unfunded Valid Applications	Valid Applications Funded (Percent)	2020 Average Contract Amount (Dollars)	Estimated Unfunded Application Amount (Dollars)
Georgia	5,749	1,416	1,615	46.7	28,427	45,908,925
Hawaii	312	116	121	48.9	72,908	8,821,850
Idaho	1,257	409	435	48.5	57,084	24,831,626
Illinois	2,133	427	304	58.4	38,283	11,638,127
Indiana	2,712	958	906	51.4	26,594	24,093,933
Iowa	4,623	980	1,651	37.2	29,372	48,493,497
Kansas	4,071	942	1,274	42.5	37,071	47,227,968
Kentucky	3,369	755	1,072	41.3	24,402	26,158,602
Louisiana	2,193	623	757	45.1	42,906	32,479,640
Maine	1,173	498	380	56.7	20,963	7,966,097
Maryland	790	266	270	49.6	37,438	10,108,323
Massachusetts	405	208	53	79.7	22,820	1,209,446
Michigan	2,445	1,059	452	70.1	15,756	7,121,529
Minnesota	3,512	611	1,209	33.6	45,079	54,500,738
Mississippi	11,436	1,932	4,871	28.4	24,242	118,083,632
Missouri	4,910	935	2,137	30.4	34,648	74,042,245
Montana	1,327	452	179	71.6	71,422	12,784,622
Nebraska	4,146	883	1,411	38.5	28,047	39,574,382
Nevada	246	76	98	43.7	101,362	9,933,453
New Hampshire	365	207	62	77.0	22,553	1,398,265
New Jersey	610	227	141	61.7	23,798	3,355,532
New Mexico	1,430	289	666	30.3	84,827	56,494,543
New York	1,145	308	85	78.4	45,102	3,833,648
North Carolina	2,648	468	1,646	22.1	46,047	75,792,593
North Dakota	1,342	446	306	59.3	47,543	14,548,175
Ohio	2,899	1,214	738	62.2	18,669	13,777,966
Oklahoma	4,541	895	1,626	35.5	27,361	44,488,532
Oregon	1,162	591	269	68.7	41,225	11,089,448
Pennsylvania	2,259	456	828	35.5	49,776	41,214,367

State	Total Applications Received	Number of Active and Completed Contracts	Unfunded Valid Applications	Valid Applications Funded (Percent)	2020 Average Contract Amount (Dollars)	Estimated Unfunded Application Amount (Dollars)
Rhode Island	212	105	51	67.3	30,109	1,535,564
South Carolina	3,005	983	1,163	45.8	35,750	41,577,174
South Dakota	1,291	326	84	79.5	53,820	4,520,880
Tennessee	3,511	1,216	1,025	54.3	29,576	30,314,930
Texas	8,620	2,991	2,521	54.3	28,729	72,425,426
Utah	1,524	412	625	39.7	64,008	40,004,909
Vermont	865	314	285	52.4	31,131	8,872,238
Virginia	1,479	441	628	41.3	55,768	35,022,139
Washington	781	236	180	56.7	88,319	15,897,362
West Virginia	1,549	393	563	41.1	24,403	13,739,125
Wisconsin	3,635	1,436	922	60.9	22,941	21,151,779
Wyoming	767	211	144	59.4	66,747	9,611,616
Pacific Basin	111	21	15	58.3	32,261	483,916
Puerto Rico	1,386	363	371	49.5	23,414	8,686,562
Grand Total	**125,341**	**33,701**	**42,806**	**44.0%**	**$35,885**	**$1,564,074,378**

Source: Protracts as of October 2020.

Unfunded valid applications include pre-approved, deferred, and eligible. Estimated value of unfunded valid applications ($) is determined from number of unfunded valid applications multiplied by average 2020 contract amount.

Conservation Innovation Grants (CIG)

Conservation Innovation Grants (CIG) are authorized as part of the Environmental Quality Incentives Program (EQIP) (16 U.S.C. 3839aa-8). CIG stimulates the development, adoption, and evaluation of innovative conservation approaches and technologies in conjunction with agricultural production. CIG projects transfer conservation technologies, management systems, and innovative approaches (such as market-based systems) to agricultural producers, NRCS staff, and the private sector.

The 2018 Farm Bill authorized a new CIG component—On-Farm Conservation Innovation Trials (On-Farm Trials). The traditional CIG component (Classic) and On-Farm Trials complement each other, with CIG Classic funding pilot projects, field demonstrations, and on-farm conservation research of promising technologies or approaches, and On-Farm Trials funding wider-scale adoption and evaluation of innovative conservation approaches such as those proven effective in CIG Classic. On-Farm Trials includes the Soil Health Demonstration Trial as a subcomponent.

Annually, NRCS publishes Notices of Funding Opportunity for national Classic and On-Farm Trial competition. In addition, NRCS State offices may opt to administer their own CIG competitions using a portion of their EQIP allocations. Between 20 and 30 States generally take advantage of this opportunity each year.

Current Activities

In 2020, $15 million in funding was made available for the national Classic competition which received over 100 applications in five priority areas – water quality, water reuse, wildlife, air quality, and energy conservation. Classic awards were announced in October 2020.

Twenty-five million in funding was made available for the 2020 national On-Farm Trials competition. Approximately 100 proposals were received across four priority areas - irrigation management technologies, precision agriculture technologies and strategies, management technologies and strategies, and the soil health demonstration trial. Fourteen On-Farm Trials awards were announced on September 29, 2020. In addition, 22 State offices held State-level CIG competitions in 2020, and approximately $6.5 million was awarded.

Farm and Ranch Lands Protection Program

The Farm and Ranch Lands Protection Program (FRPP) was authorized by Subchapter C of Chapter 2 of Subtitle D of Title XII of the Food Security Act of 1985 (16 U.S.C. 3838h et seq.), as amended. Section 2704 of the Agricultural Act of 2014 (P.L. 113-79) (the 2014 Farm Bill) repealed FRPP. However, Section 2704 also provided transitional language that ensures NRCS has authority to provide prior enrollees technical and financial assistance to complete work on prior year FRPP enrollments as needed. FRPP protected lands by providing matching funds to keep productive farm and ranch lands in agricultural use. The purposes and functions of FRPP were consolidated into the Agricultural Land Easements component of the Agricultural Conservation Easement Program (ACEP-ALE). Lands enrolled under FRPP are considered enrolled in ACEP-ALE, and are eligible to receive financial and technical assistance services authorized under ACEP.

Section 2704 of the 2014 Farm Bill authorized the continued validity of FRPP contracts, agreements, and easements, and authorized any unobligated FRPP funds made available between 2009 to 2013 to be used to support FRPP activities entered into prior to February 7, 2014, the date of enactment of the 2014 Farm Bill. Upon exhaustion of these prior year FRPP funds, the 2014 Farm Bill authorizes the use of ACEP funds to carry out these FRPP activities.

In addition to helping landowners and entities develop conservation easement deeds and conservation plans, NRCS may use FRPP prior year funds to provide technical assistance, as needed, for existing FRPP enrollments to complete activities such as final verification of the eligibility of the entity, landowner, and land; completion of hazardous materials assessments; enforcement of the terms of cooperative agreements; final review of deeds, title, and appraisals; and payment processing on lands enrolled into FRPP prior to February 7, 2014.

Current Activities

The 2014 Farm Bill repealed FRPP and combined its purposes with the Wetlands Reserve Program and the Grassland Reserve Program to create ACEP. No new enrollments of FRPP occurred in 2020. However, an adjustment of the FRPP acreage is a result of corrections to administrative records. The acquisition and closing of all FRPP-funded conservation easements have been completed.

Table NRCS-62. Cumulative Program Activity Through 2020

Closed Easements (Permanent)	**Cumulative**
Number of Easements	4,315
Number of Acres	1,066,621
Financial Assistance Funding	$668,794,600

Grassland Reserve Program

The Grassland Reserve Program (GRP) was authorized by Sections 1238 N through Q of the Food Security Act of 1985 (P.L. 99-198), as amended. Section 2705 of the Agricultural Act of 2014 (P.L. 113-79) (the 2014 Farm Bill) repealed GRP. However, Section 2705 also provided transitional language that ensured prior enrollments will continue to provide technical and financial assistance by NRCS. The 2014 Farm Bill combined the purposes and functions of GRP into the Agricultural Land Easement component of the Agricultural Conservation Easement Program (ACEP-ALE). Lands previously enrolled in GRP are now considered enrolled in ACEP-ALE, and the repeal of GRP does not affect the validity or terms of any contract, agreement, or easement entered into prior to the 2014 Farm Bill enactment.

Section 2705 of the 2014 Farm Bill authorized the continued validity of GRP contracts, agreements, and easements, and authorized any unobligated GRP funds made available between 2009 to 2013 to be used to support GRP activities entered into prior to February 7, 2014, the 2014 Farm Bill enactment date. The 2014 Farm Bill also authorized the use of ACEP funds to carry out these GRP activities.

GRP technical assistance includes development of grazing management plans, reviews of restoration measures, guidance on management activities, and biological advice to achieve optimum results considering all grassland resources. The 2014 Farm Bill authorized GRP prior year funds to be used by NRCS to provide ongoing technical assistance to existing GRP enrollments.

Current Activities

The 2014 Farm Bill repealed GRP and combined its purposes with the Wetlands Reserve Program and the Farm and Ranch Lands Protection Program to create ACEP. No new additional enrollment of GRP lands has occurred since 2013; however, contracts and easements signed prior to February 7, 2014, continue to be serviced by the agency. All GRP agreements for easements have completed the acquisition of the conservation easement. Enrollments include current active and completed agreements, but do not include cancelled or expired agreements.

Table NRCS-63. 2009 to 2013 GRP Enrollment Summary

No. of Agreements	391
No. of Acres Enrolled	266,133
Financial Assistance Funding	$320,641,800

Information regarding GRP rental contracts is available from the Farm Service Agency.

Healthy Forests Reserve Program

Title V of the Healthy Forests Restoration Act of 2003 (P.L. 108-148) authorized the establishment of the Healthy Forests Reserve Program (HFRP). The Food, Conservation, and Energy Act of 2008 (P.L. 110-246) amended the program to provide mandatory funding through the Commodity Credit Corporation. The 2014 Farm Bill made minor changes to HFRP by adding a definition of the term “acreage owned by Indian tribes”, identifying HFRP as a contributing program or (“covered program”) authorized to accomplish the purposes of RCPP, replacing mandatory funding with authorization of appropriations, and authorizing the use of conservation operation funds for HFRP stewardship responsibilities. The 2018 Farm Bill amended the provisions.

HFRP assists landowners in restoring, enhancing, and protecting forest ecosystems in order to: 1) promote the recovery of threatened and endangered species; 2) improve biodiversity; and 3) enhance carbon sequestration. HFRP provides financial assistance for specific conservation actions completed by the landowner. The agency’s Chief solicits project proposals that State Conservationists have developed in cooperation with partnering organizations. States with approved projects provide public notice of the availability of funding within the selected geographic area(s). HFRP offers four enrollment options:

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

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

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

The agency provides financial assistance payments consistent with enrollment in either a single payment or in ten or fewer annual payments, as agreed to between the agency and the landowner. Cost-share payments are also provided 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.

In coordination with the Department of the Interior's Fish and Wildlife Service and the Department of Commerce's National Marine Fisheries Service, the agency provides technical assistance to landowners through the development of 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. Technical assistance continues to be provided to the landowner after the project is enrolled by reviewing restoration measures and providing guidance on management activities and biological advice to achieve optimum results.

Current Activities

Cumulatively, 102 agreements have been enrolled, encompassing approximately 675,535 acres.

Table NRCS-64. Cumulative Program Activity (2006 Through 2020)

Closed Easements (Permanent and 30-Year)	**Cumulative**
Number of Easements	86
Number of Acres	21,026
Active and Completed Restoration Cost-Share Agreements	**Cumulative**
Number of Agreements	16
Number of Acres	654,509
Summary	**Cumulative Summary**
Total Agreements Enrolled	102
Total Acres	675,535

NRCS's Healthy Forests Reserve Program (HFRP) helps owners preserve, manage land in Minnesota
Originally offered in just 13 States, HFRP has been a popular and competitive program that enrolled over 675,000 acres from its inception through 2015. While not funded as a stand-alone program after 2015, the authorities of the Agricultural Act of 2014 through the Regional Conservation Partnership Program provided a new avenue for funding and enrollment opportunities for HFRP in approved project areas nationwide, helping to address much needed forest resource concerns and protect these forested working lands from development pressure.

A recent amazing success story for HFRP under this new funding approach began in 2017 when the Camp Ripley Sentinel Landscape partnership was awarded RCPP funding to enroll forest easements and implement agricultural best management practices that furthered Sentinel Landscape partnership priorities in support of the combined defense, conservation, and agricultural missions of the United States Department of Defense, Department of the Interior, and the Department of Agriculture.

Located along the northern stretch of the Mississippi River, the goal of the Camp Ripley Sentinel Landscape is to combine conservation easements with sustainable management practices to protect Camp Ripley's military mission while also enhancing important natural resources in the region. About a third of land surrounding the base are small private holdings that are mainly used for agriculture or recreation, but which also protect the quality of water entering the Mississippi River for local communities and downstream cities.

In 2020, through the Camp Ripley Sentinel Landscape RCPP agreement, NRCS was able to permanently protect a 430-acre forested parcel with an HFRP easement, the first in the State of Minnesota. This easement not only assists Camp Ripley to increase the critical buffer surrounding that base which supports the continued military mission of the installation, it also provides critical forested habitat for the endangered Northern long-eared bat and other forest wildlife, supports carbon sequestration that can help offset the impacts of increased greenhouse gas emissions and allows local landowners to keep working agricultural lands in their family.

Regional Conservation Partnership Program

The Regional Conservation Partnership Program (RCPP) was reauthorized by the Agriculture Improvement Act of 2018 (the 2018 Farm Bill). Through RCPP, NRCS seeks to co-invest with partners to implement projects that demonstrate innovative solutions to conservation challenges on a regional or watershed scale.

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

The 2018 Farm Bill changes to RCPP included the following:

- Standalone program - RCPP is now a standalone program with its own funding of $300 million annually. Landowners and agriculture producers enter into RCPP contracts and RCPP easements.
- Enhanced Alternative Funding Arrangement (AFA) provision—AFA projects are more grant-like and rely more on partner capacity to implement conservation activities.
- RCPP Renewals – This is a new provision providing NRCS with the authority to noncompetitively award new funding to the most successful existing RCPP projects.
- Three funding pools reduced to two – The national pool was eliminated. Partners apply to either the Critical Conservation Area or State/Multi-State funding pool.
- Emphasis on project outcomes – All RCPP projects now develop and report on their environmental outcomes.

As a result of these changes, RCPP conservation activities include a range of on-the-ground conservation activities implemented by eligible farmers, ranchers, and forest landowners. These activities are completed in RCPP contracts (rather than using the covered program contracts authorized under the Agricultural Act of 2014 (2014 Farm Bill) version of RCPP) that allow for greater flexibilities for partners, producers, and landowners participating in RCPP projects. The types of activities are:

- Land management/land improvement/restoration practices – Similar to the traditional EQIP/CSP-like contracts with practices to address the resource concern(s) identified on the land.
- Land rentals – Short-term rental contracts that supplement the transition from one farming practice to another; does not replace the traditional CRP programs.
- Entity-held easements – Similar to the traditional ACEP-ALE easement in which there is a partnership between a partner holding the easement and NRCS.
- United States-held easements – Similar to the traditional ACEP-WRE easement in which the United States Government purchases and holds the long-term easement for wetlands.
- Public works/watersheds – Similar to the P.L.-566 watershed plans and implementation to address large scale watershed concerns.

Applicants propose to employ any combination of these eligible activity types as part of an RCPP project.

NRCS funds approved partner proposals by entering into agreements with an eligible partner to implement a project that will assist producers with installing and maintaining qualified activities on eligible land. Partners contribute a significant portion toward meeting the overall costs of the project scope. RCPP-eligible partners include agricultural or silvicultural producer associations, farmer cooperatives or other groups of producers, State or local governments, Indian Tribes, municipal water treatment entities, water and irrigation districts, conservation-driven non-governmental organizations, and institutions of higher education. Partner contributions are used to leverage the financial benefits of the project to increase the natural resources being protected utilizing RCPP funds. The partnership agreement details the arrangement between the agency and the partner, including the programs being offered and any alternative funding arrangements.

The RCPP project selection process is outlined through announcements for program funding (APF) posted on www.grants.gov and the NRCS website. Project selections occur after applicants submit proposals using the web-based application system for RCPP. Proposals are then evaluated by a NRCS Review Team using criteria published in the APF. Beyond the technical proposal evaluations, NRCS may consider available funding, geographic diversity, applicant diversity, and other factors in making the final award decisions.

Projects receive financial assistance based on the terms agreed upon between NRCS and the lead project partners. The traditional RCPP component operates by providing funds directly to landowners and producers. The delivery of RCPP financial assistance is individually tailored to each project and based upon the needs and delivery options described in the proposal. Through RCPP's AFA component, RCPP financial assistance is delivered through partners using a more grant-like approach. Technical assistance is either provided directly to producers and landowners or through the partners for the implementation of practices and activities.

Current Activities
In April 2020, NRCS announced the 48 recipients of the 2019 RCPP awards, the first awards made under the 2018 Farm Bill. In September 2020, NRCS announced the ten awardees for the first ever separate RCPP AFA competition. NRCS released the 2020/2021 APF for the traditional RCPP competition on August 6, 2020, and accepted applications for proposals until November 4, 2020. NRCS anticipates announcing awards for this competition in March 2021.

Voluntary Public Access and Habitat Incentive Program

The Voluntary Public Access and Habitat Incentive Program (VPA-HIP) was authorized by Section 1240R of the Food Security Act of 1985 (P.L. 99-198), as amended (16 U.S.C. 3839bb-5). The program was reauthorized by the Agriculture Improvement Act of 2018 (the 2018 Farm Bill) with an authorized funding level of $50 million for the period covering 2019 through 2023. The Commodity Credit Corporation funds VPA-HIP.

VPA-HIP is a competitive grant program that provides opportunities to State and Tribal Governments to promote programs encouraging owners and operators of privately held farm, ranch, and forestlands to voluntarily make land accessible to the public for hunting, fishing, nature watching, hiking, and other wildlife-dependent recreation.

Only State and Tribal Governments are eligible to apply, through a competitive grants process, for program funding. Owners of private forest, farm, or ranchlands are eligible to receive funds from the State or Tribal Government awardees in a manner consistent with the proposals submitted to the agency, and in compliance with the conditions of the established formal agreements between NRCS and the awardees.

VPA-HIP awardees use the Federal funds to lease land from participating landowners for public use and to enhance wildlife habitat. VPA-HIP awards include funds for technical assistance to identify and/or improve existing quality wildlife habitat on private lands and provide outreach to socially disadvantaged and historically underserved landowners. VPA-HIP awardees use technical assistance funds to update maps and other information to ensure the public is aware of locations providing opportunities for wildlife-dependent recreation. NRCS State offices collaborate with VPA-HIP awardees in providing needed technical assistance.

Current Activities

In September 2019, NRCS published a Notice of Funding Opportunity that made up to $50 million available for three-year projects. On March 11, 2020, NRCS announced the selection of 27 award recipients in 27 States. NRCS State offices managing the awards finalized award agreements for all 27 award recipients by September 30, 2020. As of October 1, 2020, these three-year projects are underway.

Wetlands Reserve Program
The Wetlands Reserve Program (WRP) was authorized by Section 1237 of the Food Security Act of 1985 (P.L. 99-198), as amended, to assist landowners and tribes in restoring and protecting wetlands. WRP was repealed by Section 2703 of the Agricultural Act of 2014 (P.L. 113-79) on February provided transitional language that ensured prior enrollments will continue to provide technical and financial assistance. WRP was a voluntary program that provided technical and financial assistance to eligible landowners, enabling them to protect 7, 2014. However, Section 2703 also and restore valuable wetland ecosystems, including associated habitats such as uplands, riparian areas, and forest lands. WRP purposes were rolled into the Wetland Reserve Easements component of the Agricultural Conservation Easement Program (ACEP-WRE). Lands previously enrolled in WRP are now considered enrolled in ACEP-WRE and are eligible to receive financial and technical assistance services authorized under

ACEP. The repeal of WRP does not affect the validity or terms of any contract, agreement, or easement entered into prior to the enactment of the Agricultural Act of 2014.

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

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

Prior year WRP funding continues to be used to provide ongoing technical assistance to existing WRP easements and contracts entered into prior to the 2014 Farm Bill enactment date. Authorized activities include: completion of due diligence, easement closings, boundary surveys, restoration planning and design, and restoration implementation.

Current Activities

The 2014 Farm Bill repealed WRP and combined its purposes with the Farm and Ranch Land Protection Program and the Grassland Reserve Program to create ACEP. No new enrollments of WRP have occurred since the 2014 Farm Bill was signed into law; all closings to date related to WRP enrollments have been completed.

Table NRCS-65. WRP Cumulative Enrolled Easements, Restoration Cost-Share Agreements and Contracts with Tribes and Closed Easements

Agreement Type	Cumulative Agreements	Cumulative Acres
Enrolled Permanent Easements	10,856	2,096,617
Enrolled 30-year Easements	2,713	424,509
Restoration Cost-Share Agreement	396	89,867
30-Year Contract with Tribes	15	2,890
Total	13,980	2,613,883
Agreement Type	**Cumulative Easements**	**Cumulative Acres**
Closed Permanent Easements	10,856	2,096,617
Closed 30-Year Easements	2,713	424,509
Total	13,569	2,521,126

Table NRCS-66. Emergency Wetlands Reserve Program (EWRP) Cumulative Closed Permanent Easements

Agreement Type	Cumulative Agreements	Cumulative Acres
Closed Easements	731	84,042

The types of wetlands restored through WRP varies from vernal pools in the west and northeast to bottomland hardwood forests in the southeast, prairie potholes in the upper Midwest, coastal marshes, and mountain meadows, but consist primarily of floodplain forests and emergent marsh wetlands. Restoration and protection of these varied and valuable wetland types account for 85 percent of the acreage enrolled in WRP, while the remaining 15 percent of WRP acres includes adjacent upland habitats that provide nesting habitat and buffer area to the wetland areas. Most acres offered into WRP occur in areas that, despite having been drained or cleared for agricultural production, are still subject to frequent flooding or prolonged saturation, making them ideally suited for restoration and usually marginal for agricultural production.

Wetlands Mitigation Banking Program

The Wetland Mitigation Banking Program (WMBP) is a first-of-its-kind program funded through the 2014 Farm Bill and revised in the 2018 Farm Bill. WMBP provides a legal mechanism for agricultural producers to maintain their eligibility for USDA program benefits, if they convert agricultural wetlands. In particular, a producer may offset the loss of wetland functions and values resulting from a conversion activity by restoring, enhancing, or creating wetland functions and values on a different site. Through a mitigation bank, producers can purchase offsetting wetland "credits" which come from previously drained (prior to 1985) wetlands that have been restored and approved for wetland mitigation.

NRCS accepts grant proposals to establish mitigation banks for agricultural producers. The intent of the program is for qualified third parties to operate and manage all aspects of a wetland mitigation bank with oversight by NRCS. Eligible entities include Federally-recognized Indian tribes, State, and local units of government; for-profit entities; and nongovernmental organizations.

Program funds may be used to pay for:

- Development of a mitigation banking instrument.
- Identification of suitable mitigation sites and performance of functional assessments to determine the available credits and a credit release schedule.
- Market research and contracting for mitigation activities.
- Land surveys, permitting, and title searches.
- Design and formulation of mitigation plans.
- Restoration, enhancement, or creation of wetland mitigation bank sites in accordance with NRCS conservation practice standards.

- Tracking and management of wetland mitigation data.
- Direct administrative costs associated with implementing the project.
- Indirect costs of the awardee.

NRCS uses a grant agreement to provide program funds to each selected applicant. The project budget period, amount of Federal assistance, terms and conditions of the award, and reporting requirements are described and provided to the selected applicants as part of this process.

Subsequently, awardees work with NRCS to develop a mitigation banking instrument that provides full details for development, establishment, and operation of a mitigation banking program. Mitigation banking instruments are developed in conjunction with national and State NRCS staff oversight, and are subject to NRCS approval.

Eligible entities receiving funds will ensure the following wetlands receive priority for mitigation under WMBP (note that wetland designation labels are those used by NRCS for implementation of the wetland compliance provisions of the Food Security Act of 1985):

- Farmed Wetland (FW)
- Farmed Wetland Pasture (FWP)
- Wetland (W) less than five acres in size that is predominantly bordered by land that has been cropped eight of the past ten years when the wetland is designated as degraded according to a functional assessment tool
- Converted Wetland (CW) that, prior to conversion, qualified under one of the items of above, as determined by NRCS staff.

Activities funded by this program are for the sole purpose of assisting agricultural producers with wetland conservation compliance.

Current Activities

On May 5, 2020, NRCS published a notice of funding opportunity (NFO) that made up to $5 million available for WMBP. This funding was appropriated to NRCS by the 2020 consolidated appropriations bill. On September 28, 2020, NRCS announced the selection of eight award recipients in eight States. NRCS State offices managing these awards will execute grant agreements with the recipients by December 2020, and projects may then commence.

Wildlife Habitat Incentive Program

The Wildlife Habitat Incentive Program (WHIP) was authorized by Section 1240N of the Food Security Act of 1985 (16 U.S.C. 3839bb-1), as amended. NRCS administered WHIP with funds made available through the Commodity Credit Corporation. Section 2707 of the Agricultural Act of 2014 (P.L. 113–79) repealed WHIP. However, Section 2707 also provided transitional language that ensured prior enrollees will continue to be provided technical and financial assistance by NRCS. WHIP provided assistance to agricultural landowners for the protection, restoration, or enhancement of upland wildlife habitat, wetland wildlife habit, threatened and endangered species, fisheries, and other types of habitat. Focused efforts on fish and wildlife habitats also contributed to more sustainable use of resources and reduced greenhouse gas emissions. The purposes of WHIP were consolidated into EQIP by the 2014 Farm Bill.

Financial Assistance. Section 2707 of the 2014 Farm Bill authorized the use of unobligated WHIP funds from 2009 through 2013 to be used to support contracts entered into WHIP prior to the date of enactment of the 2014 Farm Bill. A WHIP contract may be modified to increase funds, provided the increased cost is the result of a valid contract modification within the original contract scope and intent.

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

Current Activities

The 2014 Farm Bill repealed the authority to enter into new WHIP contracts. As a result, priority was shifted to assist producers to implement existing contracts. In 2020, the agency worked with producers to implement 154

practices and made nearly $550,832 in payments for the completed practices. Currently, 114 WHIP contracts on 15,036 acres remain active.

Feral Swine Eradication and Control Pilot Program

The Feral Swine Eradication and Control Pilot Program (FSCP) was authorized by Section 2408 of the Agriculture Improvement Act of 2018 (P.L. 115-334). The Farm Bill provided $75 million in mandatory funding for 2019 through 2023, and this funding is equally divided between NRCS and the Animal and Plant Health Inspection Service (APHIS) to carry out the pilot program.

The objective of FSCP is to pilot collaborative efforts to address the threat that feral swine pose to agriculture, native ecosystems, human health, and animal health. Feral swine are an invasive species that damage agricultural crops, degrade natural systems, and can carry diseases that can be passed on to livestock and humans. Estimates of the damage caused by this invasive species, as well as associated control costs, exceed $2 billion annually in the United States. Feral swine are inhabitants across the United States, but the heaviest concentrations are found in the Southeastern portion of the country, and stretch as far west Texas and Oklahoma, with high populations also found in California.

Pilot areas for FSCP are identified collaboratively, by NRCS and APHIS States personnel in consultation with the State technical committee. FSCP is delivered within pilot areas through three coordinated components. First, APHIS works directly to control feral swine populations. Second, NRCS provides funding to partner organizations to provide technical and financial assistance to agricultural producers for on-farm trapping, and other means of feral swine control. Partner organizations also provide other services, including pre-and post-project damage assessments, and other means to assess progress in control efforts. Finally, NRCS provides technical and financial assistance for restoration of damage caused by feral swine after those populations have been controlled.

Delivery of FSCP is prioritized to those States that have the highest and most damaging feral swine populations. The existing APHIS National Feral Swine Damage Management Program has proved effective in addressing emerging populations in conjunction with States. The pilot program builds upon and expands work already underway by APHIS' National Feral Swine Damage Management Program, to reduce damages inflicted by feral swine, in areas with high population densities and in partnership with local government, the private sector, industry, and academia.

Current Activities

In 2020, NRCS provided funding for the 20 projects identified in the first round of the program, and announced a second round of projects. NRCS awarded approximately $16.8 million in FSCP funds to partners, to provide assistance to producers in 20 pilot projects distributed across ten States. For the second round of projects, USDA expanded the availability of the program to Hawaii, Kentucky, Missouri, and Tennessee. These States make up the next tier in the APHIS classification of States by feral swine density. USDA, in consultation with State Technical Committees, identified an additional 15 projects in eight States for potential funding. An announcement of funding opportunity soliciting partner proposals to implement these new pilot projects was published on September 21, 2020. In 2021, an agreement will be finalized in the amount of $530,791 with Auburn University and Texas A&M University. This agreement will focus on capturing landowner damage assessment data across all the pilot projects.

Office of Urban Agriculture and Innovative Production

The Office of Urban Agriculture and Innovative Production (OUAIP) was newly authorized by Section 12302 Urban Agriculture amending Section 222 of the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6911 et seq.). The Secretary of Agriculture delegated the Natural Resources Conservation Service to lead the USDA-wide office, and work in partnership with numerous USDA agencies that support urban agriculture.

The mission of the OUAIP is to encourage and promote urban, indoor, and other emerging agricultural practices, including:

- community gardens and farms located in urban areas, suburbs, and urban clusters;
- rooftop farms, outdoor vertical production, and green walls;
- indoor farms, greenhouses, and high-tech vertical technology farms;
- hydroponic, aeroponic, and aquaponic farm facilities; and
- other innovations in agricultural production, as determined by the Secretary.

OUAIP is directed to administer grants, and cooperative agreement pilot projects in at least ten States, establish ten new Urban/Suburban County Committees for Urban Agriculture, and establish a Federal Advisory Committee for Urban Agriculture. OUAIP used the $5 million in appropriated 2020 funds to meet the requirements, with a focus on developing a new comprehensive grants program and pilot project program.

Current Activities

OUAIP Urban Agriculture Grants

Urban Agriculture and Innovative Production (UAIP) Competitive Grants Program supports a wide range of activities through two grant types, which are Planning Projects and Implementation Projects. Activities include operating community gardens and nonprofit farms, increasing food production and access in economically distressed communities, providing job training and education, and developing business plans and zoning. Priority was given to projects located in, or targeting an Opportunity Zone, which is a census tract designation for low-income communities. In its first year, USDA received 500 applications for this program. USDA awarded approximately $1.14 million for three Planning Projects and approximately $1.88 million for seven Implementation Projects.

Community Compost and Food Waste Reduction Pilot Program

In 2020, USDA received 78 applications for the Community Compost and Food Waste Reduction (CCFWR) Pilot Program. Through the competitive process, USDA awarded approximately $1.09 million in 13 pilot projects that develop and test strategies for planning and implementing municipal compost plans, and food waste reduction. Priority was given to projects that anticipate or demonstrate economic benefits, incorporate plans to make compost easily accessible to farmers, including community gardeners, integrate other food waste strategies, including food recovery efforts, and collaborate with multiple partners.

Urban and Suburban County Committees

The 2018 Farm Bill authorized the Secretary to establish ten new Urban and Suburban Farm Service Agency (FSA) County Committees as part of a five-year pilot project. OUAIP worked closely with FSA to identify the locations; develop outreach, business, and operation plans and associated policies; and conduct national trainings and outreach sessions. The committees are organized through the OUIAP. The first five selected locations are, Albuquerque, New Mexico; Cleveland, Ohio; Philadelphia, Pennsylvania; Portland, Oregon; and Richmond, Virginia.

FSA will announce the remaining five locations in early 2021. These committees will make important decisions about how Federal farm programs are administered locally. Their input is vital to how FSA carries out disaster programs, as well as conservation, commodity and price support programs, county office employment, and other agricultural issues.

Urban Agriculture and Innovative Production Advisory Committee

During 2020, the OUAIP made inroads to establish the USDA Urban Agriculture and Innovative Production Advisory Committee (Committee) pursuant 7 U.S.C. §6923(b)(1). The Committee is to advise the Secretary on the development of policies and outreach relating to urban, indoor, and other emerging agricultural production practices.

At the end of 2020, OUAIP was working with the Department on finalizing the charter that will establish the Committee in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App. 2, and 41 CFR § 102-3.

Internal USDA Advisory Committee

To ensure cooperation and involvement of all relevant USDA agencies, USDA established an internal advisory committee with membership from agencies that have a mission which services urban agriculture and innovation. This Committee, identified as the OUAIP Committee, provided guidance to the OUAIP Designated Federal Official and developed recommendations on applicable policy for USDA leadership throughout 2020, and continue in 2021. Membership includes the following agencies: Agricultural Marketing Service, Agricultural Research Service, Animal Plant Health Inspection Service, Economic Research Service, Farm Service Agency, Food and Nutrition Service, Foreign Agricultural Service, Forest Service, National Agricultural Statistics Service, National Institute of Food and Agriculture, Natural Resources Conservation Service, Rural Development, Risk Management Agency, Office of the Chief Economist, Office of Partnership and Public Engagement.

AGENCY-WIDE PERFORMANCE AND EVALUATION

Introduction

The Farm Production and Conservation (FPAC) mission area is USDA's focal point for the nation's farmers and ranchers and other stewards of private agricultural lands and non-industrial private forest lands. FPAC agencies implement programs designed to mitigate the significant risks of farming through crop insurance services, conservation programs and technical assistance, and commodity, lending, and disaster programs. These agencies include the Farm Service Agency, the Natural Resources Conservation Service, the Risk Management Agency, and the FPAC Business Center (FPAC BC),

FPAC BC's Performance, Accountability, and Risk (PAR) division leads the mission area in Strategic Planning, Performance Management, Evidence and Evaluation, and Enterprise Risk Management (ERM). PAR works closely with each of the FPAC agencies to develop performance related practices and products. This office frequently works directly with USDA leadership and represents FPAC on the Department's Performance, Evaluation, Evidence Committee and the ERM Committee, which are facilitated by the USDA Office of Budget and Program Analysis. FPAC's Enterprise Risk and Strategy Committee, comprised of executives from each of the FPAC agencies, oversees and provides accountability for performance functions across the mission area.

USDA Strategic Goal 5: Strengthen the Stewardship of Private Lands Through Technology and Research

- Objective 5.1: Enhance Conservation Planning with Science-Based Tools and Information
- Objective 5.2: Promote Productive Working Lands
- Objective 5.3: Enhance Productive Agricultural Landscapes

A more detailed report of the performance can be found at https://www.usda.gov/our-agency/about-usda/performance . The following table summarizes the results for the Departmental Key Performance Indicators (KPIs) for which FPAC is responsible.

FY 2022-2026 Priorities:

- Employee Morale
- COVID Relief
- Equity and Inclusion
- Climate Change and Agriculture
- Rural Community and Economic Development
- Food Safety & Food and Nutrition Security
- Open and Competitive Markets
- Forest Service

Strategic Objective 5.1		FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
5.1.1. Contract Implementation Ratio	Results	N/A	N/A	87%	87%	87%	TBD	TBD
	Target	N/A	N/A	Baseline	87%	87%	87%	87%
	Status	N/A	N/A	N/A	Met	Met	TBD	TBD

Alignment to 2022–2026 priorities (see above): **Climate Change and Agriculture**: This measure supports protection and improvement of the environment through long-term monitoring of conservation implementation.

Strategic Objective 5.1		FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
5.1.2. Practice implementation rate	Results	N/A	N/A	43%	55%	43%	TBD	TBD
	Target	N/A	N/A	Baseline	53%	53%	53%	53%
	Status	N/A	N/A	N/A	Exc	Unmet	TBD	TBD

Alignment to 2022–2026 priorities (see above): **Climate Change and Agriculture**: This measure supports protection and improvement of the environment through consistent conservation practices.

Strategic Objective 5.2		FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
5.2.1. Cropland with conservation applied to improve soil quality (Million Acres) - EQIP	Results	2.8	3	3.1	3.4	3.9	TBD	TBD
	Target	N/A	N/A	3	3.1	3.4	3.4	3.4
	Status	N/A	N/A	Exc	Exc	Exc	TBD	TBD

Alignment to 2022–2026 priorities (see above): **Climate Change and Agriculture**: This measure supports protection and improvement of the environment through better soil quality which may help sequester carbon.

Strategic Objective 5.2		FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
5.2.2. Cropland with conservation applied to improve soil quality (Million Acres) - CTA	Results	6	5.9	6.0	.7	6.4	TBD	TBD
	Target	N/A	N/A	5.9	5.9	6.0	6.0	6.0
	Status	N/A	N/A	Exc	Met	Exc	TBD	TBD

Alignment to 2022–2026 priorities (see above): **Climate Change and Agriculture**: This measure supports protection and improvement of the environment through better soil quality which may help sequester carbon.

Strategic Objective 5.2		FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
5.2.3. Tons of sediment prevented from leaving cropland and entering waterbodies (Million Tons)	Results	4.6	4.8	5.3	6.3	8.2	TBD	TBD
	Target	N/A	N/A	4.6	5.7	5.7	5.7	5.7
	Status	N/A	N/A	Exc	Exc	Exc	TBD	TBD

Alignment to 2022–2026 priorities (see above): **Climate Change and Agriculture**: This measure supports protection and improvement of the environment through retention of topsoil and improved water quality.

Strategic Objective 5.3		FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
5.3.2. Working lands protected by conservation easements (Thousand Acres).	Results	75.7	60.7	163	178	167	TBD	TBD
	Target	N/A	N/A	101	140	163	163	163
	Status	N/A	N/A	Exc	Exc	Exc	TBD	TBD

Alignment to 2022–2026 priorities (see above): **Climate Change and Agriculture**: This measure supports protection and improvement of the environment preserving the ecosystem benefits of wetlands and preventing deleterious effects of additional development of farmland.

PROGRESS Toward the Achievement of Strategic Objectives FY 2021

Additional information regarding performance can be located within the Annual Performance Report submitted in conjunction with our Congressional Justifications. A high-level summary of progress is provided below:

In FY 2020, NRCS was not able to meet its performance target for *Practice implementation rate* due to:

There have been challenges concerning the methodology of this measure. NRCS will compile data from FY 2020 and FY 2021 to ensure stability in new methodologies before adjusting targets to reflect nominally higher outcomes present in FY 2020 data using the new quarterly metric paradigm. There was confusion implementing the transition of the new data capturing method, and as a result, the annual cumulative metric for FY 2020 was not met.

However, even when faced with these challenges, NRCS was able accomplish the following:

Conservation Delivery Streamlining Initiative (CDSI)

NRCS continued to refine the tools it has developed to better align staff with conservation work. NRCS implemented Conservation Desktop (CD) (one of three integrated systems including CD, Mobile Planning Tool, and Conservation Client Gateway) as an internally facing, map-based tool for field conservationists to efficiently develop science-based conservation plans and practice schedules to support conservation implementation. CD also helps field staff with the management of Farm Bill conservation program contracts. CD has been through multiple stages of implementation since initial release in 2017 and was integrated in 2020 with the Conservation Assessment and Ranking Tool (CART), which is used for performing science-based resource inventories, assessments, and ranking. With these implementation process improvements, including the use of CART and CD, NRCS expects to reap a savings of 2 hours for the processing and tracking of each Conservation Plan or Program Application. Cumulatively, this will result in an annual savings of 160,000 NRCS employee work hours and an increased response rate for NRCS customers.

Farmers.gov application

In addition to improving our customers experience, the Farmers.gov gateway app will interface with field staff via a one-stop, digital, customer facing conservation software. NRCS continues to monitor and improve Farmers.gov, where customers will have the ability to view, digitally sign, and interact with NRCS conservation documents, such as conservation contracts, payment documents, practices, and maps. Users may also submit assistance requests for new conservation plans.

Conservation Technical Assistance (CTA) Program

The CTA program is the backbone of the NRCS'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 mandatory programs. In FY 2020, over 336,000 customers received abbreviated technical assistance, and over 113,000 customers received comprehensive planning assistance. Results from this assistance included 31.3 million acres covered under written conservation plans; 34.1 million acres treated with conservation practices to improve water quality; 26.9 million acres of grazing and forest lands conservation; 9.4 million acres of wildlife habitat improvement; and 12.8 million acres of conservation applied on the ground to improve soil quality. In FY 2020, CTA was also used to fund the development of assessments used to guide investments in water quality in 34 watersheds or source water protection areas targeted through the National Water Quality and the Mississippi River Basin Healthy Watershed Initiatives.

Environmental Quality Incentives Program (EQIP)

EQIP advances the voluntary application of conservation practices to promote agricultural production, forest management, and environmental quality as compatible uses. Conservation practices funded through EQIP help producers improve the condition of soil, water, air, and other natural resources. The program assists owners and operators of agricultural and nonindustrial private forest land with the identification of natural resource problems and opportunities in their operation and helps address those identified problems in an environmentally beneficial and cost- effective manner. In FY 2020, over 9.8 million acres have been enrolled in EQIP conservation practices and activities that will improve agricultural lands and nonindustrial private forests. NRCS has also approved more than 32,000 contracts that total $1.1 billion. Conservation practices and activities funded through EQIP contracts accrue significant environmental benefits, including improved grazing lands, improved air quality, enhanced fish and wildlife habitat, sustainable plant and soil conditions, improved water quality and quantity, reduced soil erosion, and energy conservation that provide important ancillary economic and social benefits.

Agricultural Conservation Easement Program (ACEP)

The 2018 Farm Bill reauthorized ACEP through 2023 and added enhancements to streamline the easement acquisition process, which will continue to build upon prior years' efforts to help farmers and ranchers keep their land in agriculture. ACEP consists of two components: 1) an agricultural land easement (ALE) component under which NRCS assists eligible entities to protect agricultural land by limiting non-agricultural uses of that land through the purchase of agricultural land easements; and 2) a wetland reserve easement (WRE) component under which NRCS provides financial and technical assistance directly to landowners to restore, protect and enhance wetlands through the purchase of wetlands reserve easements. Through the ALE component, ACEP helps farmers and ranchers keep their land in agriculture. In FY 2020, NRCS reviewed and entered into 141 agreements with entities that are eligible to receive funding over the next five years. ACEP-WRE provides technical and financial assistance directly to private landowners and Indian tribes to restore, protect, and enhance wetlands through the purchase of wetland easements. WRE enrollment options include permanent easements, 30-year easements, term easements, and 30-year contracts (for acreage owned by an Indian Tribe). For FY 2020, there are 82 new enrollments protecting 15,022 acres of wetland and wetland-associated upland habitat.

Regional Conservation Partnership Program (RCPP)

RCPP promotes the implementation of conservation activities through agreements between partners and producers. RCPP, through agreements between partners and conservation program contracts directly with producers, helps implement conservation projects that may focus on water quality and quantity, soil erosion, wildlife habitat, drought mitigation and flood control or other regional priorities. The 2018 Farm Bill reauthorized RCPP as a standalone program with annual funding of up to $300 million. It creates new opportunities for funding up to 15 projects each year through Alternative Funding Arrangements or Grant Agreements to achieve conservation benefits on a regional or watershed scale. Successful RCPP projects provide innovative conservation solutions, leverage partner contributions, offer impactful and measurable outcomes, and are implemented by capable partners. For example, in 2018, an RCPP project led by Audubon California and Western United Dairymen saved all of California's known tricolored blackbird colonies by using RCPP funding to compensate landowners for postponing harvests in fields taken over by blackbird colonies. In Wisconsin, the Milwaukee River Watershed Conservation Partnership is using RCPP to build the capacity of watershed stakeholders within the Milwaukee River watershed. This will help to conserve farmland, improve water and soil quality and deliver good food, all while giving local farmers a helping hand.

Expected Progress at the 2022 Proposed Resource Level

At the requested budget levels, NRCS will be able to meet its projected performance target outlined in the table above.

Funding at the proposed levels will allow NRCS to meet or exceed its targets while mitigating the challenges it faces, making progress on its mission to aid and facilitate the conservation. In FY 2021 NRCS mitigates challenges presented in FY 2020 by:

Social distancing solutions/Phased office return

NRCS is rapidly adapting to new servicing protocol for program applications, contracting, and field-based delivery with social distancing. NRCS delivers technology and remote training to engage new employees in resource and application processing work. NRCS has a robust annual training effort utilizing the FPAC-Employee Development Section to conduct multiple classroom and field-based trainings. In alignment with the White House, CDC, and USDA guidance, NRCS has introduced a phased return to offices to ensure we continue to implement our programs and provide the highest quality customer experience. NRCS has taken steps to ensure our field staff take the necessary protective measures, including social distancing and use of PPE, to provide the best level of security we can for the health and safety of NRCS staff and the people we work with.

Workload/staffing solutions

To address the growing disparity between workload and staffing, NRCS has been developing and using data analytic models such as the National Staffing Distribution Model and the Optimally Productive Office model. The Optimally Productive Office study leverages analysis of cycle time analyses and core workload to determine how offices should be staffed. The study results are displayed in online dashboards. Additionally, NRCS is actively using the pathways program for recruitment efforts, both for interns and Presidential Management Fellows.

Directives Updates

NRCS is in the process of addressing the need to keep all policy guidance current. In addition to working with the various components of NRCS responsible for each directive's maintenance, NRCS is working with the Farm Production and Conservation Business Center to create a new directives management system and to track progress on this effort and the future maintenance of the directives system through the Operational Excellence platform, using SmartSheets.