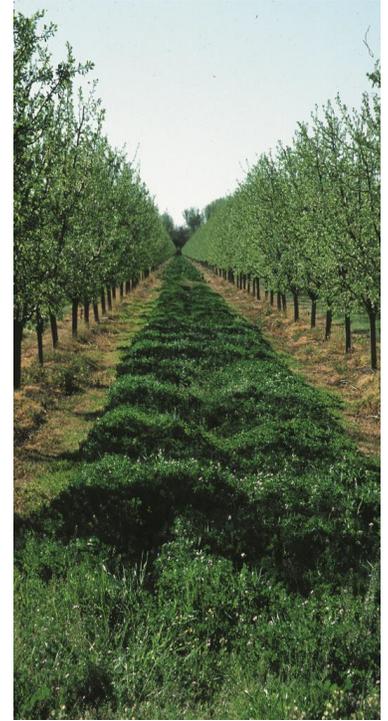




United States Department of Agriculture

Natural Resources Conservation Service



REGIONAL CONSERVATION PARTNERSHIP PROGRAM

**Programmatic
Environmental Assessment**

November 2020



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1.0 INTRODUCTION

The Regional Conservation Partnership Program (RCPP) is a voluntary collaborative program that provides financial and technical assistance to partners to help agricultural producers plan and implement conservation activities to address natural resource concerns on agricultural land, nonindustrial private forest land, and Tribal land. RCPP was first authorized by Congress in the Agricultural Act of 2014 (2014 Farm Bill.) As implemented under the 2014 Farm Bill, conservation activities within each selected RCPP project were accomplished through a combination of partnership agreements (between the Natural Resources Conservation Service (NRCS) and a lead partner), and contracts or agreements with eligible landowners, entities, and individuals under the regulations of one or more covered programs: the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Agricultural Conservation Easement Program (ACEP), and Healthy Forests Reserve Program (HFRP), and in designated critical conservation areas (CCAs), the Watershed Protection and Flood Prevention Act (Public Law 83-566, hereafter PL-566), excluding section 14 (watershed rehabilitation) of the act (16 U.S.C. 1012). The Agricultural Improvement Act of 2018 (2018 Farm Bill) modified the RCPP program that has been in place since 2014, so NRCS is publishing a final rule to implement those changes.¹

The National Environmental Policy Act of 1969 (NEPA) requires that Federal agencies prepare Environmental Impact Statements (EISs) for major Federal actions significantly affecting the quality of the human environment. When a proposed Federal action is not likely to result in significant impacts requiring an EIS, but the activity has not been categorically excluded from NEPA, an agency can prepare an Environmental Assessment (EA) to assist them in determining whether there is a need for an EIS.² The Council on Environmental Quality (CEQ) has defined “major Federal action” to include activities over which Federal agencies have control. Often, agencies exercise considerable discretion when promulgating a regulation. In the case of the 2018 Farm Bill, Congress has prescribed the program changes that must be made, and there is very little discretion remaining for NRCS to exercise. Decisions that do remain fall within categories of activities for policy development related to administrative functions and that deal solely with the funding of RCPP disbursements, that have been excluded from the requirement to prepare an EIS. NRCS has decided to prepare this programmatic EA to review at a broad, national scale the effects of activities that will occur on the ground when RCPP is implemented following 2018 Farm Bill requirements. This will provide a programmatic analysis to which those site-specific actions may tier, when appropriate, for purposes of complying with NEPA.

CEQ has indicated that because an EA is a concise document, the purpose of which is to determine the need for an EIS, it should not contain long descriptions or detailed data which the agency may have gathered. Rather, it should contain a brief discussion of the need for the proposal, alternatives to the proposal, the environmental impacts of the proposed action and alternatives, and a list of agencies and persons consulted.³ In addressing these requirements,

¹ Sections 1271-1271F. of the Agriculture Improvement Act of 2018 (2018 Farm Bill).

² See 40 CFR 1501.5; 7 CFR 650.8.

³ See Forty Most Asked Questions Concerning CEQ's NEPA Regulations, 23 March 1981.

this EA also incorporates by reference relevant analysis from the 2016 and 2020 EQIP Programmatic EAs, the 2009 and 2020 CSP Programmatic EAs, the 2016 and 2020 ACEP Programmatic EAs, the 2006 HFRP Programmatic EA⁴ and the 2014 Conservation Reserve Program (CRP) Supplemental Programmatic EIS⁵, as well as other existing analysis cited within this document.

2.0 BACKGROUND

2.1 Overview of RCPP under the 2014 Farm Bill

RCPP was initially authorized by section 2401 of the Agricultural Act of 2014 (the 2014 Farm Bill, Public Law 113-79; February 7, 2014). RCPP under the 2014 Farm Bill combined the purposes of four former conservation programs—the Agricultural Water Enhancement Program, the Chesapeake Bay Watershed Program, the Cooperative Conservation Partnership Initiative and the Great Lakes Basin Program. Congress also established additional purposes under RCPP: to further the conservation, restoration, and sustainable use of soil, water, wildlife, and related natural resources; to encourage eligible partners to cooperate with producers in meeting or avoiding the need for national, State, and local natural resource regulatory requirements related to production; and to implement projects that affect multiple agricultural or nonindustrial private forest operations over a broad geographic area.

RCPP partners developed project applications, in response to an annual RCPP Announcement for Program Funding (APF), to address specific natural resource objectives in a proposed area or region. Applicants included State and local governments, American Indian Tribes, municipal water treatment entities, water and irrigation districts, conservation-driven nongovernmental organizations, institutions of higher education, agricultural and silvicultural producer associations, farmer cooperatives, and other groups of producers. Partners also provided a substantial portion of the overall costs of the project. For example, between 2014 and 2016 NRCS provided about \$590 million to nearly 200 RCPP projects, while more than 2,000 partners contributed an estimated \$900 million to those same projects. Summaries of RCPP projects funded in fiscal years (FYs) 2014–18 are provided in appendix A.

NRCS selected projects from the applications submitted through the highly competitive application process using criteria described in the APF and worked with the partners to develop partnership agreements. Just over one-third of project proposals were funded. NRCS and partners delivered technical and financial assistance to producers in accordance with the rules and policy guidance for EQIP, CSP, ACEP, and HFRP. In designated CCAs, PL-566 was also used to carry out some projects.

2.2 Overview of RCPP 2018 Farm Bill Changes

Under the 2018 Farm Bill, RCPP remains a partnership program that promotes coordination between NRCS and its partners to deliver conservation assistance to producers and landowners. NRCS will continue to accept RCPP project proposals through annual APFs, notices of

⁴ https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/ecosciences/ec/?cid=nrcs143_008451

⁵ <https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/Environ-Cultural/CRP%20Final%20SPEIS.pdf>

National Funding Availability (NFOs), or other similar periodic announcements. Selected projects and eligible partners will be offered the opportunity to enter into programmatic partnership agreements (PPAs) with NRCS. NRCS will provide technical and financial assistance to address conservation benefits targeted in selected RCPP projects through two distinct types of PPAs: “classic” PPAs and alternative funding arrangements (AFA). RCPP financial assistance in classic PPAs will be provided through participant awards (RCPP contracts with eligible producers and supplemental agreements with eligible partners). RCPP financial assistance in AFA projects will be delivered through partners. Eligible partners will continue to provide a substantial portion of the overall costs of the scope of the project, which may include any combination of direct funding and in-kind support. In the 2018 Farm Bill, Congress mandated several changes to RCPP to simplify the application process, increase flexibility in the administration of agreements with partners, and eliminate the constraints of delivering assistance under the rules of the covered programs. Table 1 summarizes some of the changes made to RCPP.

Table 1. Selected Statutory Requirements of the Regional Conservation Partnership Program

Program Elements	2014 Farm Bill	2018 Farm Bill
<i>Funding by fiscal year (FY)</i>	\$100,000,000 for each FY (2014–18) and 7% of the funds or acres made available each year from ACEP, CSP, EQIP, and HFRP.	\$300,000,000 for each FY (2019–23) Repeals the 7% reserved resources from covered programs.
<i>Program Purposes</i>	To use covered programs to accomplish purposes and functions similar to those under the agricultural water enhancement program, Chesapeake Bay Watershed Program, Cooperative Conservation Partnership Initiative, and Great Lakes Basin Program for soil erosion and sediment control; further the conservation, restoration, and sustainable use of soil, water, wildlife, and related natural resources on a regional or watershed scale; encourage partners to cooperate with producers in meeting or avoiding the need for regulatory requirements related to production on eligible land; and in implementing projects that will result in the installation and maintenance of activities that affect multiple agricultural or nonindustrial private forest operations on a local, regional, State, or multistate basis.	Expands purposes to include furthering the conservation, protection, restoration, and sustainable use of sources of drinking water and ground water. Adds purposes to encourage the flexible and streamlined delivery of conservation assistance to producers through partnership agreements and to engage producers and eligible partners in conservation projects to achieve greater conservation outcomes and benefits for producers than would otherwise be achieved.

Program Elements	2014 Farm Bill	2018 Farm Bill
<i>Funding Pools</i>	RCCP projects received financial awards through one of three funding pools: projects in critical conservation areas (CCAs) received 35% of funding, nationwide and multistate projects competed in a national funding pool for 40% of funding, and 25% of funding was available for projects in a single State.	Reduces the number of funding pools by eliminating the national competitive process. State and multistate pool will have 50% of the funds and CCAs will have 50% of the funds.
<i>Critical Conservation Areas (CCAs)</i>	Eight CCAs were designated and set to expire in 5 years (2019): Chesapeake Bay Watershed, Great Lakes Region, Mississippi River Basin, Colorado River Basin, Longleaf Pine Range, Columbia River Basin, Prairie Grasslands Region, and California Bay Delta.	One or more priority resource concerns will be identified for each CCA. Outreach and education to eligible partners and producers in CCAs will be provided to encourage development of projects to address priority resource concerns. CCA designations may be reviewed not more frequently than once every five years and withdrawn if determined that the area is no longer a CCA.
<i>Covered Programs and Payments</i>	Implemented through contracts under ACEP, CSP, EQIP, and HFRP and their associated rules and the Watershed and Flood Prevention Program (PL-566, except for the Watershed Rehabilitation Program) in designated CCAs.	<p>Authorizes RCPP contracts. Eliminates requirement for contracts through covered programs.</p> <p>Adds the authorities of the CRP and Watershed and Flood Prevention Program (PL-566) to covered programs.</p> <p>Eligible conservation activities are like those available under ACEP, CRP, CSP, EQIP, HFRP, and PL-566.</p> <p>Expands authority to use PL-566 to both funding pools, not just in CCAs.</p> <p>Authorizes not more than 15 AFAs per year which would provide funding directly to partners. Partners would carry out eligible activities on eligible land in agreements with producers.</p>

3.0 PURPOSE AND NEED FOR ACTION

NRCS needs to promulgate regulations to implement RCPP as it has been modified by the 2018 Farm Bill. In the Joint Explanatory Statement of the Committee of Conference for the 2018 Farm Bill (Manager's Report), the Managers made clear that Congress does not intend for USDA to continue to implement RCPP through the rules and regulations of the covered programs. Rather, the Managers direct that NRCS shall run RCPP as a stand-alone program, with its own rules and regulations, and shall revise the program to focus on increasing producer access, improving conservation outcomes, and simplifying procedures.

When the regulations are implemented, NRCS must ensure it does so in a manner that achieves the purposes for which RCPP has been authorized. As stated in the legislation, the purposes of RCPP under the 2018 Farm Bill are to—

- Carry out eligible activities to accomplish purposes and functions similar to those of the agricultural water enhancement program, Chesapeake Bay watershed program, cooperative conservation partnership initiative, and Great Lakes basin program for soil erosion and sediment control, as they were in effect before the 2014 Farm Bill.
- Further the conservation, protection, restoration, and sustainable use of soil, water (including sources of drinking water and ground water), wildlife, agricultural land, and related natural resources on eligible land on a regional or watershed scale.
- Encourage eligible partners to cooperate with producers in meeting or avoiding the need for national, State, and local natural resource regulatory requirements related to production on eligible land, including through alignment of partnership projects with other national, State, and local agencies and programs addressing similar natural resource or environmental concerns; and implementing projects that will result in the adoption, installation, and maintenance of eligible activities that affect multiple agricultural or nonindustrial private forest operations on a local, regional, State, or multistate basis.
- Encourage the flexible and streamlined delivery of conservation assistance to producers through partnership agreements.
- Engage producers and eligible partners in conservation projects to achieve greater conservation outcomes and benefits for producers than would otherwise be achieved.

4.0 ALTERNATIVES

4.1 Scoping and Public Involvement

On February 26, 2019, USDA hosted a listening session at the USDA South Building in Washington, D.C., that was streamed live on <https://www.farmers.gov/manage/farmbill> for those unable to attend in person. The event gave the public an opportunity to provide input to the NRCS and other agencies on implementing changes to existing programs under the 2018 Farm Bill and to share their thoughts about how USDA can streamline and improve program delivery,

as well as enhance customer service. A video of the listening session is available at <https://www.farmers.gov/manage/farmbill> and on YouTube. A notice announcing the listening session was published in the Federal Register and interested parties submitted 183 written comments. The most frequent comment topics specific to RCPP included:

- Using RCPP for conservation easements
- Streamlining the program and processes, including simplifying the application process
- Increasing flexibility for partner contributions and reporting
- Including historically underserved producers
- Sharing of information across States and on outcomes

An interim rule with request for comment amended the RCPP regulations effective February 13, 2020. After the interim rule was published in the Federal Register, several paragraphs about producer eligibility and practice standards were found to have been inadvertently omitted in 7 CFR 1464.5. A correcting amendment and extension of comment period for the interim rule was published in the Federal Register on March 17, 2020.

NRCS received 335 comments on the interim rule from 65 individuals and agricultural and conservation organizations. The topics of the most-frequent comments received on the interim rule are listed below. NRCS responses to these comments are in the preamble of the final rule and resulted in some adjustments to the final rule.

- Program administration related to Historically Underserved Producers
- Entity-held Easements and Buy-Protect-Sell Transactions
- Compensation for U.S.-held easements
- Critical Conservation Areas
- Non-competitive renewals of partnership agreements
- Partner contributions
- Rental contract duration

In the Federal Register notice announcing the interim rule, the public was also invited to submit comments on the Programmatic EA. One comment specific to the Programmatic EA was received stating that NRCS should identify and analyze a range of reasonable alternatives in addition to its proposed action (Alternative 2.) NRCS disagrees it is required to analyze additional alternatives. NRCS considered various ways to implement the few portions of RCPP left to its discretion. Such decisions by agency leadership fall under USDA categorical exclusions related to policy development and funding of programs and are therefore exempt from the requirement to prepare an EA or EIS. NRCS prepares its programmatic NEPA documents to provide broad-scale analyses to which site-specific program actions may tier, when appropriate, for purposes of complying with NEPA. Therefore, a single proposed action alternative and the no action alternative required by law are appropriate.

The overall impacts of RCPP are beneficial to the environment and would be regardless of discretionary decisions by NRCS leadership on policy and funding disclosed in the RCPP regulations. NEPA does not require Federal agencies to consider alternatives that have substantially similar consequences; rather, it is clearly intended to help agencies avoid significant

adverse impacts. Conservation activities associated with each RCPP contract undergo additional environmental review and analysis designed to avoid, minimize, rectify, reduce, eliminate, or compensate for any potential adverse impacts.

4.2 Alternative 1: No Action—Continuation of RCPP as implemented under the 2014 Farm Bill

The No Action alternative involves continuing RCPP as it was implemented under the 2014 Farm Bill. Alternative 1 assumes partnership agreements and individual producer contracts would be funded based on processes used under the 2014 Farm Bill and that as a result, similar conservation measures would be implemented. Although alternative 1 is not viable because it does not meet the requirements of the 2018 Farm Bill, it provides a baseline against which to compare the effects of the proposed action alternative. CEQ's NEPA implementing regulations require analysis of a No Action alternative for this purpose.

4.3 Alternative 2: Proposed Action—Implement RCPP as modified by the 2018 Farm Bill

NRCS' proposed action is to implement RCPP under the Final Rule developed by NRCS and according to the statutory requirements that Congress has placed on the program in the 2018 Farm Bill. Many of the statutory requirements are described in the introductory section of this Programmatic EA. NRCS will promulgate the Final Rule at the national level to ensure consistency of program implementation across the Nation. However, implementation of RCPP will largely occur at the State and local levels, including decisions regarding selection of priority resource concerns for State funding pools, evaluation and ranking of proposals, and contract development.

5.0 EFFECTS OF ALTERNATIVES

5.1 Approach to Impact Analysis

This analysis concentrates on the environmental impacts of conservation activities likely to be implemented under the No Action and Proposed Action alternatives and the resource concerns most frequently addressed—cropland soil quality, fish and wildlife habitat, water quantity, and water quality. Because RCPP was implemented under the rules for EQIP, CSP, ACEP, and HFRP, the program and conservation practice and activity impacts described in the 2016 EQIP Programmatic EA, the 2009 CSP Programmatic EA, the 2016 ACEP Programmatic EA, and the 2006 HFRP Programmatic EA⁶ are incorporated by reference. This Programmatic EA also incorporates by reference the findings of the RCA Appraisal: Soil and Water Resources Conservation Act (RCA),⁷ and the Conservation Effects Assessment Project (CEAP) findings described in a series of CEAP cropland, wildlife, wetlands, and grazing lands assessment

⁶ https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/ecosciences/ec/?cid=nrcs143_008451

⁷ "RCA Appraisal: Soil and Water Resources Conservation Act," USDA, 2011.
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/rca/>

reports.⁸ The effects of RCPP projects funded under PL-566 authorities are analyzed in project-specific watershed plan-NEPA documents.

This Programmatic EA analyzes potential environmental impacts at a broad program scale, identifying the qualitative effects that are a reasonably foreseeable result of each alternative. These qualitative assessments are based on a review of the best available scientific studies and methodological approaches, as well as professional judgment. NRCS has developed network effects diagrams to illustrate the chain of expected direct, indirect, and cumulative effects of applying each conservation practice according to the standard for the land use on which it is intended to be applied and the other practices to be considered in conjunction. Copies of the network effects diagrams are available on the NRCS website⁹. The methodologies used to develop the network effects diagrams and determine the effects of NRCS conservation programs are described in appendix B.

5.2 Environmental Considerations in NRCS Conservation Program Delivery

In addition to this programmatic review, NRCS undertakes environmental reviews at subsequent stages of program implementation consistent with NEPA requirements, other requirements for protection of the environment, and NRCS regulations. This additional review includes conducting an onsite environmental evaluation (EE) during NRCS' development of a program contract with individual producers or during development of programmatic agreements with successful RCPP partner applicants, if NRCS will not be providing assistance directly to individual producers. The EE includes analysis of effects resulting from connected RCPP partner activities that occur without NRCS technical and financial assistance, that is, the partner actions would not occur but for RCPP funding. For example, partner organizations may administer their own conservation or easement programs or take other actions with the same types of environmental impacts as NRCS' conservation activities. The availability of RCPP funding may allow partners to redirect their own resources to activities or land acquisition that would not otherwise occur or to conduct other associated actions. NRCS also considers the cumulative impacts of others' actions during the EE. The results are documented on an EE worksheet before funding is provided. The EE assesses the effects of conservation alternatives and provides information for the Responsible Federal Official to determine the need for consultation or to develop an additional EA or EIS consistent with NEPA, other requirements for environmental protection, and NRCS regulations.

In situations where NRCS is providing assistance directly to individual producers, and a single conservation practice or activity may result in increased risk to the condition of another resource, additional conservation practices or other mitigation measures are integrated into the conservation plan to avoid creating new resource concerns. The EE process helps to ensure that all potential impacts to natural resources are identified and appropriate alternatives and practices are available to the program participant. Appendix C describes the development of NRCS conservation practice standards and how environmental considerations, including compliance

⁸ See <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/ceap/> for a description of CEAP and links to related studies and reports.

⁹ Practice Network Effect Diagrams are available at https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/cp/ncps/?cid=nrcs143_026849

with NEPA, the Endangered Species Act (ESA), and National Historic Preservation Act (NHPA), are integrated into NRCS conservation planning and program delivery.

Under programmatic agreements with partners, the 2018 Farm Bill provides authority for partners to propose projects involving innovative approaches and other activities that achieve conservation benefits without requiring use of NRCS' conservation planning process or conservation practice standards (e.g., in AFA projects.) Because NRCS cannot know all the conservation actions that may be carried out under such innovative programmatic agreements, the effects of such actions cannot be analyzed in this Programmatic EA. Therefore, project specific EAs or EISs will be required for RCPP projects that will not use NRCS' conservation planning process or conservation practice standards, unless all of the proposed activities can be categorically excluded from the requirement under USDA or NRCS regulations (7 CFR Parts 1b.3 and 7 CFR Part 650.6.)

5.3 Environmental Effects of Alternatives

The discussion of the No Action alternative below describes how RCPP under the 2014 Farm Bill affected the environment, and projects future effects would be similar if RCPP continues unchanged. The discussion of alternative 2, under which RCPP would be implemented according to the requirements of the 2018 Farm Bill, focuses on the likely differences in eligible activities implemented and impacts to the quality of the human environment as compared to the No Action alternative.

5.3.1 Alternative 1: No Action—Continuation of RCPP as Implemented Under the 2014 Farm Bill

The No Action alternative assumes RCPP would continue to be implemented as it was under the 2014 Farm Bill, and as a result, partnership agreements, program contracts, easement acquisitions, and watershed projects similar to those funded under the 2014 Farm Bill RCPP program would continue to be funded into the future. In addition, this alternative assumes RCPP funding would be available in amounts similar to those under the 2014 Farm Bill.

Under the 2014 Farm Bill, NRCS administered RCPP through APF notices posted to the government “grants.gov” portal. NRCS published APFs in May 2014 for FY 2014/ 2015 implementation, and additional APFs for FY 2016, 2017, and 2018 utilizing funds that were made available under the 2014 Farm Bill. Eligible partners submitted proposals to one of three funding pools—the national pool, the State pool, or the CCA pool. Upon selection of a partner proposal, NRCS and the selected partner negotiated the terms of a partnership agreement. Partnership agreements were for a period of up to 5 years and could be extended a single time for an additional year, therefore, most of the RCPP projects funded under the 2014 Farm Bill are still being implemented. Under the partnership agreements, NRCS entered into covered program contracts with producers in the project area and administers the program contracts through the covered programs' regulatory frameworks.

Additionally, NRCS and its partners could utilize the authorities of PL-566, other than the Watershed Rehabilitation Program, in the eight CCAs designated by the Secretary of Agriculture. PL-566 authorizes several project purposes, including flood prevention, watershed

protection, public recreation, fish and wildlife, agricultural water management, municipal and industrial water supply, and water quality management. Conservation measures implemented for each of these purposes include—

- Measures installed to prevent or reduce damages caused by floodwater, control, and dispose of surface water caused by abnormally high direct precipitation, stream overflow, or floods aggravated or caused by wind or tidal effects; measures to reduce or prevent runoff, erosion, and sediment; modify the susceptibility of improvements in the floodplain to damage; remove damageable property from the floodplain or prevent encroachment into the floodplain; or reduce the frequency, depth, or velocity of flooding.
- Watershed protection consists of onsite treatment of watershed natural resource concerns for the primary purpose of reducing offsite floodwater, erosion, sediment, and agriculture-related pollutants. Watershed protection plans may include ecosystem restoration-type activities. Any NRCS conservation practice or combination of practices may be used.
- Public recreation facilities needed to ensure public health and safety and access to and use of a reservoir or other area, including picnic areas, sanitation facilities, fishing piers, shelters, cooking grills, parking areas, swimming beaches, access roads, water, power, and trails.
- Measures installed for public use of areas developed to improve the habitat or the environment for the breeding, growth, and development of fish and wildlife.
- Drainage, ground water recharge, irrigation, water conservation, water quality improvement, and water supply for agriculture and rural communities.
- Measures necessary to provide storage capacity in reservoirs to increase the availability of water for present and future municipal and industrial use, including outlet works and pipelines to convey water from the reservoir to the existing or proposed treatment facilities or water system, but not water wells, water treatment plants, distribution systems, or electric distribution facilities.
- Measures to provide water storage capacity in reservoirs for regulation of stream flow to improve water quality in streams.

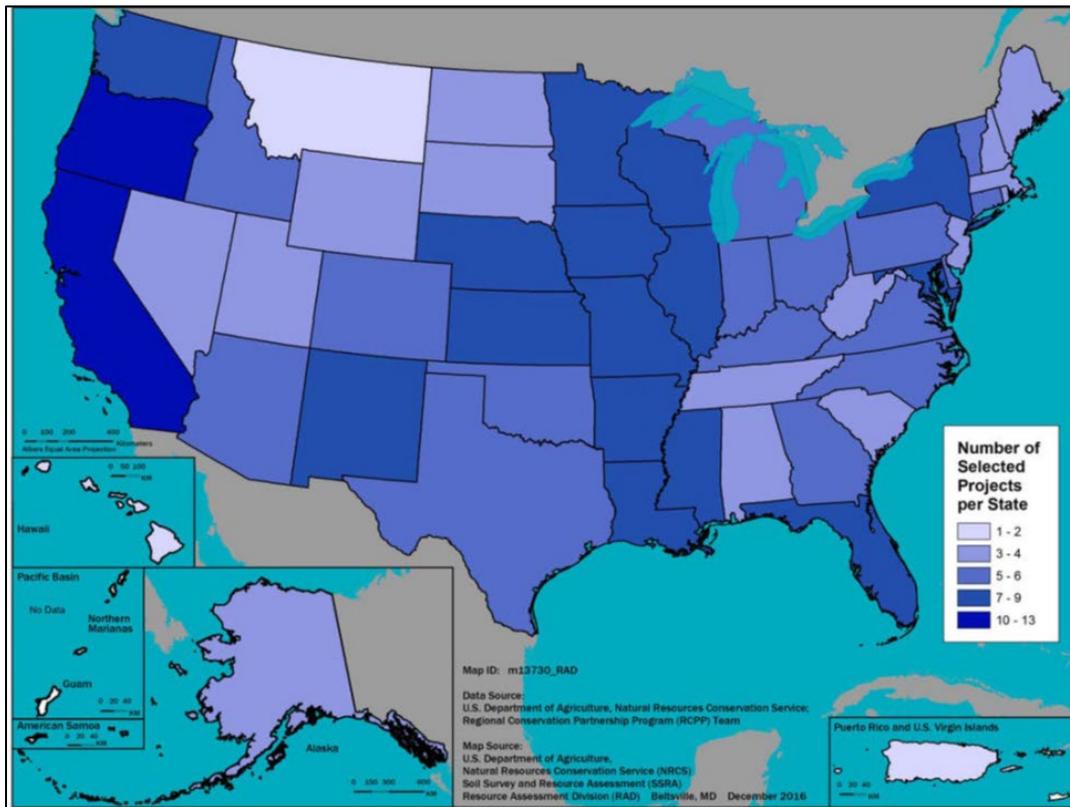
Under the 2014 Farm Bill, RCPP projects using PL-566 authority were implemented under the rules and policies of NRCS' Watershed Program. Therefore, each of these required a watershed project plan to be prepared in combination with a project-specific NEPA document (referred to as a Plan-EA or Plan-EIS.) The *Final Watershed Plan and Environmental Assessment for the Lower Gunnison Project* provides an example of one of these documents and is available upon request.

For the PL-566 funded portion of the Bayou Meto Lower Arkansas Region Conservation Partnership RCPP project, NRCS adopted an EIS prepared by the U.S. Army Corps of

Engineers. Plan-EAs for remainder of 2014 Farm Bill PL-566 RCPP projects are still in preparation.

Funding was allocated to each funding pool at 35 percent for CCAs, 40 percent for national, and 25 percent for State. A total of 375 RCPP projects were funded under the 2014 Farm Bill in all 50 States and Puerto Rico. Appendix A provides summary descriptions for all RCPP projects funded in each State; multistate projects are listed under each State in which they occurred. Figure 1 shows the geographic distribution of RCPP projects funded under the 2014 Farm Bill.

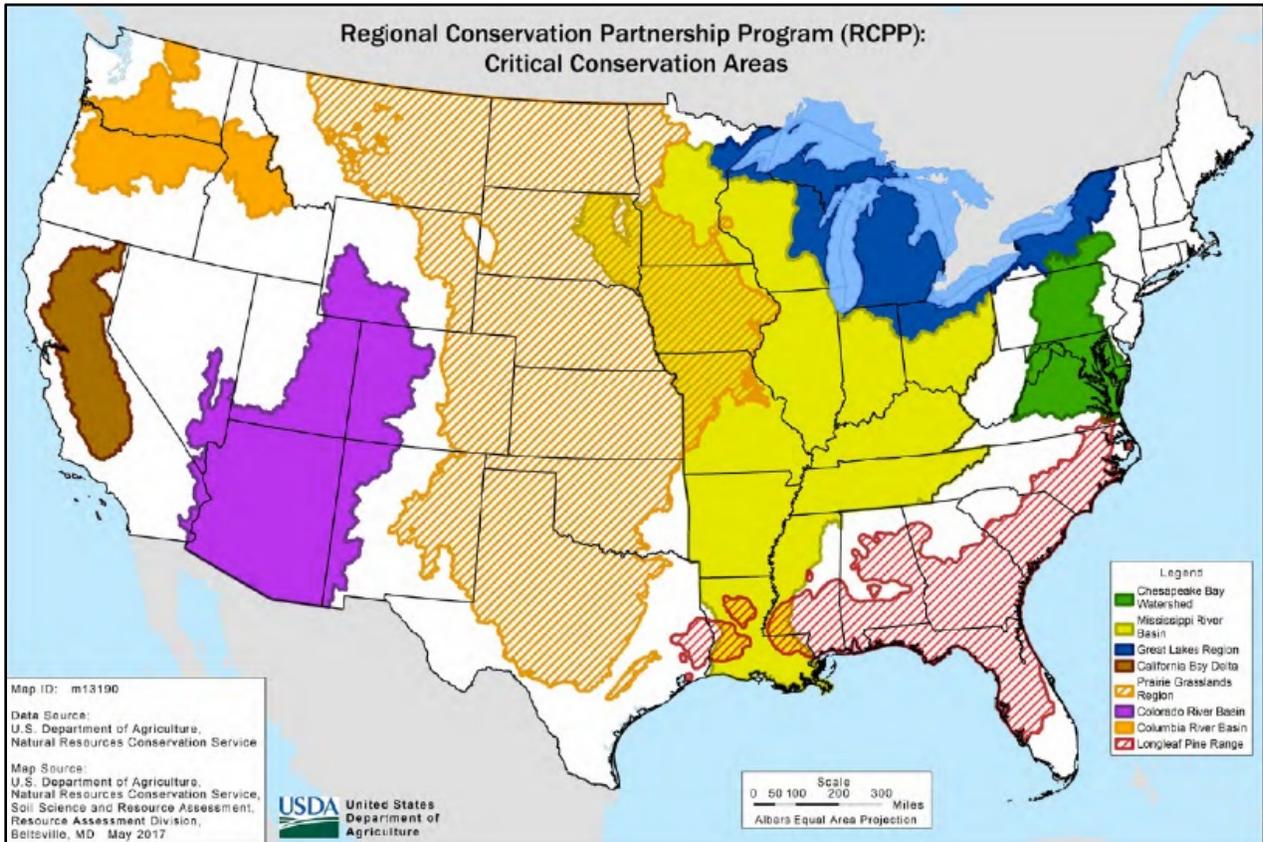
Figure 1: Geographic Distribution of RCPP Projects under the 2014 Farm Bill



Critical Conservation Areas (CCAs)

A total of 76 projects in CCAs received about 34 percent of available funds and are located in one of eight geographic areas chosen by the Secretary of Agriculture and shown in figure 2. Under alternative 1, the CCAs described below were Chesapeake Bay Watershed, Great Lakes Region, Mississippi River Basin, Colorado River Basin, Longleaf Pine Range, Columbia River Basin, Prairie Grasslands Region, and California Bay Delta.

Figure 2: RCPP Critical Conservation Areas 2014-2020



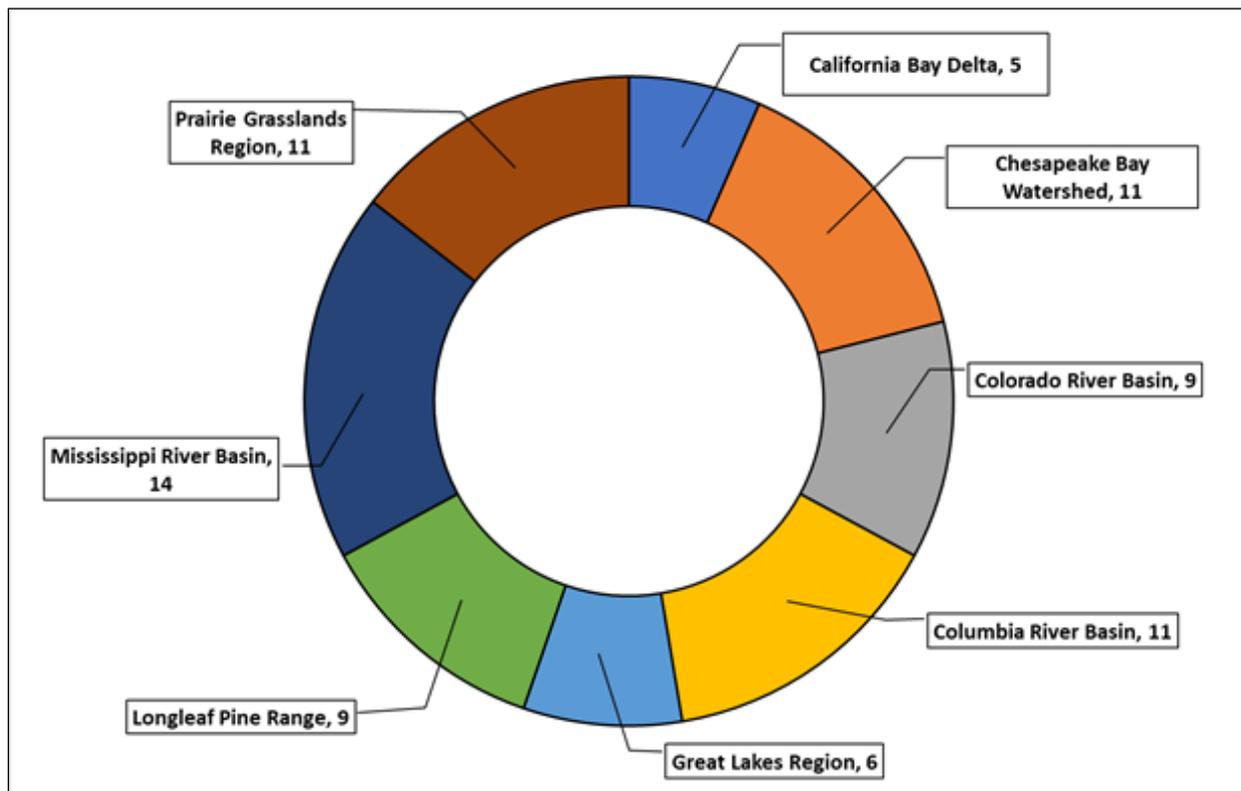
CCAs were designated according to criteria in the 2014 Farm Bill, which required priority be given based on the degree to which the CCA—

- included multiple States with substantial ag production;
- had an existing agreement or work plan adopted by a Federal, State, or regional authority;
- would benefit from water quality improvement;
- would benefit from water quantity improvement; and
- would assist producers to meet natural resource regulatory requirements.

Under the 2014 Farm Bill, CCA designations were to expire after 5 years, unless redesignated. Under alternative 1, CCA designations would remain the same. A similar number of projects would be funded in each CCA, and similar conservation activities would occur.

Each CCA described below has overarching goals that include addressing priority resource concerns that are common throughout the area. Figure 3 below shows the distribution of RCPP projects in each CCA funded in FYs 2014–18.

Figure 3: CCA-funded RCPP projects funded in FYs 2014–18



Chesapeake Bay Watershed CCA

The Chesapeake Bay Watershed (Bay) covers 64,000 square miles, includes more than 150 rivers and streams that drain into the Bay, and supports the largest estuary in North America. More than 300 fish, shellfish, and crab species and a wide array of other wildlife call the Bay home. With almost 30 percent of the watershed in agricultural production, over 83,000 farms in the region generate more than \$10 billion annually.

The overall goal of the Chesapeake Bay Watershed CCA is to reduce nitrogen, phosphorus, and sediment loads coming from private lands. The priority resource concern is water quality degradation caused by excessive sediment in surface water and excess nutrients in surface and ground waters.

Coordinated conservation work in the Chesapeake Bay between NRCS, partners, and agricultural producers began in the 1940s, continued under the Chesapeake Bay Program established in 1983, and the Chesapeake Bay Watershed Initiative (CBWI) launched in response to a 2009 Executive Order. The 2014 Farm Bill repealed funding for the Chesapeake Bay program and rolled program authorities and purposes into RCPP. Information on the most frequently used conservation practices in the Chesapeake Bay Watershed CCA under the 2008 and 2014 Farm Bills and the extent and locations of those practices grouped by Chesapeake Bay States can be found in the RCA Program Report for CBWI available here (copy and paste link into your web browser): https://www.nrcs.usda.gov/Internet/NRCS_RCA/reports/fb08_cp_cbwi.html

The environmental effects of conservation practices installed in the Bay have been analyzed in two CEAP-Cropland Reports (USDA NRCS 2011a and USDA NRCS 2013b.) The first report (USDA NRCS 2011a) documented that between 2003 and 2006, most cropland acres in the region had structural or management practices in place to control erosion. Nearly half the cropland acres were protected by one or more vegetative or structural practices, such as buffers or terraces. Reduced tillage was used in some form on 88 percent of the cropland. Adoption of conservation practices had reduced edge-of-field sediment loss by 55 percent, losses of nitrogen with surface runoff by 42 percent, losses of nitrogen in subsurface flows by 31 percent, and losses of phosphorus (sediment attached and soluble) by 41 percent over what would have been predicted without any conservation practices in place. The study also found that 19 percent of cropped acres (810,000 acres) had a high level of need for additional conservation treatment. These were the most vulnerable acres with the least conservation treatment and the highest losses of sediment and nutrients.

NRCS performed a second CEAP survey (USDA NRCS 2013b) in the region during the fall of 2011 that covered the conservation and production practices in use from 2009 to 2011. That study showed additional conservation measures installed resulted in reductions in sheet and rill erosion rates by 57 percent and edge-of-field sediment losses by 62 percent since 2006. Estimated edge-of-field nitrogen losses in surface runoff were reduced by 38 percent, nitrogen losses in subsurface flows were reduced by 12 percent, and phosphorus losses were reduced by 45 percent compared to 2003–2006 loss rates. Structural practices were adopted on 66 percent of cropped acres, a 27 percent increase between the survey periods. The number of cropped acres that farmers planted to cover crops every year more than tripled and 52 percent of all cultivated acres in the region had cover crops applied at least one out of every 4 years. Conservation measures adopted between the first and second CEAP studies reduced the number of cropped acres with high potential conservation benefits by 80 percent, dropping from the 2003–2006 level of 813,000 acres to 157,000 acres (4 percent of all cropped acres) in 2011. Opportunities remain for progress in avoiding nutrient losses through improved management of nutrient application.

Great Lakes Region CCA

The Great Lakes hold 21 percent of the world's fresh surface water and host habitat for a variety of fish and wildlife species of concern. They provide drinking water for more than 40 million people and economic benefits from fishing and recreation. The Great Lakes Region is also a major agricultural area, with more than 55 million acres of land under production. All of these uses impact the Great Lakes ecosystem. The overall goal of the Great Lakes Region CCA is to manage nutrients and sediment on agricultural land to reduce algal blooms in the Great Lakes. The priority resource concern is water quality degradation due to excess nutrients in surface and ground waters and excessive sediment in surface water.

The Great Lakes Basin Program began in 1990, when Congress authorized funding in the budget of the U.S. Environmental Protection Agency (EPA) for comprehensive, basin-specific soil erosion and sedimentation control activities. In 1994, funding shifted to the NRCS budget. The goal of the Great Lakes Basin Program was to protect and improve water quality in the Great Lakes by reducing soil erosion and controlling sedimentation through financial incentives, information and education, and professional assistance. The objectives were to minimize off-site

damage to harbors, streams, fish and wildlife habitat, recreational facilities, and the basin's public works systems caused by sediment and to reduce the on-site damages caused by soil erosion on farms, developments, streambanks and shorelines.

The Great Lakes Restoration Initiative (GLRI) was launched in 2010 with NRCS as one of a number of Federal agencies participating. Led by EPA, GLRI encompassed a broad partnership of Federal, State, local and nongovernmental organizations working to improve water quality, restore and protect habitat, and provide cleaner water and healthier ecosystems in the basin. Under GLRI, NRCS focused its work on private lands in priority watersheds to control invasive species, protect watersheds and shorelines from nonpoint source pollution and restore wetlands and other habitat areas.

A CEAP-Cropland Report (USDA NRCS 2011b) assessed the effects of conservation practices on cropland in the Great Lakes Region. The study found structural practices for controlling soil erosion were in place on 26 percent of all cropped acres in the region and on 37 percent of the highly erodible cropland. Eighty-two percent of the cropland acres met criteria for no-till (32 percent) or mulch till (50 percent), and all but 9 percent had evidence of some kind of reduced tillage on at least one crop in the rotation. Adoption of conservation practices had reduced wind erosion by 44 percent and edge-of-field waterborne losses of sediment by 47 percent, losses of nitrogen with surface runoff by 43 percent, losses of nitrogen in subsurface flows by 30 percent, and losses of phosphorus (sediment attached and soluble) by 39 percent.

Opportunities still existed to further reduce sediment and nutrient losses from cropland. Nineteen percent of cropped acres (2.8 million acres) still had a high level of need and 34 percent (5 million acres) had a moderate level of need for additional conservation treatment. The remaining 47 percent of the cropped acres had a low level of need for additional treatment. The most widespread need was nitrogen loss in subsurface flows. Excessive phosphorus loss (sediment adsorbed and soluble) from fields was also a concern but less so than nitrogen.

A CEAP-Wildlife study (Keitzer et al. 2016) helped quantify the potential water quality benefits of conservation practices for stream fish conservation in the Western Lake Erie Basin (WLEB), the most intensively farmed watershed in the Great Lakes Region. The results confirmed that agricultural runoff appeared to be a big contributor to poor water quality throughout the WLEB, potentially limiting fish community health in more than 6,000 miles of streams, representing more than 50 percent of the watershed. The study's authors noted that current conservation practices had improved water quality, but a need still existed for additional structural (erosion control) and nutrient management practices. The study also found water quality is expected to limit fish communities in up to 5,000 miles of streams, even if erosion control and nutrient management practices were implemented on 80 percent of farms, due to other potential sources of water pollution (e.g., point sources, urban, and exurban runoff) and nonwater quality stressors (e.g., dispersal barriers, in-stream habitat, altered hydrology, and invasive species).

Mississippi River Basin CCA

The Mississippi River is North America's largest river, flowing over 2,300 miles through America's heartland to the Gulf of Mexico. The watershed not only provides drinking water, food, industry, and recreation for millions of people, it also hosts a globally important migratory

flyway that is home for over 325 bird species. The overall goal of the Mississippi River Basin CCA is to reduce nitrogen, phosphorus, and sediment loads coming from private lands. The priority resource concerns are water quality degradation caused by excess nutrients in surface and ground waters and excessive sediment in surface water, insufficient water caused by inefficient use of irrigation water that results in water quality degradation through irrigation-induced erosion, and degradation of fish and wildlife habitat.

The CCA boundary was identified to harness the partnerships and momentum already established by NRCS' Mississippi River Basin Healthy Watersheds Initiative (MRBI). With more than 600 partners engaged throughout the initiative area, MRBI has treated over 800,000 acres of agricultural land with systems of practices intended to avoid, control, and trap nutrients and sediment in run-off and improve irrigation efficiency. The Mississippi River Basin CCA partners aimed to accelerate conservation in the 13-State area to continue to reduce nutrient and sediment loading to local and regional water bodies and to improve efficiency in using water supplies, particularly in the Southern States.

CEAP assessments of the effects of conservation practices have been completed for both the Upper and Lower Mississippi River Basins (USDA NRCS 2012, and USDA NRCS 2013a.) These studies indicate that conservation practice use in the Mississippi River Basin has reduced sediment, nutrient, and pesticide losses from farm fields and subsequent loadings in rivers and streams in the region. However, the findings showed substantial conservation treatment was still needed to reduce nonpoint agricultural sources of pollution, especially nitrogen through leaching. Combinations of erosion-control and nutrient management practices were deemed essential because implementing erosion control practices alone can result in rerouting nitrogen delivery from overland flows to subsurface pathways. The need was greater in the Lower Mississippi River Basin than in the Upper. Overall, CEAP cropland models show that conservation on cropland throughout the entire Mississippi River Basin has reduced nitrogen and sediment loading to the Gulf of Mexico by 28 percent and 45 percent, respectively, over what would be lost without conservation systems in place.

A Mississippi State University study (Kaminski and Davis 2014) assessed bird use of habitat and availability of food in rice fields, catfish ponds, and wetlands managed through NRCS' Migratory Bird Habitat Initiative (MBHI). The MBHI was a 3-year effort created in response to the Deepwater Horizon oil spill in 2010, with the goal of improving and creating habitat in the Upper and Lower Mississippi River Basins for water birds using the Mississippi River Flyway. Conservation practices including wetland restoration, wetland enhancement, wetland wildlife habitat management, and shallow water development and management were implemented on more than 470,000 acres in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri and Texas. Key findings of the study demonstrated—

- Rice fields flooded early through MBHI were home to an average 15 migratory birds per acre, compared to 2 birds per acre on rice fields not flooded early;
- Catfish ponds flooded early showed heavy biodiversity with 40 species of ducks, shorebirds, and other water birds visiting them;

- Over seven times more migrating shorebirds were observed on shallowly flooded idled catfish ponds enrolled in MBHI than on other catfish ponds;
- MBHI-enrolled catfish ponds in Mississippi met nearly all the established shorebird migration habitat goal for the region; and
- MBHI-managed habitats provided up to 28 percent of the winter waterfowl food energy needed in the Mississippi Delta and up to 25 percent needed in southwestern Louisiana.

Although the MBHI ended in 2013, several RCPP projects in the Mississippi River Basin CCA continue the habitat restoration and management work started under the initiative.

Colorado River Basin CCA

Irrigated agriculture is important to the economy and quality of life in many areas of the Colorado River Basin. It uses a large share of the basin's existing water, also used by 33 million people in 7 States and 3 million people in Mexico. The overall goal of the Colorado River Basin CCA is to improve water quality and quantity in the Colorado River Basin. Priority resource concerns are water quality degradation due to excessive salts in surface waters and ground waters, insufficient water due to inefficient use of irrigation water, soil quality degradation due to concentration of salts in soil, and degradation of fish and wildlife habitat.

NRCS has worked with partners and producers on salinity control projects in the Colorado River Basin since 1974, when the Colorado River Basin Salinity Control Act created the Colorado River Basin Salinity Control Program and directed USDA, U.S. Department of Interior, and the EPA to cooperate and coordinate their activities effectively to control the salinity of water delivered to users in the United States and Mexico. The 1996 Farm Bill modified USDA authorities and rolled on-farm salinity control activities into EQIP.

NRCS has been using EQIP to implement on-farm salinity control measures in 12 salinity control project areas in western Colorado, eastern Utah, and southwestern Wyoming. NRCS focuses assistance on promoting soil health, improving irrigation, addressing drought, and helping to promote sustainable use of water resources throughout the basin. Irrigation improvements and vegetation management reduce water available to transport salts vertically, laterally and on the soil surface. These efforts continued along with Colorado River Basin CCA projects funded under the 2014 Farm Bill.

As of the end of FY 2016, NRCS and other Federal partners participating in the Salinity Control Program had installed measures controlling an estimated 1.33 million tons of salt annually. The Colorado River Basin Salinity Control Forum anticipated that during the period from 2017 to 2020 an additional 63,500 tons of annual salt load reduction would be achieved (Colorado River Basin Salinity Control Forum 2017.) NRCS has calculated that through 2018, salinity control measures installed with USDA assistance control over 623,000 tons of salt annually.

The environmental impacts of salinity control projects in the Colorado River Basin have been analyzed in numerous documents, including an EIS for the Colorado River Water Quality

Improvement Program. A listing of these documents is available from the U. S. Bureau of Reclamation at: <https://www.usbr.gov/uc/envdocs/arc.html>.

Longleaf Pine Range CCA

Longleaf pine forests once encompassed more than 90 million acres of the North American landscape and represented some of the world's most unique and biologically diverse ecosystems. In 2010, approximately three percent, or 3.4 million acres, of longleaf pine forest remained. The overall goal of the Longleaf Pine Range CCA is to increase the extent of longleaf pine forests to 8 million acres by 2025, with the support of partners. Working towards this goal addresses the priority resource concerns of inadequate habitat for fish and wildlife, degraded plant condition, and water quality degradation due to excess nutrients, pesticides, and sediment.

Under the Longleaf Pine Initiative (LLPI) launched in 2010 in support of the American Longleaf Restoration Initiative, NRCS began working with agricultural producers and conservation partners to restore longleaf forests. Under LLPI, NRCS helped producers implement conservation practices in 9 States including forest stand improvement, herbaceous weed control, prescribed burning, tree/shrub establishment, restoration and management of rare and declining habitats, and several others. NRCS targeted LLPI efforts toward connecting existing longleaf landscapes to provide increased habitat, including habitat for the ESA-listed red-cockaded woodpecker and gopher tortoise, and other environmental benefits, like improved air and water quality, because of the forests' larger footprints. By 2016, NRCS had helped producers restore nearly 400,000 acres on private land. Together with other conservation efforts, the amount of healthy longleaf forests increased to nearly 5 million acres during that time period. (U.S. Department of Agriculture 2016a)

The gopher tortoise is a keystone species in longleaf pine savannahs in Louisiana, Mississippi, Alabama, Florida, Georgia and South Carolina. Gopher tortoises dig burrows up to 40 feet long that allow escape from heat and danger and provide shelter for more than 350 other species. All nine Longleaf Pine Range CCA projects are restoring habitat for gopher tortoise by enhancing and restoring longleaf pine forests. Forest stand improvement, prescribed burning, and other sustainable forestry conservation practices are being used including tree/shrub establishment to plant new longleaf pine trees. These practices are planned in conjunction with upland wildlife habitat management or early successional habitat development and management. A University of Georgia study is in progress to assess gopher tortoise response to these practices, but results are not yet available for this EA.

Columbia River Basin CCA

The Columbia River Basin provides habitat for salmon and steelhead, essential components of a healthy ecosystem and critical to Indian Tribes and local communities. Loss of quality habitat because of pressures from population growth threaten fish numbers and the overall health of the basin. The Columbia River Basin CCA works with agricultural producers to improve water quality and manage water quantity in order to restore critical components of salmon habitat, aid in the recovery of Pacific salmon, and protect public health by addressing the inefficient use of irrigation water and reducing sediment, nutrients, and pesticides reaching surface and ground

water. The boundary of the CCA is a portion of the Columbia River Basin that includes essential fish habitat designated under the Magnuson-Stevens Act.

A CEAP-Cropland report (USDA NRCS 2014a) analyzed the effects of conservation practices farmers reported using on cropland between 2003 and 2006 in the Pacific Northwest Basin, which includes the Columbia River Basin and adjacent areas. The study showed farmers had reduced sediment, nutrient, and pesticide losses from farm fields through conservation practice adoption throughout the Pacific Northwest Basin, compared to losses that would be expected if no conservation practices were in use. Structural practices for controlling water erosion were in place on 33 percent of all cropped acres in the region, including 40 percent of highly erodible land. Fifty-nine percent of cropped acres met criteria for mulch till, and 21 percent met criteria for no-till. Ninety-two percent of cropped acres had structural or tillage and residue management practices in place. Farmers met criteria for good nitrogen management—appropriate rate, timing, and method of application—on 44 percent of the cropped acres and good phosphorus management on 43 percent. The study concluded that more than half of the cropland in the Pacific Northwest Region needed additional treatment for some combination of sediment loss and nutrient runoff.

Prairie Grasslands Region CCA

One of the most threatened ecosystems in North America, native prairie and grasslands contained within the Prairie Grasslands Region are essential habitat for many threatened wild game species, including the lesser prairie-chicken and greater sage-grouse. The region also encompasses the Red River Basin and the Ogallala Aquifer—areas where working lands experience frequent flooding and ponding and prolonged drought and aquifer decline, respectively. The overall goal of the Prairie Grasslands Region is to restore and protect native prairie grasslands and wetlands and promote sustainable use of soil and water resources to mitigate flooding, drought, and overdraft of the Ogallala Aquifer. Priority resource concerns are habitat degradation; inefficient use of irrigation water; excess water due to runoff, flooding, and ponding; and degraded plant condition due to excessive plant pest pressure.

NRCS initiatives in the Prairie Grasslands Region CCA that began prior to RCPP include the Lesser Prairie Chicken Initiative, Sage Grouse Initiative, Red River Basin Initiative, and Ogallala Aquifer Initiative. CEAP cropland assessments and other CEAP studies have been completed in portions of the Prairie Grasslands Region that document some of the resource concerns there and benefits of NRCS conservation practices that address them.

The Lesser Prairie-Chicken Initiative (LPCI) began in 2010. About 95 percent of the lesser prairie-chicken's habitat is privately owned, making the land management decisions of agricultural producers critical to the bird's success. Due to large-scale habitat loss and fragmentation, the species' distribution has been reduced by roughly 85 percent. Causes of habitat loss and fragmentation include invading mesquite and redcedar, poor grassland and prairie health, and conversion to cropland. NRCS has used EQIP and ACEP to help private landowners conserve over 1 million acres of lesser prairie-chicken habitat. Common conservation practices applied include brush management, prescribed burning, range planting, prescribed grazing, and upland wildlife habitat management. Several CEAP Wildlife publications have documented the benefits of these practices as well as easement (ACEP) and

rental (CRP) programs that maintain grassland habitat. The most recent of these summarized findings from five studies that assessed LPCI practices. These studies showed that applying brush management, prescribed burning, and prescribed grazing within lesser prairie-chicken habitat can improve habitat quality, facilitate the persistence of the species, and promote the bird's movement into unoccupied habitats. Expansion of these practices into unoccupied grasslands improves the potential for lesser prairie-chicken to successfully recolonize areas from which it was extirpated. (USDA NRCS 2019a)

NRCS also launched the Sage-Grouse Initiative (SGI) in 2010 to conserve sage-grouse on working rangelands in sagebrush habitats. Large-scale conversion of native rangelands to cultivated cropland, housing and energy developments, invading conifer trees and nonnative annual grasses, and catastrophic wildfires have fragmented the sagebrush landscape, reducing its size by half. Many species, including the sage-grouse, have seen substantial population declines as a result. As with LPCI, NRCS has used EQIP and ACEP to help over 1,800 livestock producers and other landowners improve and protect over 7 million acres of sagebrush habitat. Common practices include using brush management to remove invasive conifers, herbaceous weed control and prescribed grazing to reduce invasive and fire-prone cheatgrass and wildfire risk, restoration of wet meadows and riparian areas that provide foraging areas for sage-grouse chicks within sagebrush landscapes and marking fences to reduce collisions. A number of CEAP Wildlife publications document research to evaluate the effects of these practices on sage-grouse and other wildlife. Research is ongoing but results of completed studies are summarized below.

Conifer removal has been shown to improve sage-grouse occupancy, nest survival, and brood success. Studies also show that sagebrush songbirds recolonize rapidly following encroached conifer removal and summer water availability is improved (USDA NRCS 2019b.) Riparian areas, wet meadows and wetlands provide important summer habitats for sage-grouse broods (USDA NRCS 2012b.) Fence markers reduced sage-grouse collisions with fences by 83 percent, or six-fold, over unmarked fences (Stevens et al. 2012.) Targeting conservation easements on private lands vulnerable to development in Wyoming was determined to be able to reduce anticipated sage-grouse population declines by half statewide, and by nearly two thirds within core habitat areas with the largest numbers of communal breeding grounds (known as leks) and grouse (USDA NRCS 2014c.)

The Red River Basin Initiative (RRBI) began in 2011 and continued through 2018 using EQIP and ACEP. Conservation practices implemented by farmers and landowners participating in RRBI improved soil health and reduced soil erosion; improved soil water management for crop production; restored wetlands and enabled them to reduce input costs and make their operations more efficient and resilient to weather extremes. Conservation easements ensured that restored wetlands remain in place and continue to provide benefits for the full term of the easement as agreed to by the landowner—either 30 years or in perpetuity. This improves water quality through reduced delivery of nutrients and sediments to lakes, streams and rivers. Flood damage in the Red River Basin is reduced through detention of runoff water within restored wetlands and easement acres, and from improved water infiltration on agricultural land. Restored wetlands benefit migratory water birds and other wetland-dependent species by increasing the quantity and quality of wetland habitat. (U.S. Department of Agriculture 2016b)

The Ogallala Aquifer Initiative (OAI) also began in 2011 and continued through FY 2018. NRCS provided agricultural producers with assistance under EQIP to implement a variety of conservation practices to improve irrigation efficiency, manage nutrients, and implement prescribed grazing and other conservation systems. Improving irrigation efficiency and implementing conservation systems reduced producers' expenditures for energy, chemicals, and labor inputs, while enhancing revenues through higher crop yields and improved crop quality. Additionally, these efforts help maintain the long-term viability of the irrigated agricultural sector and offset the effect of rising water costs and restricted water supplies on producer income. Conserving water may extend the useful life of the aquifer and increase the flow in rivers, benefiting wildlife like the least tern, whooping crane, pallid sturgeon, and piping plover.

California Bay Delta CCA

The California Bay Delta watershed is remarkable for its agricultural productivity and ecological diversity. It is also home to one of the largest and most complex water delivery systems in the Nation. Water for an estimated \$28 billion agricultural industry is delivered through the Bay-Delta system. The watershed encompasses more than 38 million acres, and within this area, six counties produce more food than any other comparably sized area in the world.

The Sacramento and San Joaquin Rivers in California's Central Valley meet in the Delta, which also provides water to one of the most important estuary ecosystems in the United States and drinking water to 25 million Californians. The Bay Delta supports habitat for 55 species of fish and 750 species of plants and wildlife. The overall goal of the California Bay Delta CCA is to promote water conservation, improve water quality, and restore wildlife habitat throughout the Bay Delta region. Priority resource concerns are water quality degradation due to excess nutrients in surface and ground waters and excessive sediment in surface waters, inefficient use of irrigation water, and habitat degradation. Practices are implemented to address inefficient use of irrigation water and reduce nutrients and pesticides in surface and ground water and sediment in surface water.

Local policy makers in California requested NRCS assistance implementing the Interim Federal Action Plan for the California Bay Delta, resulting in the Bay Delta Initiative beginning in 2011. NRCS provided agricultural producers assistance under 2008 Farm Bill programs to improve water quality and quantity, and restore and protect wetland, riparian, and wet meadow habitat.

Water quantity resource concerns were primarily addressed with irrigation practices that improved efficiency and irrigation water management. Using irrigation water management, farms increased irrigation efficiency by 25 percent on average. Ground water pumping and use of diesel engines to pump water decreased, resulting in energy savings and air quality improvement.

Water quality improvements focused on irrigated cropland and dairies with emphasis on nutrient management, integrated pest management, and reducing soil erosion. Producers on irrigated cropland used nutrient management and integrated pest management to reduce the potential for nitrogen, phosphorus, and pesticide delivery to streams and tailwater return systems to prevent potentially impaired water from leaving their farms. NRCS also worked with over 1,000 dairy

operators to develop waste management plans to keep them in compliance with water quality regulations.

A CEAP-Cropland study of the Bay Delta is in progress, but results are not yet available for this EA. The Sacramento Bay Delta “special study” will quantify the reduction in sediment, nitrogen, and phosphorus losses due to implementation of NRCS-assisted conservation practices in the Bay Delta CCA.

Wetland restoration and enhancement practices have also been used extensively in the Bay Delta to improve water quality and wildlife habitat. Wetland reserve easements and associated wetland restoration projects in the Colusa Basin trap sediment washed in from upstream areas subject to flooding. The sediment is stored in the wetlands rather than being discharged to the Sacramento River. In addition to the habitat provided by wetland restoration projects, NRCS works with rice farmers to flood their fields earlier or maintain water longer to provide foraging areas for migratory shorebirds.

A CEAP-Wetlands assessment of wetland conservation effects in the Central Valley of California (Duffy et al., eds. 2011) found daytime use by wintering waterfowl at wetland easement sites increased dramatically after wetland restoration and was sustained for up to 8 years post-restoration. Researchers estimated that 18 percent of wintering waterfowl in the Central Valley use wetland easement habitats and that wetlands restored through NRCS programs made up about 8 percent of the total wetland habitat in the Central Valley in 2007.

National and State Funding Pools

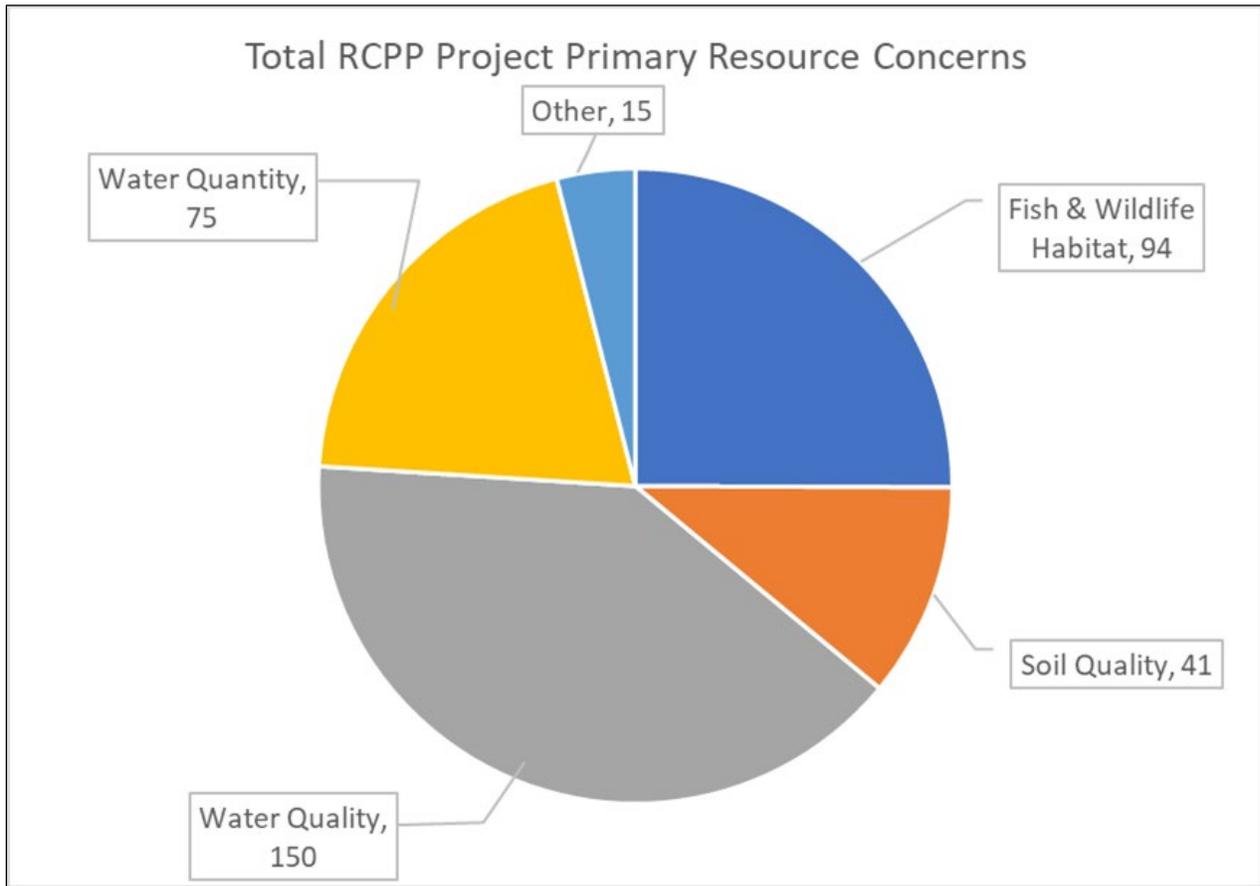
Under the 2014 Farm Bill, 75 National RCPP projects received about 41 percent of available funding and addressed at least one of the resource concerns listed in table 2 below. To receive State funding, a project must have addressed either a national resource concern or a resource concern identified by the State. State RCPP projects received 25 percent of available funding but made up almost 60 percent of the total number of RCPP projects.

Table 2: Primary Resource Concerns Addressed by RCPP by fund pool, FYs 2014–18

Primary Resource Concerns	Critical Conservation Areas (CCAs)	National	State	Grand Total
Air Quality		2	3	5
Climate Change		1	1	2
Degraded Plant Condition	3		2	5
Energy Conservation			3	3
Soil Quality		6	35	41
Water Quality	29	22	99	150
Water Quantity	25	14	36	75
Fish & Wildlife Habitat	19	30	45	94
Grand Total		76	75	224

Figure 4 below shows the resource concern focus of RCPP projects funded in all fund pools in FY 2014–18.

Figure 4: Resource Concerns Addressed by RCPP Projects FYs 2014–18



As shown in table 2 and figure 4, water quality was the focus of 40 percent of RCPP projects funded under the 2014 Farm Bill. Projects primarily addressing habitat for fish and wildlife made up another 25 percent of all 2014–18 fiscal year RCPP projects. Twenty percent of all 2014–18 projects primarily focused on water quantity, and 11 percent on soil quality. The remainder primarily addressed one of the other resource concerns listed in table 2.

Conservation practices most frequently planned to address water quality resource concerns under RCPP in the 2014 Farm Bill were cover crop, nutrient management, fence, heavy use area protection, watering facility, residue and tillage management—no till, underground outlet, prescribed grazing, livestock pipeline, and forest stand improvement.

Where habitat for fish and wildlife was the primary resource concern, conservation practices most frequently planned were brush management, forest stand improvement, early successional habitat development and management, wetland wildlife habitat management, fence, herbaceous weed control, watering facility, and woody residue treatment.

RCPP projects focusing on water quantity most frequently included irrigation water management, cover crop, shallow water development and management, structure for water control, nutrient management, irrigation pipeline, and watering facility.

RCPP projects with soil quality as the primary resource concern included cover crop, watering facility, herbaceous weed control, brush management, livestock pipeline, forest stand improvement, nutrient management, fence, and residue and tillage management—no-till the most.

As described in 5.1 above and in appendix B, NRCS uses network effects diagrams to describe the chain of expected direct, indirect, and cumulative effects of applying each conservation practice according to the standard for the land use on which it is intended to be applied and the other practices to be considered in conjunction.

In addition, because RCPP under the 2014 Farm Bill was implemented under the authorities of EQIP, CSP, ACEP, and HFRP, the program and conservation practice and activity impacts have been described in the associated programmatic EAs. Therefore, the Environmental Effects of the No Action Alternative in the 2019 EQIP Programmatic EA, the 2019 CSP Programmatic EA, the 2019 ACEP Programmatic EA, and the 2006 HFRP Programmatic EA¹⁰ are incorporated by reference. Projects in CCAs funded under PL-566 required project-specific NEPA documents to be prepared.

Table 3 below shows the proportion of RCPP projects funded under the 2014 Farm Bill under the authorities of the various programs. ACEP-ALE refers to the agricultural land easement (ALE) component of ACEP, and ACEP-WRE is the wetland reserve component (WRE). About one-quarter of all projects (96 out of 375) used more than one program.

Table 3: 2014–2018 RCPP Projects by Program

Program	EQIP	CSP	ACEP-ALE	ACEP-WRE	HFRP	PL-566
Number of Projects	292	40	63	33	25	18
Percentage of Total Projects	78%	11%	17%	8%	6%	5%

Conservation practices and land easement acquisitions under RCPP in alternative 1 were implemented through the covered NRCS conservation programs, EQIP, CSP, ACEP, and HFRP. Concurrently, the same conservation activities were also implemented outside of RCPP under the same programs. The extent of those activities has been captured in the [RCA national conservation program reports](#) which includes conservation practices and land easement acquisitions implemented in RCPP projects.

NRCS landscape initiatives are illustrative of the cumulative effects of NRCS programs because they focus NRCS program authorities to address specific natural resource concerns in a particular geographic area. These initiatives overlap and in some cases are the same as the geographic areas designated as CCAs under alternative 1. The existing CCAs and landscape initiatives would continue under alternative 1 and the conservation benefits described would continue to accrue.

¹⁰https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/ecosciences/ec/?cid=nrcs143_008451

Cumulative effects also result from the actions of others. Some RCPP partner activities that occur without NRCS assistance are likely to have similar effects as NRCS actions. For example, partner organizations may administer their own conservation or easement programs.

There are indirect effects associated with application of conservation activities. For example, activities associated with reducing soil erosion on cropland have indirect effects that include decreased sediment and turbidity in surface waters, improved aquatic habitat, improved air quality, improved crop productivity, and often improved energy efficiency. Similar impacts result from improved management of livestock and vegetation on pasture and range lands.

Activities applied on forest land may indirectly improve water quantity and quality, improve air quality, and restore or enhance wildlife habitat. Wildlife activities may indirectly improve air and water quality and often result in the creation of potential recreational opportunities.

While the effects of the conservation activities vary depending on the local ecosystem, landscape position, methods of installation, and scope or magnitude of the activity, it is possible to describe the general types of impacts that will occur. Based on the results identified on the network effects diagrams and CEAP studies, there is every reason to expect that under RCPP, soil erosion will decrease; soil, air, and water quality will improve; water will be used more efficiently; plant condition and wildlife habitat will improve; and energy will be used more efficiently.

Some negative impacts may also occur, since certain practices applied to benefit one resource concern may have adverse impacts on others. For example, conservation tillage applied without a nutrient management plan may improve soil erosion but may simply reroute where excess nutrients end up. Applying suites of conservation practices that consider the impact on all resource concerns is key to resolving such incongruities.

Under this No Action alternative, the effects of RCPP would continue during the 2018 Farm Bill. Overall, the effects of RCPP would be similar to those under the 2014 Farm Bill, with important environmental benefits resulting and no major adverse impacts anticipated.

5.3.2 Alternative 2: Proposed Action—Implement RCPP as modified by the 2018 Farm Bill

Alternative 2 incorporates the changes required by Congress in the 2018 Farm Bill, including implementing RCPP under its own regulations. It assumes similar conservation activities would be implemented as under alternative 1 because RCPP contracting authorities would still be tied to covered program activities and it is anticipated that partners will propose (and NRCS will select) projects to address substantively similar resource concerns. This alternative assumes NRCS will provide up to \$300 million in program funding annually over the course of the 2018 Farm Bill, and those funds will leverage at least the same amount in partner resources, based on partner contributions towards RCPP projects funded under the 2014 Farm Bill.

These assumptions are supported by information on RCPP projects funded with 2019 program dollars thus far.¹¹ Forty-eight RCPP classic projects were funded in FY2019. NRCS awarded

¹¹ Information on FY 2019 RCPP projects is available here:

\$206 million for these 48 RCPP projects while leveraging nearly \$300 million in partner contributions. In addition to the 48 RCPP Classic projects, NRCS awarded more than \$50 million for 18 renewals of 2014 Farm Bill projects and will award approximately \$50 million to RCPP AFA projects. Twenty-five RCPP classic projects were selected from the CCA funding pool and 23 from the State/multistate funding pool. Resource concerns addressed by the 48 projects include improving water quality, soil health and drought resiliency, protecting drinking water supplies, and enhancing wildlife habitat.

The discussion below summarizes the differences in the Proposed Action Alternative that could result in environmental impacts different from those described under the No Action Alternative.

Expanded Purposes

The 2018 Farm Bill expanded the purposes of RCPP to include furthering the conservation, protection, restoration, and sustainable use of sources of drinking and ground water. NRCS has always considered impacts of existing management and planned conservation activities on surface and ground water quality, including sources of drinking water, in its EE process described under 5.2 above and in appendix C. Therefore, this change is not expected to result in much difference in the types of RCPP projects funded, conservation activities implemented or benefits to sources of drinking and ground water than those under alternative 1.

Adding purposes to encourage the flexible and streamlined delivery of conservation assistance to producers through partnership agreements and to engage producers and eligible partners in conservation projects to achieve greater conservation outcomes and benefits for producers than would otherwise be achieved is expected to make it easier for more partners and more producers to participate in RCPP. However, NRCS expects that partners will propose and NRCS will fund projects substantially similar to those under alternative 1, therefore the conservation benefits of RCPP are not anticipated to increase substantially under alternative 2.

Funding Pools

The 2018 Farm Bill eliminates the national funding pool and divides the available funds equally between CCA and State and multistate funding pools. Under alternative 2, RCPP applicants submitting a proposal for a multistate project and not eligible for a CCA will be considered in the State/multistate pool.

Because the total amount of funding available under the 2018 Farm Bill will be similar to the amount available under the 2014 Farm Bill, it is likely that the total number of projects selected and funded under alternative 2 will be comparable to those under alternative 1.

Critical Conservation Areas

The 2018 Farm Bill removed the provision that CCAs expire after 5 years and clarified that CCA designations may be reviewed not more often than once every 5 years, and the designation

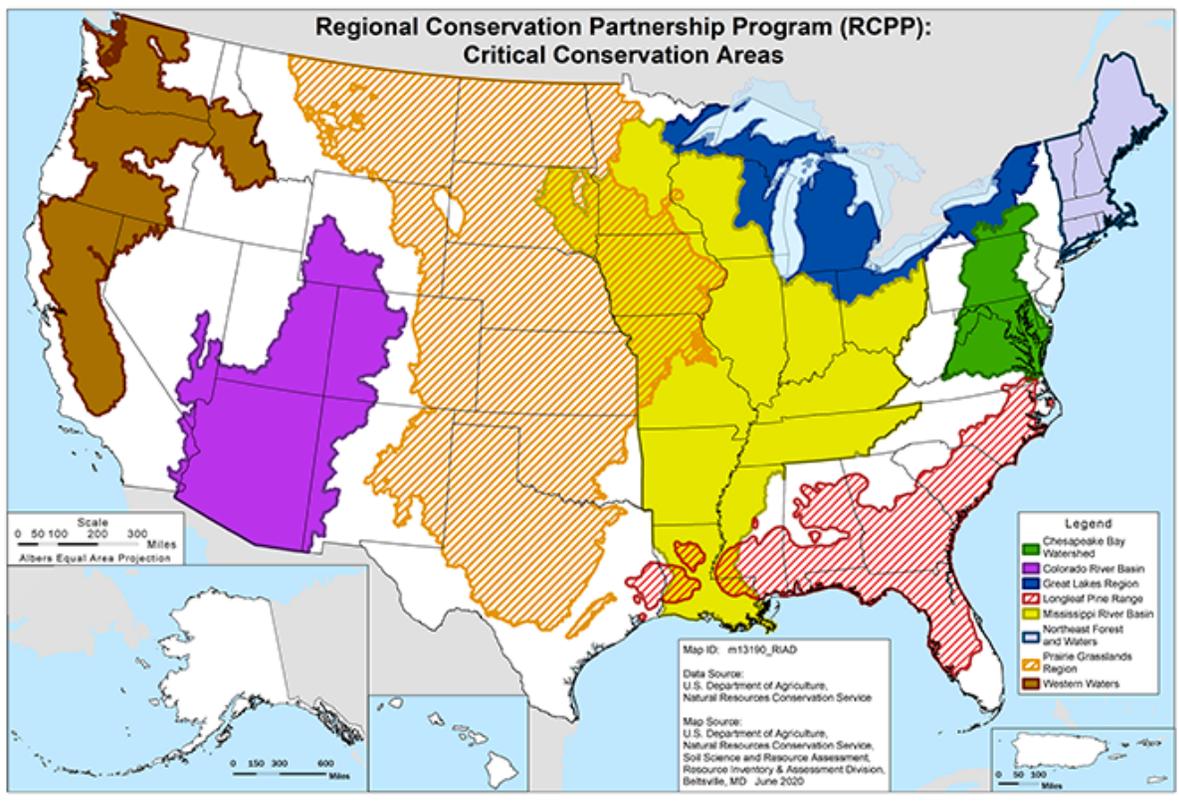
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/rcpp/>

withdrawn only if the area is determined to no longer be a CCA. As under alternative 1, a maximum of 8 CCAs may be designated.

Because critical conservation conditions continued to exist in the CCAs established under the 2014 Farm Bill, and not all priority resource concerns had been fully addressed, NRCS retained the same CCA designations under alternative 2 as under alternative 1 in FY 2019 and FY 2020. During interim final rule development, NRCS solicited input on CCA designations from external and internal stakeholders. While many new CCA designations were proposed, after reviewing proposals with the Secretary, two changes to CCA designations were made for FY 2021.

The new Northeast Forests and Waters CCA was designated because the proposal identified several priority resource concerns, including degraded plant condition, inadequate habitat, and water quality degradation, in an area of the US that did not previously include a CCA. The previous California Bay Delta and Columbia River Basins CCAs were consolidated into one because they address similar resource concerns and two adjacent sub-watersheds that share these same priority resource concerns were added. The new Western Waters CCA consolidated the previous Columbia River Basin and the California Bay-Delta CCAs and added the Klamath and Puget Sound Basins. Previously designated CCAs (Chesapeake Bay Watershed, Great Lakes Region, Mississippi River Basin, Colorado River Basin, Longleaf Pine Range, Prairie Grasslands Region) remain unchanged. The new CCA designations are shown in Figure 5 below.

Figure 5. 2021 CCA Designations



Because the primary resource concerns for CCA designations retained remain the same and those for the new CCAs are similar, there should be few if any differences in the resource concerns addressed or the conservation practices used under alternative 2 compared to alternative 1. RCPP projects funded under the previous CCA designations (Chesapeake Bay Watershed, Great Lakes Region, Mississippi River Basin, Colorado River Basin, Longleaf Pine Range, Columbia River Basin, Prairie Grasslands Region, and California Bay Delta) will continue to make progress towards meeting established goals and addressing primary resource concerns using much the same the practices described under alternative 1. The main difference in effects under alternative 2, is that conservation practices funded under RCPP CCA projects will be applied across larger portions of California, Oregon and Washington as well as in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut for the first time.

Similarly, overarching goals have been established for each CCA. The conservation goals of the Northeast Forests and Waters CCA are to address degraded plant condition, inadequate aquatic and terrestrial habitat, and water quality degradation in New England. The conservation goals of the Western Waters CCA are to address water quality degradation, insufficient water quantity, and inadequate aquatic habitat within several major watersheds on the western coast of the continental US.

Guidance will be developed and provided to partners, including methods and tools that can be used to quantify outcomes at varying scales appropriate to projects (regional, State, county, watershed, field, etc.) and for the various natural resource concerns addressed by projects. This should result in increased accountability for RCPP projects and more information becoming available on the effects of conservation activities used to address primary resource concerns. NRCS will use that information to either continue funding the same activities or make adjustments based on the outcomes. Any adjustments made are not expected to be major because NRCS' experience over its 85-year history has resulted in the development of conservation practices and easement terms to help solve the natural resource problems that exist in CCAs.

Covered Programs and Payments

Under alternative 2, NRCS will continue to administer RCPP through periodic APF notices. Eligible partners will submit proposals to the State and multistate or the CCA pool as described above. Upon selection of a partner proposal, NRCS and the selected partner will negotiate the terms of a partnership agreement. Once the agency approves and announces the proposals selected, agricultural producers within the approved project areas may submit an application to NRCS or through the project partner to enter into an RCPP contract that encompasses eligible agricultural land, nonindustrial private forest land, or associated land. Conservation activities implemented will be the same as those associated with the covered programs. New authority adding CRP to the list of covered programs will allow rental payments to be used in RCPP contracts. PL-566 authorities for watershed projects may be used to fund watershed projects in the State and multistate funding pool as well as in CCAs.

NRCS proposes to use five RCPP participant award types under alternative 2 to implement eligible activities associated with the covered programs. Three award types will be RCPP program contracts between NRCS and producers (including landowners). Two award types will provide funds to partners, either through supplemental agreements between NRCS and an

eligible partner, or for entity held RCPP easements, which will also require one or more eligible producers to participate and receive funds. The five award types are summarized table 4 below.

Table 4: RCPP Contract Types and Associated Covered Programs

Contract Type	Recipient	Associated Covered Program(s)
Land Improvement / Management / Restoration	Producer or Landowner	EQIP, CSP, ACEP-WRE (Restoration), HFRP (Restoration), PL-566
Rental	Producer or Landowner	CRP
Easement held by NRCS	Landowner and Partner	ACEP-WRE, HFRP (Easement), PL-566 (Floodplain Easement)
Easement held by entity	Partner	ACEP-ALE
Public Works/Watershed	Partner	PL-566

NRCS will develop land improvement/management/restoration RCPP contracts, similar to those under EQIP and CSP, with individual producers. Land improvement/management/restoration contracts will also be available to support wetland restoration and management, forest land restoration and enhancement, and watershed land improvement activities, like those available under ACEP-WRE, HFRP, and PL-566. Because these types of RCPP contracts will be able to blend all of these previously distinct program purposes in a single contract, and because of the potential for leveraging partner contributions, greater conservation benefits than could be achieved on the same land under individual program contracts is expected to result.

RCPP rental contracts, unlike regular CRP contracts, are not expected to be used primarily to provide landscape-scale soil erosion protection and associated water quality and wildlife habitat benefits. Rather, RCPP rentals are intended to have targeted purposes within an RCPP project to achieve the proposed conservation benefits. For example, RCPP rental contracts may be used to compensate producers for 1–3 years of lost income during their adoption of new and financially risky cropping systems, or to encourage producer participation in a conservation easement program by making a rental payment to temporarily offset lost income associated with donating or selling a conservation easement. This change is expected to result in more environmental benefits under alternative 2 than would be achieved under alternative 1.

Land improvement/management/restoration and rental RCPP contracts will be developed by NRCS or other qualified persons using NRCS’ conservation planning process with its site-specific EE described in appendix C and conservation practice standards, including CSP enhancements that are linked to standards. Because of this, the effects of conservation practices implemented under those contracts will be largely the same as those described in programmatic EAs¹² for the covered programs and in the Network Effects Diagrams, Conservation Practice Physical Effects (CPPE) documents, and the CEAP as discussed in appendix B.

The effects of CRP have been analyzed in a 2014 supplemental programmatic EIS¹³, incorporated herein by reference. In addition, the environmental benefits of CRP have been quantified in numerous studies available from Farm Service Agency’s Natural Resources

¹² https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/ecosciences/ec/?cid=nrcs143_008451

¹³ <https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdfiles/Environ-Cultural/CRP%20Final%20SPEIS.pdf>

Analysis Group (NRA), Economic Policy and Analysis Staff: <https://www.fsa.usda.gov/programs-and-services/economic-and-policy-analysis/natural-resources-analysis/mae-reports-and-articles/index>. The results of these studies are also incorporated herein by reference. Although RCPP rental contracts will calculate rental payments in different ways and may be made on areas continuing to produce crops, the general effects are expected to be similar to those analyzed in the 2014 Supplemental Programmatic EIS for CRP.

Under ACEP-WRE, the Floodplain Easement Program (FPE), and HFRP, NRCS acquires and holds easements from willing landowners and funds restoration of those lands through contracts between NRCS and the landowner. ACEP-ALE easements are held by an eligible entity. The impacts of NRCS' easement programs have been described in the 2009 programmatic EAs for the Wetlands Reserve Program (WRP), Farm and Ranch Lands Protection Program (FRPP), and Grasslands Reserve Program (GRP)¹⁴, the 2004 Emergency Watershed Protection Program programmatic EIS¹⁵ and the 2006 HFRP programmatic EA¹⁶ and are incorporated by reference. The 2016 and 2019 programmatic EAs for ACEP updated the impacts of consolidating the previous WRP, FRPP, and GRP.

NRCS-held RCPP conservation easements awards will be between NRCS and an eligible landowner to execute a perpetual easement (or 30-year easement when required by State law) on eligible lands. RCPP conservation easement deeds will be written to address RCPP project resource concerns, rather than the land use and land cover requirements that are the basis for ACEP-WRE, FPE, and HFRP. Partner contributions will be allowed to encourage landowner participation, and deed and RCPP producer contract structure are expected to include some flexibility to allow for the possibilities of entity-led contracting for closing services or the long-term monitoring to be completed by a partner rather than NRCS. Anticipated benefits of the flexibility under RCPP, relative to those in the existing covered programs, includes potential increase in partner-provided outreach and project development with interested landowners and leveraging partner contributions. This should result in more conservation easements being acquired under RCPP than would be otherwise be enrolled under the covered programs. In addition, the RCPP easements will help achieve the conservation benefits identified in the RCPP project award, rather than just the wetland and floodplain protection and restoration and forestland restoration and enhancement.

Entity-held RCPP conservation easements awards will be between NRCS, a qualified entity, and a landowner. Partners and landowners will be expected to include minimum deed terms similar to those in ACEP-ALE in their RCPP easement deeds. Lead partners will help inform NRCS funding decisions through project ranking criteria and/or bundled applications. Either a qualified lead partner, or a qualified third-party entity may hold the ALE-like RCPP entity-held easement. RCPP entity-held conservation easement deeds will not be limited to current ALE levels of protection or purposes (protect working agricultural lands and limit nonagricultural uses of the land) but rather to achieve the conservation benefits identified in the RCPP project award.

¹⁴ <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/ecosciences/ec/?cid=nrcseprd386621>

¹⁵ <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/ecosciences/ec/?cid=nrcseprd388417>

¹⁶ https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_006635.pdf

Entity-held RCPP easements will have the potential to execute new, level-of-restriction or conservation benefit-based conservation easement deeds. As with NRCS-held RCPP easement contracts, the flexibilities under RCPP should result in more conservation easements being acquired than would be otherwise be enrolled under the covered program. In addition, the RCPP easements will help achieve the conservation benefits identified in the RCPP project award rather than being limited to the purposes of ACEP-ALE.

The public works/watershed component of RCPP will allow for financial and technical assistance awards to eligible partners to support planning and/or implementation of structural works of improvement to address watershed scale issues on eligible land, similar to PL-566. RCPP project proposals for public works/watershed contracts must detail proposed activities at the task/plan of work level to provide project reviewers information needed to assess project viability. NRCS does not anticipate leading the planning, design, installation, or checkout of these RCPP projects; instead, NRCS expects that partners will lead these efforts. However, NRCS may provide these services, depending on negotiations surrounding implementation technical assistance associated with those projects. Because public works/watershed RCPP projects are likely to be complex and because of the need to demonstrate timely and successful implementation of RCPP projects, NRCS is only likely to fund proposals that provide detailed, well-developed work plans, cost estimates, and proven implementation capacity of the partner. Further, public works/watershed RCPP projects must have a demonstrable tie to proposed conservation benefits and eligible agricultural lands. RCPP financial assistance is not expected to exceed rates available to similarly purposed PL-566 projects. NRCS' planning, design, and applicable environmental analysis (almost always a project-specific EA or EIS) requirements will be substantively similar to regular PL-566 projects. NRCS anticipates that compared to regular PL-566 projects, RCPP public works/watershed projects will be able to address specific situational limitations that prevent a clear fit with regular PL-566; take advantage of demonstrated design, contracting and implementation skills of experienced partners; and leverage partner contributions to achieve greater conservation benefits.

Expanding the ability to use PL-566 authorities to both funding pools likely will not result in more PL-566 structural-type projects being funded under alternative 2 because of the mix of structural and nonstructural project components in PL-566 RCPP projects under alternative 1. Only structural watershed works will fall into the public works/watershed contract type, while nonstructural work (land improvement and easements) will be accommodated in other RCPP participant award types. Therefore, a similar number of PL-566 structural-type projects are expected to be funded under alternative 2 as under alternative 1.

Because some of the conservation measures authorized under PL-566 (described under 5.3.1 above) have increased potential for adverse impacts compared to those authorized in other covered programs, most RCPP projects using PL-566 authority will continue to require project-specific EAs or EISs, unless all of the proposed activities can be categorically excluded from the requirement. Any such projects categorically excluded will have project-specific EEs completed to document the purpose of and need for the proposed action, the impacts of the proposed action and any alternatives, the absence of extraordinary circumstances precluding the use of a categorical exclusion, and the applicability of the categorical exclusions used.

Under alternative 2, NRCS will enter into up to 15 alternative funding arrangements (AFA) or grant agreements each fiscal year.¹⁷ Alternative funding agreement and grant agreements are expected to use the flexibility in RCPP to implement conservation activities different from NRCS' conservation practices as described in appendix B, using methods other than NRCS' conservation planning process and its concurrent site-specific EE as described in appendix C. NRCS will conduct a programmatic EE during development of AFA partnership agreements and grant agreements not using NRCS conservation practices or planning process. If all proposed activities cannot be categorically excluded from the requirement to prepare an EIS, NRCS will require a project-specific EA or EIS, according to the results of the EE and its findings on the potential for significant adverse impacts to occur. Alternatively, NRCS may choose not to fund RCPP proposals expected to result in significant adverse impacts or require extensive consultation with other Federal agencies.

Reasonably foreseeable cumulative effects under alternative 2 would be much the same as they would be under alternative 1. Under this Proposed Action Alternative, the effects of RCPP would continue during the 2018 Farm Bill. Overall, the effects of RCPP would be similar to those under the 2014 Farm Bill described under alternative 1, with important environmental benefits resulting and no major adverse impacts anticipated.

As under alternative 1, conservation practices implemented under RCPP would also continue to be implemented through other NRCS conservation programs, such as EQIP. Easement programs will likewise continue protecting land under easements and CRP will continue to rent land from producers. NRCS landscape initiatives described under the cumulative effects of alternative 1 would also likely continue under alternative 2. NRCS is specifically required by the 2018 Farm Bill to continue to carry out Working Lands for Wildlife (WLFW), and the WLFW model may expand to new agreements between the Farm Service Agency and the U. S. Fish and Wildlife Service for the purpose of carrying out activities for species conservation.

Under alternative 2, NRCS' coordination with State Technical Committees on identification of priority resource concerns to be addressed with projects funded under the State/multistate pool will result in additional focus of RCPP and partner technical and financial resources to address natural resource problems in a coordinated fashion in specific geographic areas. This will help NRCS meet the intent of Congress to increase program adoption by eligible partners and producers alike and increase development of RCPP projects at the local level to better ensure successful outcomes.

As described under alternative 1, alternative 2 will also have indirect effects associated with application of conservation activities and some negative impacts may also occur, since certain practices applied to benefit one resource concern may have adverse impacts on others. Applying suites of conservation activities that consider the impact on all resource concerns is key to resolving such incongruities and complying with NRCS regulations and policy for the protection of the environment as described in appendix C.

¹⁷ Descriptions of FY 2020 AFA projects are available here:
<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/rcpp/?cid=nrcseprd1654221>

Based on the results identified in the covered program NEPA documents, on the network effects diagrams associated with NRCS conservation practices, and in CEAP studies, there is every reason to expect that in general under the proposed action, soil erosion will decrease; soil, air, and water quality will improve; water will be used more efficiently; plant condition and wildlife habitat will improve; and energy will be used more efficiently. These benefits should be similar under both alternatives. The increased competition and flexibility for use of the funding will tend to result in higher quality projects with substantial existing buy-in and increased chances of being implemented by partners and producers than those under alternative 1.

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APPENDICES

Appendix A: NRCS Regional Conservation Partnership Program (RCPP) 2014-2018 Project Summaries

ALABAMA

Apalachicola-Chattahoochee-Flint Rivers (ACFR) Conservation Partnership for Alabama, Florida, and Georgia (FY14/15) \$4 M, (National) Lead partner: Flint River Soil and Water Conservation District. Persistent drought and long-term landscape change have reduced the capacity of the ACFR Basin to balance human use with ecological demand. Led by the Flint River Soil and Water Conservation District—whose successful partnership with NRCS has led to innovations in cost-effective irrigation improvements through several Conservation Innovation Grants—this project to improve water quality and quantity in the ACFR includes more partners, ranging from private industry and large nonprofit organizations to universities and local soil and water conservation districts.

A Partnership to Address Irrigation Water Quantity Concerns in Alabama (FY14/2015) (State) \$1.7 M; Lead partner: Alabama Farmers Federation. The Alabama Farmers Federation will work to address a growing demand for water in several of the State’s watersheds. Recent data shows that in some cases, irrigation increased up to 80 percent in the past few years. The goal of the Alabama Farmers Federation is to work with partners to provide direct technical support and outreach to program participants to ensure future irrigation practices will be efficient, sustainable and environmentally friendly. The RCPP Alabama Partnership’s goal is to protect, improve and enhance water quantity and water quality in the State’s watersheds.

Coastal Headwaters Forest—Longleaf Conservation and Restoration (FY 2016); \$5 M, (CCA—Longleaf Pine Range); Lead Partner: The Conservation Fund. The 205,000-acre Coastal Headwaters project, located in Florida and Alabama, will utilize key partnerships and resources to acquire conservation easements and restore the off-site loblolly pine to the native longleaf pine. In doing so, more than 44 at-risk species’ habitat will be enhanced and increased acres of longleaf pine restored. Water quality and quantity to the Gulf of Mexico will be protected and jobs retained.

African American Forest Restoration and Retention-(FY 2016); \$1.6 M (CCA-Longleaf Pine Range); Participating State(s): Alabama, North Carolina & South Carolina (lead State); Lead Partner: U.S. Endowment for Forestry and Communities. Through an existing partnership, the Sustainable Forestry and African American Land Retention Program (SFLR), this project will address degraded plant conditions and enhancement of wildlife habitat by supporting forest restoration on African American-owned forestlands in high poverty regions of the Southeastern United States. In this region, African American family-owned forests tend to be degraded due to lack of proactive forest management. During its 30-month pilot phase, the SFLR program was effective at building a bridge of trust between landowners and USDA programs supporting 157 EQIP applications for forestry practices with more than \$1 million in EQIP contracts directed to African American project participants. The project will support landowners through direct provision of forestry, land tenure (heirs’ property) and technical services as well as the brokering of services from other private and government providers including forestry commissions, consulting foresters, extension services and conservation organizations.

Coastal Headwaters Forest Partnership Alabama: (FY 2017); \$8 M; (CCA—Longleaf Pine Range) 15 Participating States: Alabama (Lead State); Lead Partner: The Conservation Fund. The Coastal Headwaters Forest Partnership will address the natural resource concerns of the Longleaf Pine Range Critical Conservation Area in Alabama’s Gulf Coastal Plain. Longleaf pine forests once dominated the American Southeast, stretching across 90 million acres. Now only four percent of the original forests remain, mostly on public lands. The CHF Partnership, led by The Conservation Fund and over a dozen diverse partners, will educate private landowners about conservation easements and encourage producers to conserve, restore and manage large properties permanently for longleaf habitat in a way that benefits the economy and environment. By restoring longleaf pine, the project will preserve four major coastal river systems in the Gulf Coast Plain, protect habitat for the threatened gopher tortoise, and approximate 600 other species related to longleaf pine habitat.

Climate Resiliency in Florida, Alabama and Georgia (FY 2017); \$3M (National) Lead Partner: Flint River Soil and Water Conservation District. Participating States: Alabama, Florida and Georgia (Lead State). The Apalachicola-Chattahoochee-Flint River Basin stretches from the base of the Appalachian Mountains in North Georgia to the Gulf of Mexico in the Florida Panhandle. The vibrant ecological Apalachicola-Chattahoochee-Flint River Basin and adjacent Ochlockonee River Basin provide habitat for a rich biodiversity of aquatic and terrestrial species, including many designated as endangered or threatened. Growers in this region provide food, fuel, forest products and fiber to global markets, and they depend upon the areas natural resources to sustain their livelihoods. Over the last few decades, fluctuations in climate patterns have presented challenges to sustainable management of the region’s natural resources. The Flint River Soil and Water Conservation District and over 30 multistate partners will develop and implement practical solutions for climate change adaptation in the river basins.

Alabama Soil Health (FY 2017); \$1.8 M (State); Lead Partner: Alabama Soil and Water Conservation Committee; Participating States: Alabama (Lead State). Through the Alabama Soil Health project, the Alabama Soil and Water Conservation Committee and partners will work with Alabama farmers to improve the timeliness of cover crop planting, explore innovative planting methods to get seeds in the ground earlier, and increase access to equipment as needed. The project partners will conduct outreach to farmers through newsletters and social media, workshops and field days along site visits. Among the many benefits of cover crops, the reduction of soil erosion, the improvement of water infiltration and storage, and the enhancement of water quality are among the most important.

Coastal Headwaters Longleaf Forest (FY2018); \$7M (Critical Conservation Area—Longleaf Pine Range); Lead Partner: The Conservation Fund; Participating States: Alabama (Lead State) and Florida. Longleaf pine forests once encompassed more than 90 million acres across the Southeast. Over the past two centuries, development, conversion to other industrial forest types, and fire suppression have reduced the longleaf pin forests to less than 5 percent of their original range. The Coastal Headwaters Forest project addresses the natural resource concerns of the Longleaf Pine Range CCA in Alabama’s Gulf Coastal Plain near the Gulf of Mexico. By restoring longleaf pine, the project will preserve four major coastal river systems in the Gulf Coast Plain and protect habitat for the threatened gopher tortoise.

Alabama Riparian Habitat Initiative (FY18); \$1.64 M (State); Lead Partner: Alabama Soil & Water Conservation Committee Participating States: Alabama (Lead State). Often referred to as “America's Amazon,” 10 percent of America’s total water resources originate or flow through Alabama, resulting in the State being listed as number one in the Nation for the occurrences of freshwater crayfish, fish, turtles, snails and mussel species, many of which are designated as endangered or threatened. The Alabama Riparian Habitat project, an innovative partnership of 13 organizations, will strengthen riparian buffer management practices on the landscape, offering solutions to landowners for the protection and enhancement of Alabama's natural resources. Riparian areas will be fenced off and revegetated, alternate water and shade sources will be provided, and stream access will be controlled to allow for improved water quality and grazing management, healthier livestock, and quality of life benefits to residents, visitors, wildlife and downstream water users.

ALASKA

Innovative Tribal Conservation and GHG Management (FY14/15); \$1.8M (National); Lead Partner: Intertribal Agriculture Council; Participating State(s): Alaska, Nebraska, New Mexico, Oklahoma & South Dakota (lead State). As the impacts of climate change become more pronounced in Indian country, Native Nations and Indian landowners are faced with the challenge of implementing resource conservation land management systems that incorporate greenhouse gas management activities, also known as carbon farming practices. As greenhouse gas management services gain value in environmental markets, it is vital that historically underserved Tribal conservation programs and American Indian farmers and ranchers develop conservation projects that demonstrate causal relationships between soil quality and ecosystem production functions such as carbon sequestration. This project will address the need for conservation stewardship projects on American Indian lands that integrate a carbon farming production possibilities frontier component. The project area will be national in scope covering a diversity of Tribal rangeland landscape types including Southwest Alaska, prairie grassland and Colorado River Basin regions. The project includes developing and implementing soil amendment, forestry and grazing management Conservation Activity Plans (CAP) and Conservation Stewardship Plans (CSP) on pilot project sites. The CAP/CSPs will establish a framework for inventorying the existing baseline carbon sequestration rate and propose cost-effective conservation practices to achieve multiple environmental quality and economic development goals. One of the anticipated outcomes from this project will be the development of carbon offsets from soil amendment and grazing land and livestock management activities. We will engage private investment in those pilot project sites that both meet investors and credit buyers’ interest in charismatic high-quality carbon offsets, and Tribes’ interest in promoting appropriate conservation practices and economic development on Indian lands.

Hoonah Native Forest Lands Partnership (FY14/15) \$2M (State) Lead partner: Sealaska Corporation (ANSCA Regional Corporation). Regional-scale land management and conservation planning will improve habitat for salmon and Sitka black-tailed deer, long-term timber production, and enhance products such as blueberries and firewood. The work will benefit traditional and subsistence resource use by Alaska Natives and rural residents in the Hoonah area. The success of this project will improve the ecological and economic sustainability of natural resources in the community as well as providing a valuable conservation planning model for other communities.

Implementing Education, Outreach, and Conservation Practices on Tribal Land for Socially Disadvantaged Producers and Alaska Tribal Conservation Districts (FY24/15) \$1.6M (National) Lead partner: Tyonek Tribal Conservation District. This project, which includes all eleven Alaska Tribal Conservation Districts (ATCDs), will extend the capacity of NRCS to provide service to ATCDs and connects partners for the benefit of enhancing, preserving, and restoring habitat used for subsistence resources in the effort to preserve customs and traditions of Alaska Native people. The project has a strong monitoring component, and partners will collect data on subsistence resources and their habitat to establish baseline information and measure change overtime.

Keex' Kwaan' Community Forest Partnership (FY18); \$2M (State); Lead Partner: Sealaska Corporation (ANCSA Regional Corporation. Participating State: Alaska (Lead). Sealaska has been working with Alaska Native Village Corporations and several other partners to develop an all-lands, all-hands approach to maximizing rural community benefits from land management activities while improving overall conservation outcomes, especially for Sitka Black-tailed deer and salmon. The Keex' Kwaan' Community Forest Partnership project is modeled off the Hoonah Native Forest Partnership, a successful 2015 RCPP project.

Copper Basin Subsistence Landscape Resiliency (FY18); \$1.71 M (National), Lead Partner: Ahtna Intertribal Resource Commission dba CRITR. Participating States: Alaska (Lead State). This is a unique, innovative, participative project to bring resources together to address subsistence sustainability through habitat enhancement, wildfire prevention measures and biomass harvest support in the Ahtna Traditional Use Territory, a 26-million-acre landscape of the Copper River basin.

ARIZONA

Restoring Native Grassland Habitats to Benefit Wildlife, Ranching and Open Space (FY14/15); \$1.5 M (State) Lead partner: Arizona Game and Fish Department. The projects accomplished through this proposal will be directed at improving grassland habitat for grassland dependent wildlife species. These are species of concern for the Arizona Game and Fish Department, which include pronghorn antelope, Gunnison's prairie dogs, black tailed prairie dogs, western burrowing owls, and Ferruginous hawks to name a few. Projects will restore native grasses and forbs to historic grasslands, which will improve food availability, cover and reduce fragmentation for wildlife.

Central Arizona Grassland Restoration and Watershed Partnership Program (FY14/15); \$1.5 M (State); Lead partner: Arizona Game and Fish Department. The goal of the projects from this proposal is to improve habitat for wildlife species dependent on grasslands and are of concern for the Arizona Game and Fish Department. In addition to grassland habitat improvement, projects from this proposal will address resource concerns such as inadequate water and forage, soil erosion and water quality degradation. Other resource concerns to be addressed include continued degradation of the watershed due to catastrophic wildfire.

Verde River Flow and Habitat Restoration Initiative (FY14/15); \$2.8M (CCA); Lead partner: The Nature Conservancy. Project partners in the Verde River Valley of Arizona will aim to improve irrigation water management and irrigation water delivery on acres, enhance

riparian habitat, and protect agricultural lands through conservation easements over five years. Easements will be focused on lands that have substantial investment in on-farm conservation practices and are critical to ensure long-term investments are protected. The lead partner has been working in the Verde Valley for three years investment in improving conveyance infrastructure, which will now enable this effort with greater on-farm focus.

Fort Huachuca Sentinel Landscape Conservation (FY16); \$5.9M (CCA); Lead Partner: Arizona Land and Water Trust; Participating State(s): Arizona. Water conservation relating to insufficient supply and drought is a natural resource concern for everyone and especially for those in the arid southwestern U.S. This project will address the resource concerns of insufficient water quantity (drought) as well as inadequate fish and wildlife habitat within the Colorado River CCA. The project area is within the Fort Huachuca Sentinel Landscape and focuses upon the Babocomari River and Sonoita grasslands, which contain large working landscapes with landowners interested in conservation/restoration. It also contains critical habitat for three threatened and endangered species, has high quality and restorable grasslands and many springs and seeps. This partnership will work collaboratively to protect and enhance these resources through the use of conservation easements as well as through education, outreach and increased enrollment in NRCS programs. This will help preserve the areas large working ranches, wildlife habitat, open spaces and rural livelihoods.

Improving AZ Strip for Wildlife and Cattle; (FY16); \$900K (State); Lead Partner: Arizona Game and Fish Department. Participating State(s): Arizona. Removing invading woody species such as juniper and sagebrush from historic grasslands will allow native grass and forb species to return to these areas and improve food availability, cover and reduce fragmentation for wildlife, especially for species of concern, which include mule deer, golden eagles and California condors.

The Little Colorado River Watershed - Navajo Nation Regional Conservation Partnership Program (FY17); \$4.8M (Critical Conservation Area—Colorado River Basin) Lead Partner: Navajo Nation Division of Natural Resources; Participating States: Arizona (Lead State). The Little Colorado River Watershed - Navajo Nation Regional Conservation Partnership Program Project will align Navajo and Federal Governments, Navajo producer associations, communities, and local organizations with the mission of the Natural Resources Conservation Service. The Navajo Nation RCPP will establish a five-year PL-566 Watershed Planning Team for three sub-watersheds of the Little Colorado River Basin in Arizona. The project partners—including the Navajo Nation Division of Natural Resources, the Little Colorado River Watershed Chapters Association, Navajo Soil and Water Conservation Districts, Army Corps of Engineers and the Bureau of Indian Affairs—will participate in and support PL-566 planning activities. The partners will address barriers to Navajo participation in Environmental Quality Incentives Program and other USDA programs, conduct bilingual-bicultural outreach and education to emerging producers' associations, and support youth conservation demonstration projects. The partnership will strengthen relationships among communities, producers and decision-makers and improve resource conditions in the project area, approximately 25 percent of Navajo Nation.

Northern Arizona Grassland Restoration (FY17); \$1.5M (State); Lead Partner: Arizona Game and Fish Department; Participating States: Arizona (Lead State). In Arizona, an estimated two-thirds of native grasslands have been adversely impacted by ongoing drought and

climate change, invasive woody vegetation and noxious weeds and wildland fire. Through the partnership project, the Northern Arizona Grassland Restoration project—led by the Arizona Game and Fish Department and Federal, non-profit and academic partners—will remove encroaching woody vegetation using fire and mechanical treatments, modify or remove potential barriers to wildlife movements, and repair, upgrade, and install watering facilities for wildlife. The complementary project goals are to restore a minimum of 20,000 acres of degraded grassland and savannah habitat and to provide reliable water sources for wildlife on a total of 100,000 acres.

Partnership GRIC Water Supply Protection Program (FY18); \$10M (National) Lead Partner: Gila River Indian Community Participating States: Arizona (Lead State). The Gila River Indian Community (GRIC), a federally recognized Indian Tribe, successfully farmed its land until a century ago when upstream diversions left growers with an insufficient water supply, leading to water and soil quality degradation and loss of productive farmland. All of the GRIC's settlement water, particularly the Central Arizona Project (CAP) water, has been affected by drought in the Lower Colorado River Basin. Because of the amount of CAP water in the GRIC's budget, it is exposed to great risk of shortage. Therefore, the GRIC has engaged in innovative ways to conserve water by partnering with Federal and State agencies in a Drought Contingency Plan (DCP) to maintain storage levels in Lake Mead in an effort to stave off a shortage declaration. This project will work to reduce water losses and maintain ground and surface water balances to ensure the long-term sustainability of soil and water quality and quantity.

SE AZ Grassland Restoration Project (FY18); \$1.25M (State); Lead Partner: Arizona Game and Fish Participating States: Arizona (Lead State). Multiple partners will work to identify grassland restoration projects within the project area through outreach to landowners and lessees. Brush management will be used to restore 10,000 acres of historic grasslands through this project. These restored acres will benefit a wide variety of grassland obligate species and benefit ranchers through more productive grasslands throughout the project area.

Lyman North—Grasslands Restoration (FY18); \$1M (State); Lead Partner: Apache Natural Resource Conservation District. Participating States: Arizona (Lead State). The Apache Natural Resource Conservation District has successfully implemented and completed practices to support grassland restoration in the southern portion of the District boundary, improving water and soil quality. This RCPP project extends this landscape scale work into the northern portion of the District, positively impacting rangelands, watersheds and wildlife habitats.

ARKANSAS

Growing Conservation in the Illinois River Watershed: (FY14/15); \$1.2 M; (State); Lead partner: Illinois River Watershed Partnership. The goal of this project is to improve water quality in the Illinois River Watershed so that all waters meet their designated uses. The Illinois River and its tributaries have many designated uses set forth by the Arkansas Pollution Control and Ecology Commission including fisheries, primary and secondary contact recreation, drinking water supply and agricultural and industrial water supply. However, portions of the Illinois River and its tributaries have been cited as not meeting these designated uses due to impairment from

bacteria, sediment and/or excess nutrients. Financial and technical assistance is vital to achieving that goal now and in the future. Water quality degradation to be addressed includes excessive sediment in surface waters, elevated water temperature, excess nutrients in surface and ground waters, excess pathogens and chemicals from manure, bio-solids or compost applications. Water quality degradation and degradation of plant condition caused by undesirable plant productivity and health must be balanced and addressed as special environmental concerns. Soil erosion is a resource concern due to concentrated flow erosion and excessive bank erosion from streams creating excessive sediment in surface waters. Inefficient use of energy in the farm operation increases dependence on non-renewable energy sources that can be addressed through improved energy efficiency and the use of on-farm renewable energy sources.

Red River Project (FY14/15); \$800K (State); Lead partner: Southwest Arkansas Resource Conservation and Development Council. The Arkansas Red River Project area is a multicounty project that includes the counties of Hempstead, Lafayette, Little River and Miller that border the Red River. This project has been developed to address the primary resource concern of water quality in the Red River Watershed in Arkansas. Secondary resource concerns include soil erosion, irrigation water quality and quantity and wildlife habitat benefits. Project success will be measured by the acres of agricultural land under contract and the number of producers adopting conservation practices that will reduce nutrient and sediment load entering the Red River.

Rice Stewardship Partnership—Sustaining the Future of Rice: (FY14/15); \$10 M (National); Lead partner: Ducks Unlimited, Inc. (DU); States: AR, LA, MS, MO, CA, TX. The Rice Stewardship Partnership composed of DU, the USA Rice Federation, and collaborating partners, will assist rice producers to address water quantity, water quality, and wildlife habitat in Mississippi, Arkansas, California, Louisiana, Missouri, and Texas. Using remote sensing to estimate bird population carrying capacity in shallow waters and the Field-to-Market Field print Calculator to monitor results over time, the partners offer several innovations to augment conservation implementation and gain broader producer participation.

Bayou Meto Lower Arkansas Region Conservation Partnership Proposal (FY14/15); \$3M (CCA—Mississippi River Basin); Lead Partner: Bayou Meto Water Management District. This project builds on strong momentum among landowners and existing partnerships that have been developed over the past through five years through the Mississippi River Basin Healthy Watersheds Initiative. It will use the full suite of NRCS programs—EQIP, CSP, ACEP-WRE, and PL-566—to address water quality degradation, ground water declines, and inadequate habitat for fish and wildlife on acres of irrigated cropland. Local partners, including irrigation districts, conservation districts, State game and fish and resource agencies, farmer co-op, higher education institutions, and for-profit entities, have well-defined roles and supported contributions to the project.

East Fork Cadron Creek Project (FY16); \$1M (State); Lead Partner: Faulkner County Conservation District; Participating State(s): Arkansas. The East Fork Cadron Creek watershed is located primarily in Faulkner County but also touches Conway, Cleburne and White counties. The East Fork Cadron drains into the Arkansas River. Resource concerns within the project area are water quality degradation due to excessive nutrients and pesticides in surface and

ground water and excessive sediment in surface waters. The primary source of contamination is cited as agriculture practices causing siltation and turbidity in the water.

Greers Ferry Lake Watershed Project (FY16); \$816K (CCA-Mississippi River Basin); Lead Partner: The Nature Conservancy; Participating State(s): Arkansas. The upper Little Red River (ULRR) watershed in the Ozark ecoregion of Arkansas supports recreational use, water supply, timber industry, productive land for grazing and contains 57 species of greatest conservation need. Water quality degradation and inadequate habitat for fish and wildlife are concerns within the ULRR watershed and will be addressed in this project through the reduction of erosion, sedimentation and excess nutrient runoff. Conservation practices will be targeted towards addressing these concerns and focus on land that directly impacts streams, riparian land. The Nature Conservancy will implement innovative methods such as "natural channel design" stream restoration projects and new ways to approach unpaved road improvements to substantially reduce sedimentation in streams while providing cost-effective, long-term solutions to the producers.

West Fork White River Watershed Initiative (FY16); \$4.3M (CCA-Mississippi River Basin); Lead Partner: Watershed Conservation Resource Center; Participating State(s): Arkansas. The West Fork White River (WFWR) is one of six major tributaries to the White River, which forms Beaver Lake, the primary drinking water source in Northwest Arkansas for 420,000 residents. Beaver Lake watershed is a State nonpoint source priority for sediment and nutrient reduction, and the WFWR is one of the largest contributors of sediment and phosphorus loadings. The Watershed Conservation Resource Center will work with several partners and producers/landowners to 1) design, construct, and establish large-scale river restorations through the PL-566 program that address accelerated streambank erosion at identified priority sites and 2) implement BMPs on agricultural and forest lands through EQIP. These actions should reduce sediment and nutrient loadings to the watershed and prevent the loss of agricultural lands and forest, while improving aquatic and terrestrial habitats.

Departee Creek Flood Prevention Plan (FY17); \$180K (CCA—Mississippi River Basin) Lead Partner: Departee Creek Watershed Improvement District; Participating States: Arkansas (Lead State). Departee Creek Watershed Improvement District and local partners, including beginning farmers and under-served producers, will implement a "shovel ready" flood prevention plan and restore natural flow to Departee Creek in Arkansas. Frequent flooding results in high quantities of sediment buildup, nutrient loss and erosion along the waterway and adjacent lands. The partners will restore critical sections of the river and then develop a low water weir on a lake located mid-stream to maintain desired water levels. The work will improve wildlife habitat, limit loss of nutrients and crops, and reduce damage to personal property and roads. With successful implementation of the flood plan, the waterway also may be removed from the 303 (d) Impaired List.

The Little Red River Water Improvement Project (FY17); \$1.2 M (State); Lead Partner: Little Red River Irrigation District Number of Initial Partners: 14 Participating States: Arkansas (Lead State). The Little Red River Regional Irrigation Water District in Arkansas was formed in 1991 with a goal of creating sustainable sources of irrigation water throughout parts of White County. The Little Red River Water Improvement Project, managed by the District and 13 partners, will encourage irrigated cropland producers to implement structural irrigation practices.

The project will result in a higher level of irrigation efficiency and water quality throughout the area. Wildlife habitat also will be increased on enrolled land.

Mid-south Graduated Water Stewardship Program (FY17); \$7 M (National); Lead Partner: USA Rice Federation; Participating States: Arkansas (Lead State). The economically-distressed Lower Mississippi River Valley region of the United States has long been fighting an uphill battle to retain ground water levels, improve water quality and provide a suitable habitat for the diverse array of wildlife that inhabit the region. The Mississippi River Alluvial Aquifer serves as a vital and valuable irrigation source for rice growers throughout the region. Decades of annual withdrawals in excess of the aquifer's recharge capabilities have resulted in severely declining water levels that threaten the entire region's viability and could result in regulation for farmers. To address this, USA Rice has partnered with Ducks Unlimited and more than 20 other partners to increase conservation efforts at all levels of producers—from those who are just beginning their conservation efforts to those who are on the cutting edge of conservation innovation. In addition to offering appropriate practices/enhancements for producers, the Mid-South Graduated Stewardship project will include an innovative option for producers to enter the carbon market by adopting advanced Alternate Wetting Drying through Environmental Quality Incentives Program/EQIP 449 Irrigation Water Management practice. The project will include 25 Strike Force counties and parishes and use an innovative outreach plan devised to reach a new and diverse set of farmers that may not often participate in USDA or conservation programs.

CALIFORNIA

Expansion of Waterbird Habitat Enhancement Programs on Central Valley Agricultural Lands (FY14/15); \$7M (CCA) Lead partner: California Rice Commission. The current sequence of events for rice production creates a situation where birds are frequently left with abrupt changes in habitat availability. The proposal extends the “watering” season of flooded rice fields beyond just the production phase and adds shallow water habitat in the winter/spring and fall months. This proposal will expand the Waterbird Habitat Enhancement Program (WHEP) by enhancing the wildlife value of acres of rice and the long-term sustainability of rice agriculture. A new WHEP component will address the needs of upland-nesting bird species on targeted acres. Ultimately, the partners have a goal for past participants to transition to CSP, with acres enrolled in the rice field management portion and enrolled in the upland portion by 2019.

Protection, Restoration, and Enhancement of Tricolored Blackbird Habitat on Agricultural Lands (FY14/15); \$1.1M (CCA) Lead partner: Audubon California. The Tricolored Blackbird, once was abundant in California with a population in the millions, now has an estimated 145,000 birds remaining statewide, and many predict that it is heading toward extinction. This proposal is a partnership between the dairy industry and conservation groups to address the factors that challenge California dairy farmers and threaten Tricolored Blackbirds, with the goal of finding a sustainable solution for management of colonies on farms and saving the Tricolored Blackbird from extinction. In addition to using working lands and easement programs to protect and increase habitat, the proposal includes an industry-led promotional campaign highlighting farmers' role in saving the species and the formation of a working group with industry partners to develop, vet, and pilot potential long-term solutions that could substitute for federally funded harvest management practices.

Rogue Oak Woodland Health and Habitat Conservation Project (FY14/15); \$3M (National); Lead partner: Lomakatsi Restoration Project. Many at-risk and listed species depend on quality oak woodlands that are threatened by conifer encroachment, densification, and severe wildfires in this project area, covering portions of Oregon and California. Working with landowners, including historically underserved producers, and using a sound, science-based approach, the partners will target high-priority acres recently identified in a Conservation Implementation Strategy to preserve, enhance, and restore the structural diversity, ecological function, and overall health and persistence of oak habitats and their watersheds.

Rice Stewardship Partnership—Sustaining the Future of Rice (FY14/15) \$10M (National); Lead partner: Ducks Unlimited, Inc. (DU). The Rice Stewardship Partnership composed of DU, the USA Rice Federation, and collaborating partners, will assist rice producers to address water quantity, water quality, and wildlife habitat in Mississippi, Arkansas, California, Louisiana, Missouri, and Texas. Using remote sensing to estimate bird population carrying capacity in shallow waters and the Field-to-Market Fieldprint Calculator to monitor results over time, the partners offer several innovations to augment conservation implementation and gain broader producer participation.

Bay Area Partnership Promoting Climate Beneficial Practices for Environmental Enhancement and Resiliency of Working Lands (FY14/15) \$2.5M (State); Lead partner: Marin Agricultural Land Trust. The Bay Area partnership and individual partners will build capacity and strengthen relationships, educate landowners and coordinate conservation actions, benefitting agriculture and natural resources in the region. The partnership proposes a three-pronged approach to addressing the primary and secondary resource concerns which includes providing technical assistance to landowners for on-farm planning, using the EQIP program to implement on-the-ground climate beneficial conservation measures, and acquiring agricultural conservation easements to protect high priority agricultural land that provides important ecological functions.

Pajaro Valley Community Water Dialogue, Tribal Conservation Districts (FY14/15); 800K (State) Lead partner: Resource Conservation District of Santa Cruz County. This proposal will leverage and support the locally driven community water dialogue to address pressing water quantity and water quality issues in the Pajaro Valley on California's Central Coast. The region currently has an aquifer overdraft with resulting seawater intrusion compromising ground water quality. The primary resource concern to be addressed is water supply (affected by inefficient use of irrigation water and declining ground water quality due to salts). Additionally, the project will address secondary resource concerns of surface and ground water quality impairments due to sediments and high concentrations of nutrients stemming in large part from agricultural sources. Taken as a whole, these resource concerns threaten the long-term viability of agriculture in the Pajaro Valley. A three-year targeted program will implement an innovative water supply and water quality management approach applicable to other regions where both surface and ground water quality are of concern, including several other coastal California agricultural communities.

North Coast Oak Woodland Conservation Project; (FY16) \$2.6 million (State); Lead Partner: University of California Cooperative Extension; Participating State(s): California. Throughout the Pacific Northwest, the loss of deciduous oak woodlands has become a critical

conservation concern, resulting in associated losses of wildlife habitat, range values, cultural uses, biodiversity and other ecosystem services. This project would provide much-needed cohesion to efforts at a regional scale, complementing substantial contributions by local organizations and landowners and providing a venue for shared development of related skills and expertise, best management practices and strategic vision among the many stakeholders working on this issue. Project objectives include increasing habitat continuity and the quantity and quality of food and shelter for wildlife; restoring structural integrity of oak woodland habitats and reducing wildfire risks; increasing the vigor and productivity of oak stands and associated plant communities; and increasing forage and shelter for livestock.

Salton Sea Agricultural Wetlands Habitat Program; (FY16) \$7.5M (National); Lead Partner: Salton Sea Authority; Participating State(s): California. This project will help producers and partners improve Salton Sea water quality, improve Imperial and Coachella valley air quality and restore habitat and wetlands. The Salton Sea is a shallow, saline, terminal lake sustained by agricultural discharge principally from the Imperial Valley. The lake provides important habitat for birds, with an estimated 400 species relying upon the lake, as well as habitat for several State- and federally-listed species. Over the last two decades, Imperial Irrigation District (IID) became a party to agreements, which provide for conservation measures to generate 408,000 AFY (acre feet per year) of water for transfer out of the Imperial Valley for Southern California urban users. Because the lake is sustained largely by agricultural discharges, absent mitigation and restoration, the parties recognized that these transfers would have unacceptable environmental impacts, particularly to the Salton Sea. IID committed to provide mitigation water for 15 years, while California committed to remaining mitigation and restoration. The first restoration projects are ready for implementation. This project targets conservation assistance to improve the water quality of IID agricultural drains, the New River and the Alamo River, which together will provide the inflows to sustain these first habitat and air quality restoration projects. By improving the quality of these inflows, this project will fill a pivotal niche in these important Salton Sea restoration projects and will help assure the success of a critical ag-to-urban water transfer.

Sierra Valley CPP (FY16); \$9.9M (CCA); Lead Partner: Feather River Land Trust; Participating State(s): California. The Sierra Valley Conservation Partnership Project (SVCPP) is a collaborative initiative to conserve high quality wildlife habitat and address water quality and ground water management challenges in Sierra Valley, the largest wetland and mountain meadow complex in the Feather River system and an ecologically rich sub-region of the Bay Delta. Sierra Valley supports the greatest diversity and abundance of birds in the Sierra Nevada and provides breeding habitat for more than 17 rare or threatened bird species. Sierra Valley is also a "priority" ground water basin for California supplying drinking water to over 1.6 million Californians each year. The SVCPP will create a formal working partnership between NRCS and one of the most successful landscape-scale conservation initiatives underway in California today, enabling NRCS to leverage its resources to achieve results completely unimaginable absent the partnership. The SVCPP will bring substantial new financial and human resources to the table, more than doubling NRCS's investment and enabling NRCS better serve the resource conservation needs of landowners in this critical upper watershed of the California Bay Delta CCA.

SONEC Working Wet Meadows Initiative (FY16) \$2.6M (National); Lead Partner: Intermountain West Joint Venture; Participating State(s): California & Oregon (lead State). The Southern Oregon/Northeastern California (SONEC) region is one of the most important areas for migratory waterbirds in North America, supporting approximately 70 percent of the Pacific Flyway's wetland-dependent migratory bird population (>six million birds). These birds are attracted to SONEC because of the food resources provided by privately owned, flood-irrigated wet meadow habitats on working ranchlands within historic floodplains. However, these habitats are increasingly threatened by changing irrigation practices, aging water conveyance infrastructure and fragmentation. To address at risk species habitat, water quantity and drought resource concerns, this project will strategically utilize Farm Bill programs and partner contributions to conserve nearly 25,000 acres of wet meadow habitats and improve the resiliency of working ranchlands to drought. Specifically, the project will improve the sustainability of wet meadows for migratory birds by: enhancing infrastructure and improving the efficiency of flood-irrigation on critical wet meadows; acquiring conservation easements to remove fragmentation risk; and enhancing important foraging habitat for wetland-dependent migratory birds.

Sonoma County Venture Conservation (FY16) \$8M (National); Lead Partner: Sonoma County Agricultural Preservation and Open Space District; Participating State(s): California. Due to severe drought in California, protection of agricultural lands and ecosystems for climate and drought resiliency is a high priority for partners in Sonoma County, California. This project is focused on four resource concerns: insufficient water, water quality degradation, soil quality degradation and inadequate habitat for fish and wildlife. The strategy for drought and climate resiliency involves using cutting edge science—such as LIDAR, downscaled climate modeling, atmospheric river modeling, habitat and species mapping, and countywide GIS based spatial decision support systems—to inform our conservation vision, conservation plans and effectiveness monitoring. The project will leverage funds for natural resource enhancements utilizing practices, which avoid the need for regulatory requirements and increase regulatory certainty for landowners. Conservation activities will focus: on layering multiple practices in key riparian corridors, ground water basins and floodplains in Sonoma County; acquiring easements; developing landowner plans; and implementing riparian corridor restoration, water conservation measures and floodplain enhancements to achieve sustainable water quality and quantity, soil health and functional ecosystems. Sonoma County sits at the nexus of the rapidly urbanizing San Francisco Bay Area and the rural North Coast of California. Conserving the rural heritage, agricultural economy and natural ecosystems is increasingly challenging given the pressure to convert natural and working lands to residential development, and conversion of these landscapes will only exacerbate impacts from drought and climate change.

Yurok Traditional Landscape Management Plan (FY16) \$2.2M (State); Lead Partner: Yurok Tribe; Participating State(s): California. Located in northern coastal California, the Yurok Reservation starts near the confluence of the Trinity and Klamath rivers and follows the Klamath River until it empties into the Pacific Ocean. The Yurok Tribe is proposing a unique land management model that will combine existing management documents into a culturally based, comprehensive, overarching guidance document with the goal of widespread sub-basin restoration. The basis of the model will combine cultural resource priorities, forest management plans, Aquatic Habitat Conservation Plans, carbon sequestration goals and watershed restoration plans into a tool to restore the health of forested lands, increase carbon production, improve long

term air quality and create habitat for aquatic and terrestrial populations that rely on habitats within this sub-basin. Plan development, training and the implementation of traditional strategies will result in greater species diversity, improvement to aquatic and terrestrial habitats and lessen the risk to the region of catastrophic fire events.

Black Rascal Creek Project (FY17) \$10M (Critical Conservation Area—California Bay Delta) Lead Partner: Merced County; Participating State(s): California (Lead State). The Black Rascal Creek Project will provide flood protection to the communities of Merced and Franklin/Beachwood in California and surrounding prime agricultural lands, an area that has seen frequent and severe flooding. In addition to flood control, the project will address drought, water quality, soil quality and inadequate wildlife habitat. The project is sponsored by the Merced Streams Group, a partnership of Merced County, Merced Irrigation District, and City of Merced. The partners expect to triple the Federal investment in the project.

Livestock in Harmony with Sage-Grouse (FY17); \$8M (National); Lead Partner: Eastern Sierra Land; Participating States: California and Nevada (Lead State). In 2012, private landowners, non-profits, and Federal, State and local government partners developed the 2012 Bi-State Action Plan for Greater Sage-Grouse to proactively conserve key habitat and substantially reduce long-term threats to the Bi-State greater sage-grouse population in Nevada and California. Through the Livestock in Harmony with Sage-Grouse project, 11 collaborating partners will implement recommended water quality, rangeland and soil health conservation practices and monitoring on grasslands of special significance in Nevada and California; partners will secure conservation easements on at least 11,000 acres of sage-grouse habitat on working ranches. The project intends to protect and measurably enhance sage-grouse habitat on working ranchlands, improve water quality, and to assist producers in meeting or avoiding the need for natural resource regulatory requirements.

San Mateo Coast Farmland, Water and Wildlife (FY17); \$3.4M (State); Lead Partner: Peninsula Open Space Trust; Participating States: California (Lead State). On the San Mateo coast, agricultural lands occupy vital spaces between large islands of protected open space, and contain important creeks, forests, grasslands, and other fish and wildlife habitats. Farmland also comprises many of the flat, scenic, developable areas in coastal San Mateo County. The proximity to Silicon Valley makes risk of development here extraordinarily high, and farmland sells for ten times the national average. In many places, farmers have been unable to own the land they have farmed for generations. Real estate speculation and other factors have led to an underinvestment in agriculture infrastructure, and in the land itself. Water management is a critical example of this. Challenges with antiquated irrigation equipment and inadequate storage exacerbate conflicts with native species' needs for the same limited water supplies. These challenges are compounded by California's drought, which has severely impacted both fish and farmers. This project will expedite delivery of natural resource conservation on agriculture lands by integrating land protection and stewardship strategies farm-by-farm and across the region to address these priority challenges.

San Diego County Partners Agricultural Sustainability (FY17) \$800K (State); Lead Partner: Mission Resource Conservation District; Participating States: California (Lead State). The Mission Resource Conservation District and 15 local partners will improve irrigation system efficiency on 120 agricultural properties in San Diego County, Calif., through the San

Diego County Partners Agricultural Sustainability project. Partners will encourage property owners to implement irrigation systems and conservation practices through enrollment in the Environmental Quality Incentives Program or EQIP. Irrigation system evaluations and conservation plans will be utilized to ascertain the baseline conditions of each participating property and to determine the necessary conservation practices needed to ensure sustainability.

Palo Verde Valley Water Conservation RCPP (FY18) \$3.7M (Critical Conservation Area—Colorado River Basin) Lead Partner: Palo Verde Resource Conservation District Participating States: California (Lead State). The Palo Verde project proposes to make protective structural improvements and to conserve water through incentivizing deficit irrigation and organic production. These measures will advance drought resiliency, soil health, water quality, habitat conservation, water accounting and critically important regional water conservation efforts in the Colorado River Basin. Currently, Palo Verde Irrigation District growers are engaging in negotiations with the Bureau of Reclamation to conserve water for Lake Mead, which is at critically low levels. This project will help facilitate voluntary grower contributions to that effort.

McMullin On-Farm Flood Capture Phase 2 Expansion (FY18); \$6.99M (Critical Conservation Area—California Bay Delta); Lead Partner: Raisin City Water District; Participating States: California (Lead State). The McMullin project will use a series of canals, pumps and turnouts to capture and divert flood water from the King River. This project will protect five thousand acres of farmland from flooding and create habitat for waterfowl.

Crisis to Opportunity: Sierra Nevada Tree Mortality (FY18), \$10M (National) Lead Partner: California Association of Resource Conservation District, Participating States: California (Lead State). There is an unprecedented tree mortality crisis in the Sierra Nevada Mountains of California due to the impact of prolonged drought and resulting bark beetle infestation. This project will address the issue by removing dead trees from the high mortality area and reforesting where appropriate. The project will help restore forest and watershed health on non-industrial private forestlands by improving soil health, habitat, and air quality and helping to prevent unprecedented catastrophic wildfire that would severely impact all of the national resource priorities. Priority areas include those with the highest tree mortality, areas designated as High Hazard Zones, areas designated as High and Very High Fire Hazard Severity Zones, and areas burned within the last ten years. More than 40 local, State and Federal entities will participate in this project, pledging over \$280 million in match. The partnership will help provide a long-term solution by creating the necessary network to solve future problems, educating citizens and agencies about proper forest management and building an awareness of the need for resources for forest management into the future.

Salinas River Riparian Enhancement Program (FY18); \$1.76 (State) Lead Partner: Resource Conservation District of Monterey County; Participating States: California (Lead State). The Salinas River Riparian Enhancement Program project will enhance at least 400 acres of Salinas River floodplain (about 30 river miles) that are infested with the invasive, non-native plant *Arundo donax* (arundo). *Arundo*, a 20-30 ft tall bamboo-like grass, grows in dense stands and has very high biomass per area, resulting in huge water loss for riparian areas, habitat degradation for listed steelhead trout and amphibious, terrestrial and avian species, and increased flood risk along the river. This project is the fourth phase of a 10-20-year riparian

improvement program to enhance all 1470 arundo-infested acres on the Salinas River, which has the second largest arundo infestation in California. Landowners along the river are looking for ways to reduce flood risk and save water but can do little to manage riparian lands due to daunting regulatory hurdles. Our program is fully permitted, allowing landowners to address their resource concerns while enhancing habitat for fish and wildlife. Our innovative, comprehensive monitoring program will quantify ecological and hydrological project benefits through detailed mapping, biological surveys, and a 2-D hydraulic model developed with project partners.

Stormwater Management Partnership (FY18); \$1.25M (State); Lead Partner: Resource Conservation District of Santa Cruz County, Participating States: California (Lead State).

Climate change threatens California coastal watersheds, bringing more frequent extreme precipitation events and an associated increase in runoff and a reduction in infiltration, placing even greater stress on limited ground water resources and surface water quality. This project focuses on stormwater management and collection from hillslopes and agricultural lands to reduce runoff and maximize infiltration to improve water quality and supply in Santa Cruz County and the greater Pajaro Valley basin. The project will maximize growers' ability to collect and manage rainfall, storing it in the soil profile at a depth that it can be utilized by the crop or infiltrated deeper to benefit ground water supplies. Additionally, implementation of irrigation water management practices will further support growers to reduce pressure on limited ground water supplies. By leveraging innovative partnerships and incentive programs, this project will serve as a model for agricultural climate change resiliency.

COLORADO

Modernizing Agricultural Water Management in the Lower Gunnison River Basin: A Cooperative Approach to Increased Water Use Efficiency and Water Quality Improvement; (FY14/15); \$8 M; (CCA-Colorado River Basin); Lead Partner: The Colorado River Water Conservation District. This project harnesses local innovation occurring within the agricultural and water communities and integrates activities to accelerate a common mission of utilizing water resources wisely while ensuring agricultural and endangered species sustainability. Although similar activities (improvement in conveyance, delivery, on-farm irrigation) have been occurring in the Lower Gunnison sub-basin, they have been primarily limited, disparate efforts without a unifying 'grand design' and without leadership from local producers. This proposal integrates activities and brings together a diversity of partners under a coordinated leadership team to achieve greater water efficiency results and multiply environmental benefits. In addition to water quantity benefits, the partners will use information from a recent Conservation Innovation Grant and national Selenium Soil Interpretation Model to target areas with high selenium. The project also supports a USFWS Programmatic Biological Opinion.

Colorado Pressurized Irrigation Small Hydropower Partnership Project; (FY14/2015); \$1.8 M; State; Lead partner: Colorado Department of Agriculture. Colorado has a special responsibility when it comes to protecting water quality and quantity. As a headwater State, our snowfall becomes a source of water for 18 States and parts of Mexico. Water from Colorado grows large amounts of food, provides recreation, hydroelectric power and wildlife habitat making water quality and quantity improvement a high priority for NRCS as well as its natural

resource partners. The Hydro Partnership project focuses on water quantity resource concerns in Colorado by facilitating the conversion of flood irrigation systems to more resource-efficient pressurized irrigation systems with integrated hydropower. This project seeks to convert flood irrigation systems to center pivot systems with integrated hydropower and retrofit existing pressurized irrigation systems to add a hydropower component.

Agate Prairie Conservation Legacy: (FY16); \$2.4 M; (State); Lead Partner: Colorado Cattlemen’s Agricultural Land Trust; Participating State(s): Colorado. The Agate Prairie Conservation Legacy represents a unique opportunity to build upon previous conservation investments in a dynamic landscape located less than 45 minutes from Denver. To date, approximately 60,000 acres of private land has been permanently protected in and around the Town of Agate. A majority of this protected land is comprised of native prairie grasslands, which provides essential habitat for several threatened species and species of special significance including the burrowing owl, swift fox and mountain plover. Prairie grasslands are also critical to the overall health and functionality of watersheds. With this project, partners will permanently protect an additional 30,000 acres of grassland prairie located in northwestern Elbert County through the acquisition of three conservation easements. Partners will work with the Bird Conservancy of the Rockies to conduct bird surveys on the property as an indication of rangeland health, which will be used to direct future habitat and rangeland improvement projects.

Colorado Dairy and Irrigation Efficiency Program: (FY16); \$1.1 M; (State); Lead Partner: Colorado Energy Office (CEO); Participating State(s): Colorado. In 2014, CEO, along with several partners, launched the Colorado Dairy and Irrigation Efficiency Pilot. Overcoming barriers to investment in energy efficiency, CEO’s eight pilot dairies are estimated to save nearly 3,000 MMBtu and 742,859 pounds of GHGs annually. Building on the success of the pilot, CEO launched a statewide program in 2015, aimed at reducing energy use. RCPP financial assistance funds will provide an estimated 60 percent of the cost of improvements up to \$24,000 for 48 of the 160 participating producers. CEO will provide participating producers with on farm energy audits and assist them in selecting and implementing cost effective improvements that reduce energy use, water, environmental impacts and producer operating costs. They will also monitor individual producer and overall program progress and track and report on improvements, energy and cost savings and GHG reductions. CEO will work with its partners to develop SMART goals that will include an annual reduction of 3.5 million kWh and 350 thousand gallons of water.

Greater Outcomes for Greater Sage-Grouse: (FY16); \$1.9 M; (National); Lead Partner: Partners for Western Conservation; Participating State(s): Colorado (lead State) & Nevada. Western States are gripped by a common need to improve sagebrush habitat and protect against its future loss. This regional partnership brings together Nevada and Colorado, who are actively investing in habitat improvements on private lands with the desire to demonstrate the effectiveness of actions to taxpayers and Federal agencies. The project will: 1) Enhance and protect rangeland for greater sage-grouse, and increase conservation outcomes generated by incorporating a habitat quantification approach in project selection and design, and building capacity of project support partners to implement habitat quantification approach; 2) Increase outcomes over time by adaptively managing habitat quantification tools; and 3) Increase transparency and demand for results from public investments by reporting outcomes generated by partner and RCPP funds invested online. State, EQIP and CSP funds will create “credit-ready” projects per the specifications of the Nevada Conservation Credit System and Colorado

Habitat Exchange, and private funds will be leveraged to cover long-term stewardship of the improved project sites. This project addresses the issue of stacking credit payments to ensure that EQIP and CSP funds are not be used to offset impacts that require compensatory mitigation and investigates innovative mechanisms for partnering public and private funds to create revolving funds.

Colorado River Headwaters Project: (FY17); \$7.7 M (Critical Conservation Area—Colorado River Basin) Lead Partner: Trout Unlimited; Participating States: Colorado (Lead State). The Colorado River Headwaters Projects will address the consequences of trans-mountain diversions that supply agricultural and municipal water to Northern Colorado and the Denver Metro Area, which have had a major impact on agriculture and aquatic resources in the headwaters of the Colorado River. Led by an array of partners representing local agriculture, local government, water providers, State agencies, conservation groups and landowners, the project will create a bypass channel to reconnect the Colorado River, make channel and habitat improvement downstream of the bypass to support healthy habitat, and improve irrigation, soil quality and water quality. When fully implemented, the Headwaters Project will directly benefit over 30 miles of the Colorado River and 4,500 acres of irrigated lands that provide sage grouse habitat and make up to 11,000 acre-feet of water available to improve the river during low flow conditions.

Building Resiliency in the San Juan-Rio Chama Region: (FY17); \$3.2 M; (National) Lead Partner: East Rio Arriba Soil and Water Conservation District; Participating States: Colorado and New Mexico (Lead State). Completed by the Bureau of Reclamation in 1976, the San Juan-Rio Chama Diversion is a series of diversion structures and tunnels that together carry runoff 26 miles across the Continental Divide from the Colorado River watershed to the Rio Chama, in the Rio Grande watershed. This diversion, along with the Rio Chama, provides approximately one third of New Mexico's water supply for irrigators, agriculture, industry, communities, fish, and wildlife. The Building Resiliency in the San Juan-Rio Chama Region project, managed by East Rio Arriba Soil and Water Conservation District and twenty partners, will complement recent diversion structures with additional forest health and watershed treatments to increase the resiliency of the landscape to withstand stressors such as drought, wildfire and climate change in southern Colorado and northern New Mexico. Between 2017 and 2021, partners in the San Juan-Rio Chama region of southern Colorado and northern New Mexico will complete 1,000–1,500 acres of watershed resiliency treatments per year utilizing \$6.4 million of Environmental Quality Incentives Program, Conservation Stewardship Program and the Agricultural Easement Program.

Colorado Rio Grande Regional Conservation Partnership Program: (FY17); \$345K (State) Lead Partner: Sub district #1 Rio Grande Water Conservation District; Participating States: Colorado (Lead State). The Colorado Rio Grande project will encourage landowners to participate in voluntary conservation practices for water and soil health. To address issues of drought, the partnership project will share irrigated water management practices, such as weather stations and soil moisture monitoring systems, with the public. Soil health practices will be applied on irrigated cropland to reduce water consumption, reduce soil erosion, enhance soil health and improve soil moisture retention qualities. The application of these practices will reduce energy consumption and contribute to increased stream flows and improved riparian habitat.

The Acequia Initiative (FY18); \$1.72M (State); Lead Partner: Colorado Open Lands; Participating States: Colorado (Lead State). The Acequia Conservation Initiative project will help historically underserved acequia landowners create stability and sustainability in their agriculture operations. Colorado Open Lands, NRCS and a variety of resource partners have come together to place conservation easements on acequia properties to protect and secure senior water rights, prime soils, native habitat and the areas agricultural heritage

CONNETICUT

Achieving Agricultural Water Security in Connecticut through RCPP (FY14/15); 400K (State); Lead partner: University of Connecticut. Focusing on the national priority of water quantity, the long-term goal of this project is achieving agricultural water security for existing and new agricultural producers. Utilizing RCPP funding, partners will work with statewide producers to develop science-based plans for drought preparedness to ensure optimal crop per drop in private forestry, crop production, ornamental horticulture/nursery operations, and turf production. Adaptation plans will be created to help producers become economically resilient in the face of greater climate variability. Improving water management across the agricultural sector will improve water quality across the State.

Improving Soil Health & Water Quality in the Thames River Watershed (FY14/15); 400K (State); Lead partner: The Last Green River Valley, Inc. This project addresses two national priorities (soil health and water quality), and all five Connecticut State priorities (water quality degradation, soil erosion, soil quality degradation, degraded plant conditions and livestock production limitations). Utilizing the RCPP Program, four collaborating partners will implement soil health conservation practices through EQIP on cropland in eastern Connecticut's Thames River Watershed. The long-term objective of this project is to show a measurable improvement of edge-of-field and in-stream water quality, including a decrease in nutrient and turbidity levels; thereby, improving soil health and water quality in the area.

Long Island Sound Watershed RCPP (FY14/15); \$10M (National); Lead partner: Connecticut Council on Soil and Water Conservation. Excess nutrients have been identified as the primary driver of hypoxic conditions in Long Island Sound and are also impacting upland water resources within the watershed, which encompasses areas of Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. This project will develop a comprehensive, whole-farm management certainty program for farmers in the area and use both working lands and easement programs to improve soil health and nutrient management, establish community resiliency areas with a focus on enhancing riparian areas, and institute a land protection program to protect agricultural and forestry areas.

Path to Reduce Pathogens in CT Agricultural Runoff (FY16); \$669K (State); Lead Partner: University of Connecticut; Participating State(s): Connecticut. Bacteria levels in Connecticut's rivers and shellfish beds are unacceptably high. This is, in part, caused by agricultural runoff. To address the degradation of soil and water from agricultural operations, University of Connecticut will enlist partners and apply technical and financial assistance for the following objectives: 1) develop conservation partnerships focused on reducing pathogens associated with agricultural activities; 2) Use multitiered bacterial source tracking techniques to identify and target critical areas for treatment approaches; 3) use multitiered bacterial source

tracking techniques to identify and target critical areas for treatment approaches; and 4) determine the opportunities for and barriers to producers and landowners in adopting pathogen conservation practices and evaluate the potential success of the project. Potential conservation practices to reduce pathogens will include composting, nutrient management, residue and tillage management, cover crops, fencing, buffers and filter strips, vegetated treatment areas and wetlands.

The Young Forest Initiative for At-Risk Species (FY16) \$5.2M (National); Lead Partner: Wildlife Management Institute's Participating State(s): Connecticut, Massachusetts, Maine, New Hampshire (lead state), New York, Rhode Island & Vermont. This project will help increase technical and financial assistance to non-industrial private forestland owners who implement practices outlined in the Environmental Quality Incentives Program that result in an increase in the quantity and quality of young forest habitats. This support is critical, since young forest habitat is necessary to meet the critical needs of several recognized at-risk species.

Accelerating the Pace of Conservation in the Southern New England Heritage Forest (FY17); \$6.14M (National); Lead Partner: The Last Green Valley, Inc. Number of Initial Partners: 12 Participating States: Connecticut (Lead State). The Southern New England Heritage Forest is a uniquely-positioned forest corridor stretching north along the Connecticut and Rhode Island border to the Quabbin Reservoir in Massachusetts. Spanning the shared borders of the 2nd, 3rd and 4th most densely populated States in the country, SNEHF contains 68 towns and covers 1.49 million acres, of which a remarkable 76% still remains in forest and high-priority forested wildlife habitat. Between 2011 and 2017, Federal and non-profit organizations conducted extensive forest landowner outreach in this region, establishing an informed network of "Woodland Ambassadors" and educated and engaged landowners interested in improving and conserving their forested properties. This SNEHF project will connect these forest landowners, who would not traditionally interact with the Natural Resources Conservation Service, with NRCS programs and services. A remarkable partnership of non-profit organizations and regional, State and municipal agencies will offer private woodland owners a suite of NRCS tools for sound management and forestry conservation practices through the Environmental Quality Incentives Program and permanent protection through easements under the Healthy Forests Reserve Program. This project will serve as a "conservation pipeline" of forest and bird habitat plans, EQIP practices and HFRP easements on private forestlands in order to accelerate the pace of conservation in SNEHF.

Connecting the Connecticut River Watershed (FY18); \$4.98M (National); Lead Partner: The Nature Conservancy; Participating States: Connecticut, Massachusetts (Lead State), New Hampshire and Vermont. This project addresses habitat for fish and wildlife, water quality and climate resilience in high priority aquatic and terrestrial sites across the four-State Connecticut River Watershed. Partners will work with land owners to improve and connect aquatic and riparian habitat; reduce sedimentation and nutrients; and identify and prioritize parcels of land that will safeguard water quality, protect riparian or wetland resources, and increase resiliency to climate change.

DELAWARE

Watershed Channel Restoration Projects in Sussex County, Delaware (FY14/15); 600K (State); Lead partner: Sussex Conservation District. The Sussex Conservation District (SCD) and its partners plan to improve water quality through watershed channel restoration projects that stabilize tax ditch banks in Sussex County, Delaware. The SCD and partners will work with landowners in signing up for the Environmental Quality Incentives Program (RCPP) to remedy identified natural resource concerns. Staff will design, engineer, permit and construct the restoration projects to NRCS standards and specifications. Success will be measured by the amount of sediment and nutrient losses reduced based on the specifications of each project. When possible, bioengineered or green technology practices will be utilized to assist in stabilization, which will further reduce nutrient loads into the waterways.

Accelerating Chesapeake Bay Watershed Implementation Plans (FY14/15), \$5.5 M (CCA); Lead partner: Maryland Department of Agriculture. To meet a large unmet demand for conservation programs that will contribute to meeting the Chesapeake Bay total maximum daily load (TMDL), this project will utilize State implementation plans to accelerate targeted, cost-effective conservation in Delaware, Maryland, and Virginia. Implementation will be adapted to each State's high priorities and opportunities for innovation. For example, in Maryland, high-resolution imagery will help prioritize locations for riparian buffers as part of the Chesapeake Bay Riparian Forest Buffer Initiative, while Delaware will offer vouchers to offset the cost of buffers through the Buffer Bonus Program.

Delmarva Whole System Conservation Partnership—From Field to Stream (FY14/15); \$5M (CCA); Lead Partners: The Nature Conservancy and the Delaware Maryland Agribusiness Association. This public-private partnership in Maryland, Delaware, and Virginia will use a science-based approach to achieve important environmental objectives: 1) improve water quality through the implementation of advanced nutrient management practices on acres and restoring, enhancing, and protecting acres of natural filters (wetlands and buffers); and 2) expand wildlife habitat by enhancing, restoring, and protecting acres of high-quality wetlands and buffers. The partners estimate that these conservation systems in priority locations will reduce total nitrogen, total phosphorus, and total suspended solids currently delivered to local waterways each year, which will support achieving the goals of the Chesapeake Bay TMDL.

Assisting Beginning Farmers with Poultry HQ BMPs (FY16); \$1M (State); Lead Partner: Sussex Conservation District; Participating State(s): Delaware. There is a backlog of beginning farmers waiting for approval for composters or mortality freezers, poultry waste structures and heavy use area protections. Over the past two years, approximately 125 new poultry houses have been constructed in Sussex County with another 228 planned over the next 2 years. With the high concentration of poultry operations, comes the potential for high nitrogen and phosphorus levels in the soil, which may potentially leach into the ground water and run off into surface water. This is exacerbated with the sandy soils, high water tables and 46 inches of average rainfall each year. These beginning farmers are also faced with increased startup costs with the new Delaware Stormwater Regulations. Construction costs have increased with the required engineering, permitting and the installation of mandatory BMPs to be in compliance with the Delaware regulations. This project will increase the opportunity for beginning farmers in Sussex County to receive funds for composters or freezers through an expedited process.

DE & MD—Meeting WIP Goals in the Chesapeake Bay (FY16); \$4.5M (CCA); Lead Partner: Maryland Association of Soil Conservation District; Participating State(s): Delaware & Maryland (lead State). Partners will come together in this project to accelerate the installation of best management practices to enable Maryland and Delaware farmers to meet the nutrient and sediment water quality goals set forth in the Chesapeake Bay TMDL. In Maryland, the focus will be on animal related BMPs, including animal waste storage, stream fencing, heavy use areas and barnyard runoff. To meet Maryland’s new Phosphorus Management Tool requirements, conservation district staff will work with dairy farmers to install state-of-the-art liquid separation technology to overcome the cost of moving the liquid portion of manure long distances to crop fields that require more phosphorus. In Delaware, emphasis will be on crop production and expanded use of cover crops. On the Delmarva Peninsula, crop farmers will be advised on the recent research finding on innovative variable rate nitrogen application techniques (GreenSeeker) and be encouraged to sign up for advanced nutrient management practices. Conservation district staff will be trained on nitrogen removal woodchip bioreactors, which are showing up to 90 percent nitrogen removal on trial sites.

Cost-share Opportunities for Beginning Farmers (FY17); \$475K (State); Lead Partner: Kent Conservation District; Participating States: Delaware (Lead State). The Kent Conservation District in Delaware along with public and private partners will assist new and beginning farmers in Kent County with initial costs associated with poultry operations, particularly with waste and manure disposal. The improper composting and manure storage can increase the possibility of nutrients contaminating surface and ground water. The project will provide cost-share funding to the ever-growing pool of new and beginning farmers in Kent County for composters, freezers and manure storage facilities. The ready access to these resources will provide new farmers with the opportunity to establish safe and effective management practices from the initiation of their operation.

Energize Delaware Farm Energy Efficiency Program (FY17); \$475K (State); Lead Partner: Delaware Sustainable Energy Utility; Participating States: Delaware (Lead State). For Delaware farms, the greatest agricultural revenue—approximately 88 percent—comes from the energy-intensive poultry and irrigation sectors. To address this challenge, the Delaware Sustainable Energy Utility and EnSave sought the feedback and support of Delaware agricultural organizations and farmers and worked together to develop an SEU-funded program that will offer energy audits, renewable energy assessments, grants, loans and connections with other sources of funding. The Energize Delaware Farm Energy Efficiency Program will match the SEU financial assistance and provide a greater percentage of cost-share to producers than the SEU funds alone. The investment will spur interest in energy conservation and renewable energy and deliver cost savings to Delaware producers.

Protecting DE Bay & Inland Bays with Cover Crops (FY18); \$1M (State); Lead Partner: Sussex Conservation District; Participating States: Delaware (Lead State). The Sussex Conservation District and their partners will help improve water quality and soil health in the Sussex County, Delaware portions of the Delaware Bay and Inland Bays Watersheds by implementing cover crops on 10,400 acres. Cover crops are cost-effective practice for improving water quality because of their ability to scavenge excess nutrients in the soil and increase organic matter. Producers will be encouraged to plant cover crops early, taking advantage of longer

growing degree days to get better root system establishment. Through plant diversity and early establishment, water quality and soil health will be improved in the targeted watersheds.

Chesapeake Bay Farm Stewardship and Preservation (FY18); \$6M (Critical Conservation Area—Chesapeake Bay Watershed); Lead Partner: Sustainable Chesapeake; Participating States: Delaware, Maryland and Virginia (Lead State). The Chesapeake Bay Farm Stewardship and Preservation project supports a diverse three State partnership to accelerate the adoption of precision nutrient management and soil health practices. Financial and technical assistance will be focused where: 1) practices will have the greatest impact on Chesapeake Bay water quality; 2) farmers have demonstrated enthusiasm for these practices; 3) partner outreach and education and technical assistance efforts support financial assistance delivery; and 4) prime farmland are located. Funds from this project will make substantial contributions to reducing nitrogen and sediment loading to the Chesapeake Bay, helping the agricultural sector to meet Chesapeake Bay TMDL milestone goals.

FLORIDA

Coastal Headwaters Forest—Longleaf Conservation and Restoration (FY14/15); \$5M (CCA); Lead Partner: The Conservation Fund. The 205,000-acre Coastal Headwaters project, located in Florida and Alabama, will utilize key partnerships and resources to acquire conservation easements and restore the off-site loblolly pine to the native longleaf pine. In doing so, more than 44 at-risk species' habitat will be enhanced and increased acres of longleaf pine restored. Water quality and quantity to the Gulf of Mexico will be protected and jobs retained.

Securing Private Working Forests to Benefit Longleaf Pine, Threatened and Endangered Species, and Military Readiness (FY14/15); \$12M (CCA); Lead partner: U.S. Endowment for Forestry and Communities. The partners will target acres of working longleaf in South Carolina, Georgia, Florida, and Louisiana, with a greater than one-to-one match from the Department of Defense and other partners. Protecting longleaf forest and maintaining lands in and surrounding up to ten military installations—each with individual goals—will support existing longleaf and gopher tortoise efforts while also maintaining critical land areas around military bases.

Regional Partnership for Conservation of Gopher Tortoise and At-Risk Species Habitat in Florida (FY14/15); \$1.5M (State); Lead partner: Florida Fish and Wildlife Conservation Commission. This partnership will endeavor to save and protect Florida's threatened and endangered species through restoration and conservation of dwindling habitat. It will provide support for conservation planning, outreach and technical assistance for NRCS conservation programs such as the Environmental Quality Incentives Program and the Agricultural Conservation Easement Program. Partners with forestry and wildlife expertise will apply conservation practices to improve forest stands, apply prescribed burning, plant field borders, develop early successional habitat and restore rare or declining habitats. This effort will target the gopher tortoise, Florida panther, Florida grasshopper sparrow and other threatened and endangered species. Outreach and program support will be accomplished by the Florida Conservation Group, Wildlands Conservation, Florida Fish and Wildlife Conservation Commission, Landowner Assistance Program and the Florida Forest Service staff in partnership

with Florida NRCS, US Fish and Wildlife Service, University of Florida Cooperative Extension Service and others.

Apalachicola-Chattahoochee-Flint Rivers (ACFR) Conservation Partnership for Alabama, Florida, and Georgia (FY14/15); \$4M (National); Lead partner: Flint River Soil and Water Conservation District. Persistent drought and long-term landscape change have reduced the capacity of the ACFR Basin to balance human use with ecological demand. Led by the Flint River Soil and Water Conservation District—whose successful partnership with NRCS has led to innovations in cost-effective irrigation improvements through several Conservation Innovation Grants—this project to improve water quality and quantity in the ACFR includes more partners, ranging from private industry and large nonprofit organizations to universities and local soil and water conservation districts.

Everglades Headwaters Longleaf Pine (FY16); \$3.7M (CCA); Lead Partner: The Nature Conservancy—Florida; Participating State(s): Florida. The Everglades Headwaters holds one of the most important collections of imperiled vertebrate wildlife in Florida and supports extensive rare/endemic habitats such as the longleaf pine-dominated flatwoods and dry prairie. The project area encompasses 15,000 acres of longleaf as part of a mosaic of other habitats and agricultural uses. These habitats are an integral part of the "working watershed" of the Everglades by receiving, storing, filtering and slowly releasing rainfall to numerous creeks, and ultimately rivers, that flow toward Lake Okeechobee. This project will allow for continued productive agriculture (i.e., cattle grazing) and will help ensure the continued ecological integrity, function and promotion of water quality and quantity within this vital landscape and watershed.

Training Florida's Natural Resource Managers (FY16); \$1M (State); Lead Partner: Florida Forest Service; Participating State(s): Florida. Project partners will train both public sector and private sector natural resource managers to enhance private forestland management in Florida. NRCS will provide financial assistance to landowners and the Florida Forest Service to increase the capacity of resource managers to offer technical assistance to the 400,000 forest landowners in Florida. Resource concerns to be addressed include inadequate habitat for fish and wildlife, plant and animal health, insufficient water, soil health, and water quality degradation on the ten million acres of private forestland in Florida. Results will be demonstrated by monitoring the increase in forest management plans and practices implemented using Farm Bill programs. This project will provide technical assistance to private forest owners to increase the number of landowners with conservation and forest stewardship plans, encourage Farm Bill program participation, inform landowners of longleaf pine management options and increase participation in forest certification programs.

Working Lands for Florida Panther Conservation (FY16); \$630K (State); Lead Partner: Florida Fish & Wildlife Cons. Comm.; Participating State(s): Florida. The Florida Panther Focus Area includes areas of south and central Florida identified by the USFWS as essential to maintaining a viable Florida panther population and facilitating the natural expansion of this population north of the Calooshattee River. Approximately 29 percent of the area is under private ownership and includes working ranchlands that provide important panther habitat and are critical for existing and future panther recovery efforts. However, as the Florida panther's range expands, and population density increases on private lands, an increase in depredation

events on commercial cattle operations within the focus area has become a threat that could undermine previous collaborative efforts in the protection and recovery of the species. The economic losses sustained by cow-calf operations due to panther depredations, in combination with the costs associated with habitat management, act as a disincentive to landowners to manage their ranches for panthers and their primary prey species, white-tailed deer. Whereas the FSA and Conservancy of Southwest Florida have direct compensation programs that assist with livestock loss, and NRCS and USFWS incentive programs assist with habitat management, they are not designed to provide funding on a large scale across a targeted landscape. Achieving Florida panther recovery goals will be augmented through this project; which appeals to owners who have large acreages, diverse habitat types, and varied land uses.

Innovative Financing for Watershed Protection (FY17); \$2.56M (National); Lead Partner: U.S. Endowment for Forestry and Communities; Participating States: Florida (Lead State).

By developing two case studies, the Innovative Financing for Watershed Protection project will encourage water utilities to fund land conservation and restoration that simultaneously protects water supplies and benefits at-risk species and other natural resources. An existing, premiere case study focused on a Natural Resources Conservation Service/Endowment partnership led Raleigh, N.C., to establish a watershed protection fee that generates \$2.25 million annually for watershed projects. For this project, the U.S. Endowment for Forestry and Communities and partners will examine the protection of a large, underserved landowner-owned farm important for water quality and that connects a matrix of other lands protected for wildlife in Savannah River Basin. The partners also will field test a potential break-through, market approach that could help landowners generate income from selling water by restoring more natural forests that benefit at-risk species and longleaf ecosystems.

Gulf of Mexico—Forest to Sea Project (FY17); \$3M (National) Lead Partner: The Conservation Fund; Participating States: Florida (Lead State). The Gulf of Mexico—Forest to Sea project will conserve Florida’s pristine “Big Bend” area along the northeastern Gulf by implementing innovative conservation/restoration solutions with private working forest owners. Using an impact investment approach, The Conservation Fund and 12 partners will implement an HFRP easement/restoration plan on large forested tracts to address the natural resource concerns of water quantity, water quality, inadequate habitat, air quality and climate change. The area faces a major threat due to the conversion of upstream forests to more intensive uses and the resultant reduction in freshwater flows. This project will prevent conversion while allowing sustainable timber harvesting and maintaining local jobs. It will accelerate the pace of conservation and serve as a model for further conservation and impact investing in the region and beyond.

Climate Resiliency in Florida, Alabama and Georgia (FY17); \$3M (National); Lead Partner: Flint River Soil and Water Conservation District; Participating States: Alabama, Florida and Georgia (Lead State). The Apalachicola-Chattahoochee-Flint River Basin stretches from the base of the Appalachian Mountains in North Georgia to the Gulf of Mexico in the Florida Panhandle. The vibrant ecological Apalachicola-Chattahoochee-Flint River Basin and adjacent Ochlockonee River Basin provide habitat for a rich biodiversity of aquatic and terrestrial species, including many designated as endangered or threatened. Growers in this region provide food, fuel, forest products and fiber to global markets, and they depend upon the areas natural resources to sustain their livelihoods. Over the last few decades, fluctuations in

climate patterns have presented challenges to sustainable management of the region's natural resources. The Flint River Soil and Water Conservation District and over 30 multistate partners will develop and implement practical solutions for climate change adaptation in the river basins.

Gulf of Mexico—Forest to Sea Project (FY18) \$5M (National); Lead Partner: The Conservation Fund; Participating States: Florida (Lead State). Florida's Big Bend includes one of the least developed coastlines in the continental U.S. and some of the Gulf of Mexico's most productive habitat. This watershed includes some of the largest remaining private forests in the State, but they are increasingly being converted to more intensive uses that negatively impact freshwater flows. The Gulf of Mexico's Forest to Sea project will protect these flows with Healthy Forest Reserve Program easements and restoration practices over large working forests.

Slow the Flow: Next Generation Practices (FY18; \$1.15M (State); Lead Partner: Florida Department of Agriculture and Consumer Services; Participating States: Florida (Lead State). The five-year "Slow the Flow" project will protect three watersheds (~4 million acres) in south Florida from high flow and nutrient-rich discharges. By improving on-farm conservation upstream, it will protect estuaries and freshwater ecosystems downstream.

The Ocala to Osceola Wildlife Corridor (FY18); \$3.56M (Critical Conservation Area—Longleaf Pine Range) Lead Partner: North Florida Land Trust; Participating States: Florida (Lead State). The Ocala-two-Osceola (O2O) wildlife corridor has been long recognized as an important landscape of natural and rural lands that connects two large National Forests and provides critical wildlife habitat for wildlife (Florida Black Bear) and at-risk species such as the red-cockaded woodpecker and gopher tortoise. The 1.6 million acre region encompasses public lands and private forests, most of which is productive timberlands. The O2O Partnership, led by the North Florida Land Trust, is a team of public and private organizations dedicated to enhanced conservation and protection of the rural character and economy of the O2O region. Working with the Florida NRCS, the Partnership will implement its conservation program through a combination of land protection and land management incentives for private landowners.

Coastal Headwaters Longleaf Forest (FY18); \$7M (Critical Conservation Area—Longleaf Pine Range) Lead Partner: The Conservation Fund; Participating States: Alabama (Lead State) and Florida. Longleaf pine forests once encompassed more than 90 million acres across the Southeast. Over the past two centuries, development, conversion to other industrial forest types, and fire suppression have reduced the longleaf pine forests to less than 5 percent of their original range. The Coastal Headwaters Forest project addresses the natural resource concerns of the Longleaf Pine Range CCA in Alabama's Gulf Coastal Plain near the Gulf of Mexico. By restoring longleaf pine, the project will preserve four major coastal river systems in the Gulf Coast Plain and protect habitat for the threatened gopher tortoise.

GEORGIA

Apalachicola-Chattahoochee-Flint Rivers (ACFR) Conservation Partnership for Alabama, Florida, and Georgia (FY14/15); \$4M (National); Lead partner: Flint River Soil and Water Conservation District. Persistent drought and long-term landscape change have reduced the capacity of the ACFR Basin to balance human use with ecological demand. Led by the Flint River Soil and Water Conservation District—whose successful partnership with NRCS has led to

innovations in cost-effective irrigation improvements through several Conservation Innovation Grants—this project to improve water quality and quantity in the ACFR includes more partners, ranging from private industry and large nonprofit organizations to universities and local soil and water conservation districts.

Securing Private Working Forests to Benefit Longleaf Pine, Threatened and Endangered Species, and Military Readiness; (FY14/15); \$12M (CCA-Longleaf Pine Range); Lead partner: U.S. Endowment for Forestry and Communities. The partners will target acres of working longleaf in South Carolina, Georgia, Florida, and Louisiana, with a greater than one-to-one match from the Department of Defense and other partners. Protecting longleaf forest and maintaining lands in and surrounding up to 10 military installations—each with individual goals—will support existing longleaf and gopher tortoise efforts while also maintaining critical land areas around military bases.

Enhancing Conservation in the Lower Flint River Basin of Georgia (FY14/15); \$1M (State); Lead partner: Flint River Soil and Water Conservation District. Enhancing Conservation in the Lower Flint River Basin of Georgia project focuses on agricultural water conservation, implementing technology-driven conservation practices that apply water only where and when it is needed. Irrigation is a critical component of agricultural production in the Lower Flint, but intensive water withdrawals coupled with periods of sustained drought threaten water availability for at-risk species and farmers in the watershed. The principal goals of this project are to increase agricultural water use efficiency on irrigated cropland in the Lower Flint by implementing conservation practices, incorporate innovative precision irrigation methods into the project and sustain natural resources for future generations of producers in southwest Georgia.

Protection of Soil and Water Quality in the Savannah, Oconee, Ogeechee, Ocmulgee, Satilla and Altamaha Watersheds (FY14/15) \$1M; (State); Lead partner: Athens Land Trust. Protection of Soil and Water Quality in the Savannah, Oconee, Ogeechee, Ocmulgee, Satilla and Altamaha Watersheds project will address the natural resource concerns of water quantity and quality, livestock production limitation, diminishing wildlife habitat by assisting farmers in the implementation of conservation practices for livestock production, conserving land and water, preserving farmland, improving soil health and supporting the viability of farming. The work will be completed by providing technical assistance to farmers and landowners regarding sustainable livestock production, conservation practices, USDA programs and resources and permanent conservation easements on their properties and financial assistance for farmers through the Environmental Quality Incentives Program and the Agricultural Conservation Easement Program.

Southern Sentinel Landscapes Conservation (FY16); \$7.5 M (National); Lead Partner: U.S. Endowment for Forestry and Communities; Participating State(s): Georgia (lead State), Mississippi & North Carolina. This project will protect and restore 17,500–21,500 acres of longleaf and other working forest habitats on private lands important for at-risk species. The goal of this multistate effort—Mississippi, Georgia and North Carolina—is to reduce the likelihood that target species will be listed under the Endangered Species Act and to demonstrate the compatibility of working lands management with at-risk species conservation. These sites and species address shared conservation interests of the Departments of Agriculture, Defense, and

Interior on proposed or potential Sentinel Landscapes. The proposed project advances goals of the Range-wide Conservation Plan for Longleaf Pine, the NRCS Longleaf Pine Initiative, and each State's Forest and Wildlife Action Plans, while also contributing to military installation compatible-use buffers. By focusing on the overlapping interests of three Federal departments, this proposal delivers more measurable benefits to at-risk species than if the agencies followed separate paths. This proposal builds on the RCPP award the U.S. Endowment for Forestry and Communities received in 2014.

Wetlands and Wildlife for Georgia Watersheds (FY16); \$802 K (State); Lead Partner: The Nature Conservancy—Georgia; Number of Partners: 8; Participating State(s): Georgia.

This project will serve two of Georgia's important watersheds in which agricultural and timber producers own substantial acreage, and in which natural resource concerns are of great conservation interest. Degraded or drained wetlands, habitat alteration and non-point source pollution threaten native wildlife resources and a broader wetland and pineland ecosystem of the Suwannee River whose natural fire and flood, patterns have been altered. NRCS funding will be used to incentivize key producers to protect and restore the most critical wetlands areas and provide models for other producers to emulate.

Climate Resiliency in Florida, Alabama and Georgia (FY17); \$3M; (National) Lead Partner: Flint River Soil and Water Conservation District Number of Initial Partners: 32 Participating States: Alabama, Florida and Georgia (Lead State).

The Apalachicola-Chattahoochee-Flint River Basin stretches from the base of the Appalachian Mountains in North Georgia to the Gulf of Mexico in the Florida Panhandle. The vibrant ecological Apalachicola-Chattahoochee-Flint River Basin and adjacent Ochlockonee River Basin provide habitat for a rich biodiversity of aquatic and terrestrial species, including many designated as endangered or threatened. Growers in this region provide food, fuel, forest products and fiber to global markets, and they depend upon the areas natural resources to sustain their livelihoods. Over the last few decades, fluctuations in climate patterns have presented challenges to sustainable management of the region's natural resources. The Flint River Soil and Water Conservation District and over 30 multistate partners will develop and implement practical solutions for climate change adaptation in the river basins.

Sentinel Landscape At-Risk Species Conservation (FY17); \$3M; (National); Lead Partner: U.S. Endowment for Forestry and Communities; Participating States: Georgia (Lead State).

The listing of Candidate Conservation Species and continued demise of Threatened species can have profound impacts on public and corporate producers. Listing of the wide-ranging gopher tortoise in Georgia, for example, would economically impact thousands of producers and millions of acres. The Sentinel Landscape At-Risk Conservation project will protect and restore habitat that might preclude listing of the gopher tortoise in Georgia and accelerate recovery of the black pine snake and gopher tortoise in Mississippi. Building upon existing Federal agency efforts, the U.S. Endowment for Forestry and Communities and multiple local partners will encourage conservation easements and habitat restoration to protect critical properties that form the core of recovery efforts.

North Georgia Poultry Energy Efficiency and Nutrient Management Planning Initiative (FY17); \$1.7M (State); Lead Partner: Limestone Valley Resource Conservation and Development Council Number of Initial Partners: 7 Participating States: Georgia (Lead

State). The North Georgia Poultry Energy Efficiency and Nutrient Management Planning Initiative will bring conservation partners together with local poultry farmers to identify on-farm energy efficiency opportunities and improve farm profitability through energy conservation implementation. These improvements will have the added benefit of improving air quality by reducing emissions of air pollutants and reducing climate change impacts through reduction of greenhouse gases. The project will also help poultry farmers with an interest in or requirement for nutrient management planning for on-farm implementation. Implementation of nutrient management plans will lead to a reduction in water quality degradation, and indirectly, reduce inadequate habitat for fish and macroinvertebrates.

Georgia Gopher Tortoise Conservation Initiative (FY18) \$3.5M (Critical Conservation Area—Longleaf Pine Range) Lead Partner: US Endowment for Forestry and Communities; Participating States: Georgia (Lead State). The Georgia Gopher Tortoise Conservation Initiative’s goal is to prevent the eastern tortoise population from Federal listing, which will save producers across four States from Endangered Species Act regulations. The project will meet this goal by enrolling up to 4,000 acres of longleaf and pine forests into Healthy Forest Reserve Program easements. This project will also improve habitat for many other species, will help maintain rural forestry jobs, and precluding listing will avoid economic impacts on thousands of producers.

SE Georgia Partners Building Watershed Resiliency (FY18); \$406K (State); Lead Partner: Coastal Georgia Resource Conservation and Development Council; Participating States: Georgia (Lead State). This project is a regional partnership to build watershed resiliency in southeast Georgia. Building watershed resiliency is a means of preventing a short-term hazard from becoming a long-term community problem, as well as developing capacity and confidence in local decision-makers and citizens to make sound choices about the natural resources around them. The primary goal is to improve water quality in the Satilla and St. Mary’s watersheds through implementation of site-specific land conservation practices, buffer establishments and easement acquisition.

Innovative Conservation at the Energy-Water Nexus (FY18); \$751K (State); Lead Partner: Flint River Soil and Water Conservation District and Georgia Association of Conservation Districts; Participating States: Georgia (Lead State). Water and energy are two of the most critical inputs for agricultural operations in Georgia. Utilizing these resources efficiently and strategically paves a sustainable path for the future. This project will develop and implement an innovative approach to conservation with a focus on water and energy. The first approach will be engaging non-traditional partners in conservation to highlight and demonstrate efficiency in irrigation and energy use. The second approach is to build a strategic partnership with a solar development company to harness the conservation value behind farmers’ conversion from crop production to green energy production in ecologically sensitive watersheds. Each of these activities will occur simultaneously alongside the implementation of best management practices for irrigation and energy through the Environmental Quality Incentives Program.

Helping Farmers Protect Soil and Water Quality (FY18); \$751K (State); Lead Partner: Athens Land Trust; Participating States: Georgia (Lead State). Athens Land Trust and partners will help producers protect water and soil quality in the Broad/Savannah, Oconee, Ogeechee, Ocmulgee, Satilla and Altamaha Watersheds in Georgia. Athens Land Trust will do

this by providing outreach, technical and financial assistance to farmers and landowners regarding sustainable livestock production, conservation practices, sustainable practices in annual and perennial crop production, USDA/NRCS programs and resources, and permanent conservation easements. A special emphasis of the program is engaging socially disadvantaged and beginning and limited resource farmers.

HAWAII

The Rain Follows the Forest Watershed Initiative (FY14/15); \$700K (State); Lead partner: State of Hawaii, Department of Land and Natural Resources. The goal of this project, led by the Hawaii State Department of Land and Natural Resources (DLNR), is to improve water quantity and quality by increasing ground water recharge, reducing erosion and decreasing the transport of excess sediment and nutrients to streams and coral reefs. It is part of a larger effort to protect our forests under Hawaii DLNR's Watershed Initiative. In partnership with numerous conservation organizations and private landowners, the project will implement practices to control invasive species, exclude non-native hooved animals (ungulates), and plant native tree species on forestlands over the next several years in order to provide long-lasting conservation benefits.

Continuing Proposal: Hawaii's Watershed Initiative (FY16); \$638K (State); Lead Partner: State of Hawaii, Department of Land and Natural Resources (DLNR); Participating State(s): Hawaii. The Department of Land and Natural Resources' (DLNR) top priority is to protect Hawaii's forests watersheds—the islands' fresh water source. Protecting forests improves the water quality of nearby streams and lakes, reduces soil erosion and agricultural fertilizer runoff into streams and coral reefs, and provides habitat for nearly 317 threatened and endangered species. This project will build off of last year's RCPP project by protecting even more forest watersheds. Main goals are to control invasive species—the main threat to forest watersheds, erect fencing to exclude non-native hooved animals (ungulates), plant trees to provide forest sustainability and diverse habitat and monitor progress.

Hawaii's Watershed Initiative (FY17); \$1M (State); Lead Partner: State of Hawaii, Department of Land and Natural Resources; Participating States: Hawaii (Lead State). The State of Hawaii, Department of Land and Natural Resources has an ambitious commitment to double the acreage of protected watershed forests by 2021 and has already protected over 37,000 new acres in less than four years. The Watershed initiative project sites contain the most intact native forest and receive the highest rainfall, which is critical for recharging Hawaii's fresh water supplies. Protecting forests also improves water quality and reduces erosion and excess nutrients in streams and coral reefs. The project will focus on controlling invasive species, the main threat to forested watersheds, and building fences to exclude non-native hooved animals.

Continuing Proposal: HI Watershed Initiative (FY18); \$770K (State); Lead Partner: State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife; Participating States: Hawaii (Lead State). This project continues the work of a current RCPP project of protecting Hawaii's forests, the source of the islands' fresh water. The State of Hawaii is committed to protecting 30 percent (253,000 acres) of Hawaii's highest priority watershed forests by 2030—currently 16 percent (132,000 acres) are protected. Project sites are lands identified as the highest priority for watershed protection because they contain the most intact

native forest and receive the highest rainfall. The scope of the proposed projects includes herbaceous weed control of non-native plants, brush management, fencing, tree/shrub establishment with native species, and protection of rare and endangered species habitat. These activities help protect and enhance forested habitats for water recharge, improve water quality, and provide habitat to over 300 listed threatened and endangered species. This continuing project will allow other partners, not currently receiving RCPP funds, to take advantage of this successful program.

IDAHO

Eastern Snake Plain Aquifer Stabilization (FY14/15); \$1.1M (State); Lead partner: State of Idaho. The Eastern Snake Plain Aquifer Stabilization project overall goal is to stabilize and recover ground water levels in the Eastern Snake Plain Aquifer (ESPA). The aquifer covers nearly 10,800 square miles of Idaho and is the sole water source for many producers in central and eastern Idaho. The region produces goods and services with an estimated value of \$10 billion annually and water is the critical element for this productivity. Declining ground water levels in parts of the ESPA led to decreased aquifer storage, decreased spring flows and changing Snake River flows that resulted in insufficient water supplies for existing uses. Project objectives are to reduce ground water withdrawals from the aquifer and increase delivery efficiencies.

Blackfoot River Conservation Partnership (FY14/15); 500K (State); Lead partner: Trout Unlimited, Inc. The Blackfoot River Conservation Partnership is a watershed-scale restoration project to restore fish passage, rebuild riparian and aquatic habitats, augment in stream flows and improve water quality throughout the Blackfoot River drainage. The river is the southernmost stronghold for the Yellowstone cutthroat trout; this project will improve habitat for this sensitive species and help landowners divert and deliver irrigation water more efficiently. Major project work will replace two irrigation water diversions with “fish-friendly” diversion structures to enable trout passage and reconnect the river to several tributaries.

Palouse River Watershed (WRIA 34) Implementation Partnership (FY14/15); \$5.5M (National); Lead partner: Palouse Conservation District. Through implementation of the Palouse River Watershed Management Plan, more than 15 partners will work with producers to address TMDL concerns and reduce water quality regulatory action on producers in this area of Washington and Idaho. Innovative project components include promotion of the Farmed SMART Certification program (which provides an opportunity for environmental markets), enhanced incentives for riparian buffer establishment including 5 years of buffer maintenance, and the establishment of a watershed-wide monitoring effort that encourages landowner involvement in monitoring of natural resource conservation improvements. In addition to improved water quality, the project is expected to benefit fish and wildlife habitat, including four fish species of concern.

Duck Valley Reservation Irrigation Improvement Project (FY14/15); \$3M (National); Lead partner: The Shoshone-Paiute Tribe of the Duck Valley Indian Reservation. Through close collaboration with the local community, the Duck Valley project in Nevada and Idaho offers specific and achievable activities to upgrade irrigation systems, remove livestock from riparian areas, and restore stream banks. This shovel-ready project will not only improve water quality

and the efficiency of irrigation use but also provide economic benefits to an underserved community.

Farmer's Cooperative Ditch Company Project (FY16); \$500K (State); Lead Partner: Farmer's Cooperative Ditch Company. Participating State(s): Idaho. Partners will address the excessive amount of sediment and nutrients in the irrigation water, reduce water usage, improve water delivery, improve soil health and provide wildlife habitat for migratory birds. A communication plan will portray the objectives and goals of the project, and will consist of two bi-annual meetings, direct mailings, field demonstrations, workshops, Internet communications and individual one-on-one contacts. The plan will concentrate on environmental awareness, strive to increase the number of conservation practices implemented and show transparency for funds expended.

Greater Spokane River Watershed Implementation (FY16); \$7.7M (National); Lead Partner: Spokane Conservation District; Participating State(s): Idaho & Washington (lead State). Substantial sources of sediments and nutrients are carried to the Spokane River watershed by its larger tributaries, and low dissolved oxygen levels and algae blooms threaten aquatic life in the Spokane River, Lake Spokane and Coeur d'Alene Lake. Reducing nutrients is key to resolving water quality degradation throughout the Greater Spokane River Bi-State Watershed. TMDL and lake management implementation plans stress the need to address agriculture and forestry within these watersheds. This project supports regional momentum towards adoption of conservation tillage operations and best management practices. Tens of thousands of agricultural and forestry acres, including a Tribal farm, will benefit through voluntary NRCS programs. Wildlife and fish habitat will be protected, and long-term easements will be developed for several forest and wetland acquisitions. In addition, this project will introduce a new program that involves using the Risk Management Insurance models to compensate producers for the loss of productive land entered into vegetative buffers. This new commodity buffer program is designed to bridge the financial gap in current cost-share programs and encourage producers to cooperatively implement these practices on their farms. Project success will be evaluated by extensive watershed-based field monitoring to track improvements in water, soil and habitat.

High Desert Drought Resilient Ranching (FY16); \$1.3M (National); Lead Partner: Trout Unlimited, Participating State(s): Idaho (lead State), Nevada & Oregon. Nevada, Idaho and Oregon ranchers have experienced a severe drought for the majority of years in the last 30-year cycle. This project will help reduce drought impacts to wildlife and livestock in the Owyhee watershed and adjacent communities in two lesser watersheds, which have been historically underserved. Project partners will work together to develop on-the-ground projects that keep water in streams longer for both livestock and wildlife. Project area selection will emphasize State and private land that currently provides habitat for three focal species: redband trout, greater sage-grouse and Columbia spotted frogs or is adjacent to known populations and has the capacity to restore habitat for these species.

Idaho Eastern Snake River Plain Aquifer Stabilization Project (FY17); \$5.17M (National); Lead Partner: Idaho Water Resource Board; Participating States: Idaho (Lead State). Through the Idaho Eastern Snake River project, the Idaho Water Resource Board and local partners will implement four actions recommended by the State of Idaho to stabilize and recover ground water levels in the Eastern Snake River Plain Aquifer: ground to surface water

conversions; end gun removal/conversion to dryland; fallowing; and flood irrigation enhancements. The project will support agriculture, industry and municipalities on the Eastern Snake Plain and stabilize and recover spring discharges from the aquifer into the Snake River that maintain the minimum stream flows.

Portneuf River Fish Passage and Water Management (FY17); \$719K (State); Lead Partner: Shoshone-Bannock Tribes Number of Initial Partners: 7 Participating States: Idaho (Lead State). The Portneuf River in southeastern Idaho provides an important habitat for fish, particularly salmonid species, and is a major source of irrigation water for the Shoshone Bannock Tribes and Fort Hall Irrigation Project. The Portneuf Pump Station supplies irrigation water for approximately 13,300 acres of the Michaud Unit. In order to meet the irrigation deliveries of the Michaud Unit and to prevent pump cavitation, the Bureau of Indian Affairs has been annually reconstructing a rock check dam immediately downstream of the pumping station to adjust the water level as necessary. This rock dam is the greatest obstruction to fish movement in the Lower Portneuf River and is a labor-intensive and difficult to manage tool to regulate main channel water flow. Through the fish passage and water management project, the Shoshone-Bannock Tribes and partners will construct a previously-designed natural-like fish passage channel on the river's right-descending bank and an Obermeyer gate irrigation check structure in the main channel of the river. Fish passage access will normalize feeding patterns and allow access to better habitats, thereby increasing fish survivability rates in the Lower Portneuf River. Also, the ability to better manage river flow will make additional water available for the Tribal Water Bank leasing program, thereby increasing drought resiliency and providing greater regional water security.

Teton Valley Soil, Water and Wildlife (FY17); \$825K (State); Lead Partner: Friends of the Teton River Number of Initial Partners: 4 Participating States: Idaho (Lead State). A new partnership in the Teton Basin seeks to address growing concerns related to the loss of agriculture in Teton Valley, as well as the related loss of wildlife habitat. The partners will implement market-based solutions to address water quality and quantity issues that are impacting farmers and wildlife populations.

ESPA Monitoring and Water Management Program (FY18); \$950K (National); Lead Partner: Aberdeen American Falls Ground Water District; Participating States: Idaho (Lead State). The ESPA Monitoring and Water Management Program will increase water availability from Snake River by improving efficiency of water use. Working with agricultural producers to increase efficiency of irrigation, ESPA will help recharge the Reclamation reservoirs and provide protection to water rights on Snake River.

Camas Prairie Soil Health Implementation Project (FY18); \$337K (State); Lead Partner: Lewis Soil Conservation District; Participating States: Idaho (Lead State). The Camas Prairie Soil Health Implementation Project will target soil quality and soil health concerns within the Camas Prairie. Implementing practices that will focus on increasing the soil quality will improve soil health, water quality and reduce nitrate contamination and pH concerns. The project will focus on cover crops, precision nutrient management and transition to organics on an estimated 3,000 acres. The goal is to implement conservation practices in a collaborative manner, utilizing multiple conservation approaches to deliver measurable solutions and maximizing

participation in the watershed while leveraging funds to increase the impact on the critical resources.

Jim Ford Creek Watershed Implementation Project (FY18); \$343K (State); Lead Partner: Clearwater Soil and Water Conservation District; Participating States: Idaho (Lead State).

The Jim Ford Creek Watershed Implementation Project will target the TMDL load reductions needed as outlined in the TMDL Review and Temperature Addendum and the Jim Ford Creek TMDL Addendum Implementation Plan for Agriculture. The primary focus of the implementation plan is temperature with the proposed practices benefiting streambank stabilization, fish habitat and species of concern. Working with 10 partners, funding will be leveraged to double the investment and increase the impact on critical resources.

ILLINOIS

Conservation Cropping Systems for Improving Soil Health: Soil Health Assessment, Comprehensive, Conservation Planning and Implementation on Targeted Farms throughout Illinois (FY14/15); \$1.6M (State); Lead partner: Illinois Department of Agriculture-Bureau of Land and Water Resources. This project will primarily address Illinois NRCS' resource concern of soil health and will have secondary water quality and erosion control benefits. The project proposes to work with farms/farmers distributed across Illinois counties, creating a network of "Soil Health Model Farms." Select EQIP participants will work with a soil health expert to identify a combination of farm specific management practices including cover crops, no-till and nutrient management strategies.

BMP Implementation for Nutrient and Sediment Loss Reduction in Macon County, Illinois (FY14/15); \$600K (State); Lead partner: Macon County SWCD. This project will look at Illinois' top resource concerns, which are soil erosion and water quality. With this project, a new partnership is being forged between the Macon County SWCD and the Sanitary District of Decatur. Using the SWCD's proven history with producers and the Sanitary District's modern water analysis lab, in-depth testing can be conducted to prove that new edge-of-field best management practices (drainage water management, bio-reactors and saturated buffer strips) are ecologically and economically worthwhile practices to reduce nutrient loss through subsurface tile drainage.

Shorebird Conservation Acreage via Drainage Water Runoff Control (FY14/15); \$500K (CCA); Lead partner: Department of Natural Resources and Environmental Science, University of Illinois. This region in Illinois is a globally important stopover location for many species of conservation concern, especially the American Golden-Plover, and is used by millions of other migratory shorebirds and waterfowl. Creating temporary wetlands in strategic locations through NRCS's drainage water management (DWM) program will provide valuable conservation acreage for many migratory bird species. DWM provide numerous other benefits, including reductions in nitrogen and phosphorous runoff, improved water quality, and potential increases in crop production for the producer. The partnership aims to double the annual implementation of DWM in this region.

Improving Oak/Hickory Forest Health in Illinois (FY16); \$2.3M (State); Lead Partner: Illinois Forestry Development Council; Participating State(s): Illinois. The Illinois Forestry

Partnership will address the decline of trees species diversity, specifically the lack of oak regeneration, in Illinois forests. The oak-hickory forest type has been reduced by 16 percent since 1962 and this reduction will continue if oaks remain underrepresented in the younger age classes. This decline is the result of fire suppression; impacts of exotic/invasive herbs, shrubs, vines and trees; and a lack of applied management strategies to address soil health, water quality, and soil erosion resource concerns on nonindustrial private forest land to restore the appropriate forest cover in the oak-hickory ecosystem. The project will focus on four target areas, covering 37 counties in the State and representing 1.1 million acres of oak-hickory forest type, about half of the remaining ecosystem.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead State) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment; habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a U.S. Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

Midwest Agriculture Water Quality Partnership (FY16); \$9.5M (National); Lead Partner: Iowa Department of Agriculture and Land Stewardship; Participating State(s): Illinois, Iowa (lead State) & Nebraska. The Midwest Agriculture Water Quality Partnership has assembled over 40 partners and \$38 million in non-Federal funds to build an innovative public-private collaboration aimed at advancing a science-based, non-regulatory approach to reducing nutrient loss and improving water quality, soil health and habitat for at-risk species. The partnership has brought together diverse stakeholders from multiple sectors committed to improving water quality in alignment with the goals of the Iowa Nutrient Reduction Strategy. The geographic focus is Iowa, Illinois and Nebraska, with an emphasis on priority watersheds within Iowa. This proposal seeks to improve water quality through building bridges among the public, private, agriculture and environmental sectors and rural, urban, point source and non-point source communities as well as all segments of the agricultural supply chain to foster greater collaboration, improved coordination, increased alignment and more effective conservation delivery. This proposal merges traditional approaches to deliver conservation through scaling up conservation planning and conservation practices with a non-traditional, highly innovative precision agriculture platform integration component that will lead to greater practice adoption and improved conservation outcomes.

Precision Conservation Management (FY16); \$5.3M (CCA); Lead Partner: Illinois Corn Growers Association; Participating State(s): Illinois (lead State), Iowa & Kentucky. The Precision Conservation Management program (PCM) is an innovative service program designed to apply hard-nosed financial farm business planning with precision conservation technology to

provide a blueprint for conservation decision-making. The goal of PCM is to integrate conservation into the foundational farm management of commodity crop operations. PCM will provide financial impact analysis of conservation practices, technical assistance from trained conservation specialists, supplemental privately-funded financial assistance, data-rich assessment tools to guide producers through NRCS program options, and precision conservation technology to enhance effectiveness and minimize risk associated with conservation practices. PCM is dedicated to helping make the Conservation Stewardship Program the flagship program for producers seeking environmental performance linked to economic sustainability. PCM's founding mission is to use farmer data to serve farmers' interests with specific emphasis on conservation adoption. Upon enrolling in PCM, cooperators create a farm profile using PCM's Farmer Portal, a web interface that quickly, accurately, and securely collects farm data to create a field-by-field inventory of detailed agronomic management practices. After creating farm profiles, PCM specialists offer cooperators a privately-funded incentive to conduct a Resource Analysis and Assessment Plan (RAAP), assessing farm sustainability and identifying natural resource concerns. Using the RAAP, PCM specialists guide cooperators through NRCS program options with a long-term goal of preparing them for the CSP. Finally, cooperators utilize the Conservation Client Gateway to apply for NRCS programs. PCM will succeed in increasing conservation adoption because it approaches conservation from the perspective of the Midwest farmer—protecting business interests while implementing conservation practices that benefit the environment and local communities.

Upper Macoupin Creek Watershed Partnership (FY17); \$1M (State); Lead Partner: American Farmland Trust; Participating States: Illinois (Lead State). Illinois contributes 20 percent of the nitrogen and 11 percent of the phosphorus, yet only 7 percent of the water to the Gulf of Mexico through the Mississippi River. The Illinois Nutrient Loss Reduction Strategy identifies the Macoupin Creek HUC 8 Watershed as one of the three highest P-yielding watersheds and outlines a voluntary approach to stemming nutrient loss through widespread adoption of agricultural conservation management practices. With little new funding, public-private partnerships will be critical for implementation, and such a partnership was recently formed in the Upper Macoupin Creek sub watershed. Ongoing activities include farmer and non-operator landowner outreach (field days, workshops and producer interviews), soil transect surveys and water quality monitoring, and enrollment of producers in State and Federal cost-share programs to implement conservation practices on agricultural and forested private lands. Through the new Upper Macoupin Creek Watershed Partnership with the Natural Resources Conservation Service, the American Trust and 11 partners will address a major barrier to practice implementation—the need for expensive new equipment—by offering reduced rate custom application with a new tillage tool, the “Soil Warrior”, allowing for strip tillage, nutrient placement and cover crop seeding all in one pass. The project will raise awareness of soil lost from un-managed forestlands by establishing a forest management demonstration site in partnership with Blackburn College, and be able to respond to requests from a traditionally underserved community in the watershed to help them with sedimentation issues.

MRB-Big Bend Enhancing Water-Soil-Habitat Quality (FY18); \$1.5M (Critical Conservation Area—Mississippi River Basin); Lead Partner: Marshall-Putnam Soil and Water Conservation District; Participating States: Illinois (Lead State). This project, in the Mississippi River Basin CCA, focuses on the Lower Illinois Senachwine Lake HUC 8 (07130001) lying within the boundaries of Marshall/Putnam Counties along the Big Bend of the

Illinois River. The goal is to empower producers to voluntarily comply with nutrient load reductions to hold off impending regulatory action in 2025. Partners will work with producers to reduce soil loss by T or better; improve water quality using edge and in-field practices by 50 percent on treated acres; develop new field test sites for innovative practice and promote installation of those practices that improve water quality and reduce sedimentation; increase wildlife nesting and brooding areas by 2 percent while increasing populations; and, protect sensitive soils over winter by applying new acres of cover crop. Partners hope to increase producer participation by 50 percent, with 10–15 percent being producers who have been previously served by the district.

Driftless Area Habitat for the Wild & Rare Phase 2 (FY18); Proposed NRCS Investment: \$9.2M (National); Lead Partner: Trout Unlimited; Participating States: Illinois, Iowa, Minnesota and Wisconsin (Lead State). The Jo Daviess Conservation Foundation and its partners will target areas in the Driftless Area where land restoration and land protection will have the most positive impact on water quality by implementing permanent conservation practices that reduce pollution and sediment runoff into streams. RCPP funding will provide a new comprehensive, targeted regional approach to restoring cold-water streams and their riparian areas for the benefit of the many at-risk species. The project will assist landowners implement conservation practices that will reduce pollution and sediment runoff. Agricultural Conservation Easement Program funding will purchase agricultural conservation easements to install permanent conservation practices such as riparian buffers and filter strips.

Otter Lake Source Water Protection (FY18); \$833K (State); Lead Partner: Illinois Corn Growers Association; Participating States: Illinois (Lead State). Otter Lake lies in the heart of Illinois corn and soybean country, and its primary purpose is to provide drinking water for 19,000 rural residents. Every day, the lake provides the water supply for six towns, two villages and two rural water districts. Recently, nutrient-induced algae blooms have occurred, and the lake is also listed as impaired for phosphorus. Nitrogen loading is also a growing concern due to rapid expansion of tile drainage. This project will protect Otter Lake by reducing excessive levels of sedimentation and nutrient loading. A highly detailed watershed plan was just completed, enabling conservation practices to be micro-targeted to areas of greatest resource need. Additionally, farmers will receive an analysis of economic return at sub-field resolution paired with financially favorable conservation alternatives.

Illinois Headwaters Conservation Partnership (FY18); \$436K (State); Lead Partner: Headwaters Invasive Plant Partnership; Participating States: Illinois (Lead State). The Headwaters Invasive Plant Partnership (HIPP) was formed to address the threat of invasive plants in conservation areas across jurisdictional boundaries in east central Illinois. Healthy forests and prairies are essential for reducing soil erosion, protecting water quality and reversing pollinator decline. Much of the conservation land covered by HIPP is held for public use through ownership by government entities or non-profit organizations, but private landholders must be engaged in order to reduce the impact of invasive plants. By providing technical knowledge and financial assistance, this project will help ensure that private and public landowners are more effectively working together to implement best management practices across the landscape.

INDIANA

Preventing nutrient loss from Indiana farms: watershed-scale pairing of cover crops and the two-stage ditch (FY14/15); \$1.51M (State); Lead partner: Notre Dame Environmental Change Initiative. The project will assist with adoption of cover crops on cropland, and two-stage ditches along the majority of channelized ditches, in two targeted 12-digit watersheds. Through water quality monitoring, the project will quantify the soil and water quality/quantity benefits from the implementation of these practices in the watersheds. Based on preliminary research, 40 to 45 percent reductions in nutrient loss are achievable with this approach, which will be monitored at the watershed scale. A key component of the project is to accurately document the effect of these practices on environmental conditions (water and soil quality) and estimate the full costs and benefits for both public and private interests. In addition, the data will support modeling efforts that will allow for broader conclusions regarding the effectiveness of these conservation practices, regionally and beyond.

Tri-State Western Lake Erie Basin Phosphorus Reduction Initiative (FY14/15); \$17.5M (CCA—Great Lakes Region); Lead partner: Michigan Department of Agriculture and Rural Development. A diverse team of partners will use a targeted approach to identify high-priority sub-watersheds for phosphorus reduction and increase farmer access to public and private technical assistance—including innovative demonstrations of practices that NRCS does not yet cover—in Michigan, Ohio, and Indiana. Identified actions are coordinated with the Ohio Phosphorus Task Force Report and will move Lake Erie toward goals developed in the Great Lakes Water Quality Agreement Annex 4 Nutrient Strategies. The partners will gauge success and monitor results using project-wide water quality monitoring and watershed modeling conducted by national experts from multiple scientific entities and institutions.

St. Joseph River Watershed Conservation Partnership: (FY14/15); \$6.8M (National); Lead Partner: Michigan Department of Ag and Rural Development. The partnership strives to find solutions to increasing ground water withdrawals and sediment and nutrient loading that are economically good for the farmer but also have multiple conservation benefits, including optimizing ground water use, improving infiltration, and reducing nutrients and sediment while also improving wildlife and fisheries habitat. Innovative methods to target high-priority areas and appropriate conservation practices will take an already developed watershed management plan to the next level. Monitoring will be used to adaptively manage this project at various levels, from the field-scale to the entire watershed. Partners have a strong history of working with both NRCS and producers.

Big Pine Watershed Partnership: (FY16); \$1.8M (National); Lead Partner: The Nature Conservancy; Participating State(s): Indiana. The Big Pine watershed, located in west-central Indiana, is a tributary of the Wabash River and part of the Mississippi River drainage. The Big Pine Watershed Partnership will engage the power of the supply chain and the trust of agronomy retailers to further conservation in Indiana's Big Pine watershed through the targeted implementation of nutrient and sediment reducing practices to achieve watershed water quality objectives. Agronomists and crop advisors will engage growers to adopt EQIP and CSP practices that can improve nutrient efficiency, soil health and water quality. Partners will help target grower engagement and practice enrollment to locations most likely to produce greatest conservation return (tons of sediment or pounds of nutrients retained per EQIP/CSP dollar

spent). The project partners will also work to streamline grower screening and enrollment for EQIP/CSP participation through the use of precision agronomic tools. This information will be used in the Fieldprint Calculator to help quantify environmental outcomes resulting from implemented actions. The partnership's goal is to deliver an additional 8,000 acres of cover crops, 10,100 acres of nutrient management and 4,850 acres of CSP. Both practices and acreage targets will greatly accelerate progress towards long-term Best Management Practice targets identified in the recently completed Big Pine Creek and Mud Pine Creek Watershed Management Plan.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead state) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment; habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a U.S. Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

Soil Health on Reclaimed Mine Lands (FY16); \$885 K (State); Lead Partner: Knox County SWCD; Number of Partners: 13; Participating State(s): Indiana. Partners will work with farmers, landowners and mine operators to implement a suite of soil health practices on reclaimed mine lands in order to improve the health of the soil, reduce the amount of sediment laden runoff reaching streams and rivers and improve wildlife habitat. The project will focus on the roughly 175,000 acres of reclaimed mine lands that are cropped in the Indiana counties of Vigo, Clay, Sullivan, Greene, Knox, Daviess, Gibson, Pike, Dubois, Warrick and Spencer.

Southern Indiana Young Forest Initiative (FY17); \$960 K (State); Lead Partner: Indiana Department of Natural Resources, Division of Forestry; Participating States: Indiana (Lead State). The Southern Indiana Young Forest Initiative, established by 11 partner organizations with a history of conservation leadership in the State, will address a lack of early successional habitat and corresponding declines in at-risk wildlife species. The Initiative will focus on 43 counties in southern Indiana that contain the majority of forested land and provide the best opportunities for incorporating early successional forest regeneration into a predominantly hardwood forest landscape characterized by advanced forest succession. Partners will promote and use Best Management Practices, ranging from species-specific silvicultural guidelines to generalized private landowner management recommendations that benefit young forest indicator species like American Woodcock and Ruffed Grouse. The project intends to work in similar fashion to successful young forest initiatives on the east coast and in Wisconsin and lays the groundwork for the establishment of an Ohio Valley Young Forest Initiative.

Reversing Declines in Grassland Biodiversity (FY18); \$4.5M (National); Lead Partner: Central Hardwoods Joint Venture; Participating States: Indiana, Kentucky, Tennessee (Lead State). The Central Hardwoods Joint Venture and its partners will use a multifaceted conservation program that will complement existing efforts to reverse the decline of grassland habitats in the Southeast United States, especially near protected landscapes. The project seeks to recover populations of grassland bird species deemed in need of conservation attention by Partners in Flight, as well as the native biodiversity associated with the historic grassland landscapes of the Interior Low Plateaus ecoregion of Tennessee, Kentucky, and Indiana. Conservation efforts will include removal of woody cover and prescribed fire, reconversion of cropland or fescue pastures to native grasses, increasing forb-to-grass ratios, changing grazing intensities, and altering haying regimes.

Grasslands for Gamebirds & Songbirds Initiative (FY18); \$1M (State); Lead Partner: Indiana Department of Natural Resources—Division of Fish & Wildlife; Participating States: Indiana (Lead State). The Grasslands for Gamebirds and Songbirds Initiative will develop and manage grassland and pollinator habitat needed by at risk bird species, including the Henslow's Sparrow, Loggerhead Shrike, Northern Bobwhite Quail, and Ring-necked Pheasant. The initiative will develop 2,250 acres of grassland habitat on private lands in five focal regions located strategically throughout Indiana.

IOWA

Regional Grassland Bird and Grazing Lands Enhancement Initiative (FY14/15); \$5M (National); Lead partner: Missouri Department of Conservation. The goal of this project, which includes portions of Kansas, Missouri, Iowa, and Nebraska, is to create and implement management strategies that provide for the adoption of scientifically proven and culturally acceptable pasture and grassland management practices. Conservation implementation will maintain the tall grass prairie ecosystem without the need for government regulation and enroll high-quality grasslands into conservation easements and contracts. The highly targeted approach identified in the proposal will strengthen existing partnerships and implementation plans.

Iowa Targeted Demonstration Watersheds Partnership Project (FY14/15); \$3.5M (CCA—Mississippi River Basin); Lead partner: Iowa Department of Agriculture and Land Stewardship, Division of Soil Conservation. Directly tied to the implementation of Iowa's Nutrient Reduction Strategy, developed in response to the Gulf Hypoxia Task Force goal of 45 percent reduction in nutrients to the Gulf, this project will assist a strong, diverse partnership in standing up demonstration watersheds in nine focus watersheds, identified by a coordinating council. Conservation in these watersheds will focus on broad adoption of practices that are most beneficial in reducing nutrients and will serve as models for future work, with a focus on farmer-to-farmer outreach and education.

Middle Cedar Partnership Project (FY14/15); \$2.1M (State); Lead partner: City of Cedar Rapids. Led by the City of Cedar Rapids, the Middle Cedar Partnership Project will focus on working with local conservation partners, farmers and landowners to install best management practices such as cover crops, nutrient management, wetlands and saturated buffers to help improve water quality, water quantity and soil health in the Cedar River Watershed. There is an urgent need to address increasing concentrations of nitrates and extreme flood events in the

Cedar River. This project will lay the foundation for needed improvements and bring together a diverse group of conservation partners.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead State) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment; habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a U.S. Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

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Upper Cedar Watershed Urban-Rural Partnership: (FY16); \$1.6M (State); Lead Partner: City of Charles City; Participating State(s): Iowa. The Urban-Rural Partnership proposes to leverage existing efforts in the Rock Creek Watershed, where a Farmer Advisory Board is working with local partners to advance practice implementation according to goals set in the Rock Creek Watershed Management Plan. The project will implement conservation practices such as cover crops, bioreactors, and saturated buffers and will also conduct outreach activities through partners to increase adoption of practices.

Fox River Water Quality Project (FY17); \$900 K (National); Lead Partner: Davis County Soil and Water Conservation District; Participating States: Iowa (Lead State). The Fox River Water Quality Project, in its 18th year, is one of the longest running watershed projects in Iowa. The conservation project will continue to improve the health of the Fox River by addressing water quality, conservation, protection and development of natural resources using voluntary programs that provide economic opportunity. The eight partners, led by the Davis County Soil and Water Conservation District, will help producers improve water quality through conservation practices like installing grade stabilization structures, water and sediment control basins, tile outlet terraces and cover crops.

Innovative Conservation Agriculture (FY17); \$646 K (State); Lead Partner: Allamakee County Soil and Water Conservation District; Number of Initial Partners: 4; Participating States: Iowa (Lead State). Through the Innovative Conservation Agriculture Project, the Allamakee County Soil and Water Conservation will address water quality and soil quality/health concerns in Allamakee County. Specifically, the project will support implementation of cover crops and no-till in conjunction with manure application, the conversion of marginal cropland to pasture, and the addition of a small grain crop to a corn-soybean system, preferably with the inclusion of cover crops in the rotation. These practices will help to minimize soil erosion and nutrient runoff. Through the project, eligible farmers will receive financial assistance to implement conservation practices, and the project will address the need to educate producers and landowners about how different practices affect soil health and long-term productivity.

SmithfieldGro: Sustainable Grain Supply Chains (FY18); \$1M (National); Lead Partner: Environmental Defense Fund; Participating States: Iowa and North Carolina (Lead State).

This RCPP project expands an innovative collaboration between Environmental Defense Fund and Smithfield Foods to address nutrient management and soil health in the company's grain supply chain. In 2014 Smithfield created SmithfieldGro, a voluntary program that provides agronomic assistance and conservation incentives to grain growers in the company's sourcing region. In 2016, SmithfieldGro improved practices on about 300,000 acres in North Carolina and Iowa. This RCPP will launch new efforts in IA and expand efforts in NC. RCPP allows SmithfieldGro to engage new partners, incorporate strong science, and reach farmers who may not enroll in traditional conservation efforts.

Driftless Area Habitat for the Wild & Rare Phase 2 (FY18); \$9.2M (National); Lead Partner: Trout Unlimited; Participating States: Illinois, Iowa, Minnesota and Wisconsin (Lead State). The Jo Daviess Conservation Foundation and its partners will target areas in the Driftless Area where land restoration and land protection will have the most positive impact on water quality by implementing permanent conservation practices that reduce pollution and sediment runoff into streams. RCPP funding will provide a new comprehensive, targeted regional approach to restoring cold-water streams and their riparian areas for the benefit of the many at-risk species. The project will assist landowners implement conservation practices that will reduce pollution and sediment runoff.

KANSAS

Improving Water Quality through the Implementation of Forestry Practices and the Assessment of Riparian Systems in Kansas Priority Watersheds (FY14/15); \$13M (National); Lead partner: Kansas State University. Surface water reservoirs in Kansas and Oklahoma have lost 40 percent of their storage capacity and are experiencing frequent algal blooms, owing mainly to stream bank erosion. By implementing forestry best management practices on more acres and creating a protection framework for remaining riparian forests in high-priority watersheds, this project will help sustain reservoir storage and wildlife habitat, improve the drinking water supply, and increase recreation opportunities. The contributing partners have a strong record of accomplishment in making water quality improvements and working with producers.

Regional Grassland Bird and Grazing Lands Enhancement Initiative (FY14/15); \$5M (National); Lead partner: Missouri Department of Conservation. The goal of this project, which includes portions of Kansas, Missouri, Iowa, and Nebraska, is to create and implement management strategies that provide for the adoption of scientifically proven and culturally acceptable pasture and grassland management practices. Conservation implementation will maintain the tall grass prairie ecosystem without the need for government regulation and enroll high-quality grasslands into conservation easements and contracts. The highly targeted approach identified in the proposal will strengthen existing partnerships and implementation plans.

Kansas Pheasant Initiative (FY14/15); \$800K (State); Lead partner: Kansas Department of Wildlife, Parks and Tourism (KDWPT). Pheasants are a socially and economically important resource to Kansas; however, populations are experiencing challenges across their range. With recent extreme drought, loss of conservation acres such as Conservation Reserve Program, and intensifying farming practices, pheasant populations in Kansas are under decimating pressures resulting in the lowest harvest levels ever recorded. To address the resource concern of

inadequate wildlife habitat, KDWPT and its partners have proposed a focus area approach to intensify habitat management at a scale to promote connectivity of habitat and provide opportunity to realize landscape level population impacts.

Advanced Irrigation Water Management on the High Plains Aquifer in Kansas: (FY14/15); \$2.4M (State); Lead partner: Southwest Groundwater Management District No. 3. This project will provide producers and crop consultants with telemetry-enabled soil moisture probes, water metering, and evapotranspiration (ET) measurement for near real-time monitoring. Advanced Irrigation Water Management is an underutilized technology in Kansas that typically increases yields and reduces water use. Implementation of this practice through RCPP will bring conservation and economic gains to producers in southwest Kansas.

Middle and Lower Neosho River Basin Conservation Program (FY14/15); \$4 M (National); Lead partner: Oklahoma Conservation Commission, Water Quality Division. This project will pool Kansas and Oklahoma State and Federal resources to address water quality concerns in the middle and lower Neosho River Basin, which affects water quality in downstream Grand Lake. Ten small watersheds, which water quality modeling has indicated are among the highest contributors to nutrient, sediment, and bacteria loading in Grand Lake, have been targeted for the program. The States will use in-stream water quality monitoring to evaluate program performance, along with watershed modeling, soil sampling, and soil carbon sequestration verification.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead State) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment; habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a US Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

Native Grazing Lands Protection in the Plains (FY16); \$3.6M (National); Lead Partner: The Nature Conservancy; Participating State(s): Kansas (lead State) & Oklahoma. Native grasslands of the central Great Plains are some of the most majestic yet least conserved landscapes in North America. The project area for this proposed effort encompasses the most intact native grazing lands remaining in Kansas and Oklahoma, which provide critical habitat for a number of rare and sensitive species, including the lesser prairie chicken. By applying conservation easements and practices on native grazing lands, this project aims to prevent habitat fragmentation and conversion to non-grazing uses, improve wildlife habitat and reduce the spread of invasive species. One innovative component of this proposal will include working with Kansas State University to better quantify the changes in stream base flows following eastern red

cedar removal in adjacent riparian areas and uplands. It is anticipated that approximately 12,000 acres of grazing lands will be protected via conservation easements and EQIP conservation practices will be delivered on over 40,000 acres.

Kansas Wetland Easements (FY17); \$2.6M (State); Lead Partner: Ducks Unlimited, Inc.; Participating States: Kansas (Lead State). Through the Kansas Wetlands Easements project, Duck Unlimited and partners will assist with the delivery of Agricultural Conservation Easement program on priority Kansas wetlands, with 800 or more additional protected easement acres. The project will provide landowner outreach and education and assist with the application process and site restoration. Conservation priorities will include protecting and restoring sensitive wildlife habitat, ground water recharge and improving water quality.

Milford Lake Watershed RCPP Project (FY18); \$2.88M (National); Lead Partner: Kansas Water Office; Participating States: Kansas (Lead State). The frequency of harmful algal blooms within Milford Lake has created a concern among lake stakeholders that blooms will adversely impact public water supplies, their ability to provide safe potable water, and negatively impact wildlife and water-based recreation. This project will bring partners together to work with NRCS on implementation of conservation practices within the Milford Lake Watershed. These partnership efforts will help improve water quality by reducing the amount of nutrients entering Milford Lake.

Doniphan County Road and Fields Sediment Reduction (FY18); \$250K (State); Lead Partner: Doniphan County Conservation District; Participating States: Kansas (Lead State). Steep slopes, loess soil and high rainfall amounts create erosion issues that have an impact on county roads. When soil washes out of fields into the road and road ditches, it carries sediment into the water supply. To protect the water and soil in the area, the Doniphan County Conservation District will collaborate with the Doniphan County Road and Bridge Department and NRCS to resolve these issues with landowners. Conservation plans will be developed that will address the drainage area contributing to erosion along the county roadways.

KENTUCKY

Cerulean Warbler Appalachian Forestland Enhancement: (FY14/15); \$8M (National); Lead partner: American Bird Conservancy (ABC); States: Ohio, Kentucky, Pennsylvania, Maryland, and West Virginia. To address habitat loss, soil health, and water quality, the project will focus on suites of conservation practices intended to enhance acres of forest habitat on private lands for cerulean warblers, an at-risk species, and associated species. The Nature Conservancy has committed to enrolling additional acres into easements, and the American Chestnut Foundation, the Appalachian Regional Reforestation Initiative, and Green Forests Work will reforest acres of reclaimed mine lands to biodiverse forest.

Managing Poo: Adoption of Nutrient Management and Conservation Practices (FY14/15); \$1.6M (State); Lead partner: Kentucky Division of Conservation. Reducing nitrogen, phosphorus and sediment loads entering waterways on private lands is the overall goal of this project. This project will be available to producers throughout Kentucky, but priority will be given to producers nearing regulatory action for water quality violations and/or producers

operating in Mississippi River Basin Initiative and National Water Quality Initiative-designated focused watersheds.

Overgrazing and Soil Degradation on Horse Farms (FY16); \$476K (State); Lead Partner: University of Kentucky; Participating State(s): Kentucky. While Kentucky is known for its iconic horse farms and rolling pastures, it is estimated that small to medium sized horse farms occupy over 750,000 of land in the State. Pastures on these farms are often overgrazed and the land base is poorly managed due to the lack of agricultural experience of many horse farm owners. The objective of this project is to implement improved pasture management practices on 25 small to medium sized EQIP eligible horse farms in Kentucky. First, three farms will be identified as demonstration farms and we will work with NRCS to incorporate a broad range of approved practices. These farms will be monitored throughout the four-year project for pasture cover and productivity, soil health, water quality and the successful implementation of other practices. Field days on the demonstration farms will help NRCS staff sign up the 25 farms and will show many small horse farms owners in KY and surrounding States the benefits that improved pasture and farm management have for the environment and their horses.

Precision Conservation Management (FY16); \$5.3M (CCA); Lead Partner: Illinois Corn Growers Association; Participating State(s): Illinois (lead State), Iowa & Kentucky. The Precision Conservation Management program (PCM) is an innovative service program designed to apply hard-nosed financial farm business planning with precision conservation technology to provide a blueprint for conservation decision making. The goal of PCM is to integrate conservation into the foundational farm management of commodity crop operations. PCM will provide financial impact analysis of conservation practices, technical assistance from trained conservation specialists, supplemental privately funded financial assistance, data-rich assessment tools to guide producers through NRCS program options, and precision conservation technology to enhance effectiveness and minimize risk associated with conservation practices. PCM is dedicated to helping make the Conservation Stewardship Program the flagship program for producers seeking environmental performance linked to economic sustainability. PCM's founding mission is to use farmer data to serve farmers' interests with specific emphasis on conservation adoption. Upon enrolling in PCM, cooperators create a farm profile using PCM's Farmer Portal, a web interface that quickly, accurately, and securely collects farm data to create a field-by-field inventory of detailed agronomic management practices. After creating farm profiles, PCM specialists offer cooperators a privately funded incentive to conduct a Resource Analysis and Assessment Plan (RAAP), assessing farm sustainability and identifying natural resource concerns. Using the RAAP, PCM specialists guide cooperators through NRCS program options with a long-term goal of preparing them for the CSP. Finally, cooperators utilize the Conservation Client Gateway to apply for NRCS programs. PCM will succeed in increasing conservation adoption because it approaches conservation from the perspective of the Midwest farmer—protecting business interests while implementing conservation practices that benefit the environment and local communities.

Seeding Ground Cover on Marginal Lands (FY16); \$360K (State); Lead Partner: Scott County Conservation District; Participating State(s): Kentucky. This project will repair eroded areas in row-cropped fields that have continued to erode due to lack of cover crops or excessive rains, flooding and overflowing, washing out the uncovered crop areas. The Districts will hold Erosion Education Workshops to announce EQIP sign-up periods and answer questions

about the program, will update the KY Ag Water Quality Plans, and will join the KY River Watershed Watch to be trained to correctly collect water samples.

Increasing Farm Bill Participation and Benefits (FY17); \$350K (State); Lead Partner: University of Kentucky Number of Initial Partners: 2 Participating States: Kentucky (Lead State). Forty-eight percent of Kentucky is forestland—12.4 million acres of forests. Productive and well-managed forests enable producers/owners to retain forests for long-term socio-economic benefits and will conserve natural resources and improve forest health, condition and wildlife habitat. Through the project, the University of Kentucky and partners will focus on increasing conservation planning and conservation practice implementation to meet resource concerns and the high demand of technical assistance requests from Kentucky’s woodland owners.

Lake Cumberland Regional Conservation Partnership Program (FY17); \$210K (State); Lead Partner: Wayne County Conservation District; Participating States: Kentucky (Lead State). The Wayne County Conservation District and eight local partners will provide leverage local and Federal funds for 4 years to implement soil and water conservation practices in Kentucky. **Season Extension for Eastern Kentucky (S.E.E.K) (FY17); \$400K (State); Lead Partner: Grow Appalachia/ Berea College; Participating States: Kentucky (Lead State)** The Season Extension for Eastern Kentucky or S.E.E.K project includes higher education institutions, non-profit organizations and for-profit entities that together will deliver conservation practices to the historically underserved producers of eastern Kentucky. The S.E.E.K partnership specifically will support producers through cost share contracts for seasonal high tunnels, micro-irrigation in those tunnels, cover crop practices for soil health and mulching practice to reduce tillage and increase plant health. These Conservation practices will increase the length of the growing season, provide a platform for more efficient water management and reduce disease pressures that impact plant health. The S.E.E.K project will be led by Grow Appalachia—a rural food security project of Berea College—which currently has 16 partner sites that serve or border all of the 37 counties specified for the S.E.E.K partnership.

The Fort Campbell Private Lands Initiative (FY17); \$750K (State); Lead Partner: Compatible Lands Foundation; Participating States: Kentucky (Lead State). The Fort Campbell Private Lands Initiative—a partnership between the Compatible Lands Foundation and the U.S. Army—will preserve approximately 20,000 acres of farmland adjacent to Fort Campbell Army Base in Christian County, Kentucky, through the acquisition of permanent conservation easements. Through this effort, prime farmlands, wildlife habitat and water quality/quantity in the Cumberland River Basin and Four Rivers Region will be protected.

Advanced Precision Ag for Sustainable Conservation (FY18); \$5.5M (Critical Conservation Area—Mississippi River Basin); Lead Partner: Security Seed & Chemical, Inc.; Participating States: Kentucky (Lead State) and Tennessee. The Cumberland River basin in Tennessee and Kentucky spans nearly 18,000 square miles and is home to nearly 2.5 million people. This project will occur in the Red River and Lower Cumberland watersheds, 2 of the 14 watersheds that make up the Cumberland River Watershed. Both surface water and ground water impairments are a concern in the watershed with nutrients, bacteria, and sediment being the primary issues. The partners will work with producers to improve water quality by maximizing fertilizer uptake, preventing sediment and nutrient losses, using science-based precision

agricultural practices, and implementing high nutrient reducing structural practices. The partners' goal is to advance the implementation of on-farm precision agriculture practice to help ensure the sustainability, resilience, and continued productivity of the area's working lands while simultaneously improving the producer's bottom line. The partners assembled for this project are some of the most advanced, cutting edge companies in the U.S., which assures that both producers and NRCS staff will have access to the most up-to-date technologies available today. Another goal of this project is to work with NRCS to improve and update practice standards and enhancements, so they work better for producers and achieve higher results for the environment.

Reversing Declines in Grassland Biodiversity (FY18); \$4.5M (National); Lead Partner: Central Hardwoods Joint Venture; Participating States: Indiana, Kentucky, Tennessee (Lead State). The Central Hardwoods Joint Venture and its partners will use a multifaceted conservation program that will complement existing efforts to reverse the decline of grassland habitats in the Southeast U.S., especially near protected landscapes. The project seeks to recover populations of grassland bird species deemed in need of conservation attention by Partners in Flight, as well as the native biodiversity associated with the historic grassland landscapes of the Interior Low Plateaus ecoregion of Tennessee, Kentucky, and Indiana. Conservation efforts will include removal of woody cover and prescribed fire, reconversion of cropland or fescue pastures to native grasses, increasing forb-to-grass ratios, changing grazing intensities, and altering haying regimes.

Working Forests for Wildlife (KY, TN, VA) (FY18); \$4.99M (National); Lead Partner: The Nature Conservancy, Kentucky; Participating States: Kentucky (Lead State), Tennessee and Virginia. Working Forests for Wildlife project seeks to conserve 25,000 acres of high priority forest in Kentucky, Virginia and Tennessee. By connecting forestland owners with The Nature Conservancy's existing carbon markets, these forests can be managed to improve biological diversity and provide habitat for endangered species.

Profitable Farms: Soil, Water and Plant Quality (FY18); \$485K (State); Lead Partner: Pine Mountain Settlement School; Participating States: Kentucky (Lead State). The Profitable Farms: Soil, Water and Plant Quality project aims to bring conservation practices to the historically under-served region of Southeastern Kentucky. This partnership will provide access to cost share contracts for Seasonal High Tunnels in order to improve plant quality, extend the growing season and produce high value fruits, vegetables and value-added goods for market. Micro-irrigation will also be key in conserving water and improving water quality. Additionally, soil health and plant quality will be improved by the use of cover crops and reduced tillage. Implementation of these practices will help build the long-term sustainability and profitability of these small farms while contributing greatly to the economic diversification of the region's economy. The project will provide a means for small farmers to tap into the tremendous opportunity for producing high-value agricultural products such as early and late crops, high quality organic heirloom vegetables, high quality organic small fruits and the resulting shelf-stable products created from this premium quality produce.

Improving Wildlife and Pollinator Habitat on Farms (FY18); \$425K (State); Lead Partner: Kentucky State University; Participating States: Kentucky (Lead State). Many agricultural producers focus on maximizing production acreage and their natural resource concerns receive less attention. This project will improve wildlife and pollinator habitats and water quality on

eligible agricultural lands in Kentucky. The project partners will work together to train agricultural landowners on efficient and accurate implementation of conservation practices through a series of how-to workshops and demonstration projects. This innovative model combines financial assistance with supportive, on-the-ground training to ensure implementation is cost-effective and successful.

Knox County RCPP (FY18); \$110K (State); Lead Partner: Knox County Soil Conservation; Participating States: Kentucky (Lead State). The Knox County Conservation District will be helping farmers and landowners through a local cost-share program--\$20,000 in cash annually for five years and \$10,000 in administrative and outreach services annually for five years—for a total of \$150,000. Since the program began, the District has helped implement 44 livestock water facility practices, 15 heavy use area practices, 250 pasture renovation practices, and 15 fencing projects. The District offers equipment rentals to those implementing soil and water conservation practices on their farms.

LOUISIANA

Rice Stewardship Program in Southwest Louisiana (FY14/15); \$1.5M (State); Lead partner: Ducks Unlimited. Ducks Unlimited is working with rice producers in southwest Louisiana to improve and sustain their operations through conservation of natural resources through the Rice Stewardship Program (RSP). DU and their collaborating partners are expanding the Rice Stewardship Program in southwest Louisiana and will support Louisiana NRCS and rice producers in planning, design and installation of conservation practices on working lands. These conservation practices will address the primary resource concerns of southwest Louisiana by improving water quality, as well as improving wetland habitat for wintering waterfowl and other wildlife species.

Targeted Conservation Delivery to Improve Soil Health, Water Quantity and Quality (FY14/15); \$100K (State); Lead partner: Louisiana Department of Agriculture and Forestry's Office of Soil and Water Conservation. The Louisiana Department of Agriculture and Forestry's Office of Soil and Water Conservation and its partners will conduct site specific assessments within five targeted watersheds across Louisiana. This detailed assessment will identify soil and water management concerns that have a substantial potential to contribute to the degradation of soil health and water quality and quantity within the watershed. The primary focus will be to identify, inform and develop resource management plans for landowners and managers to conserve and sustain soil health, water quality and water quantity on working lands.

Securing Private Working Forests to Benefit Longleaf Pine, Threatened and Endangered Species, and Military Readiness (FY14/15); \$12M (CCA); Lead partner: U.S. Endowment for Forestry and Communities. The partners will target acres of working longleaf in South Carolina, Georgia, Florida, and Louisiana, with a greater than one-to-one match from the Department of Defense and other partners. Protecting longleaf forest and maintaining lands in and surrounding up to ten military installations— each with individual goals—will support existing longleaf and gopher tortoise efforts while also maintaining critical land areas around military bases.

Rice Stewardship Partnership—Sustaining the Future of Rice (FY14/15); \$10M (National); Lead partner: Ducks Unlimited, Inc. (DU). The Rice Stewardship Partnership composed of DU, the USA Rice Federation, and collaborating partners, will assist rice producers to address water quantity, water quality, and wildlife habitat in Mississippi, Arkansas, California, Louisiana, Missouri, and Texas. Using remote sensing to estimate bird population carrying capacity in shallow waters and the Field-to-Market Fieldprint Calculator to monitor results over time, the partners offer several innovations to augment conservation implementation and gain broader producer participation.

Restoring Coastal Prairie through Biofuels (FY16); \$613K (State); Lead Partner: The Earth Partners LP; Participating State(s): Louisiana. The conversion of the Gulf coastal prairie ecoregion to rice, sugarcane, pasture and Chinese Tallow infested land has left a mere one percent of this unique, environmentally critical ecosystem fragmented across what was originally 9 million acres in Louisiana and Texas. Restoration of native perennial grasses can simultaneously support increased natural vegetation communities, increase water filtration ecosystem services and also head off further invasion of exotic species. Partners will demonstrate the feasibility of rehabilitating coastal prairie ecosystem services by deploying a production-scale switchgrass production program across as many as 1,500 acres in Southwest Louisiana spanning the Sabine, Calcasieu, Mermentau and Vermilion-Teche watersheds.

RSP: Improving Water Quality using Practice 590 (FY16); \$800K (State); Lead Partner: Ducks Unlimited; Participating State(s): Louisiana. LA Department of Environmental Quality has designated the Mermentau Basin in need of restoration. This basin holds the majority of rice production in southwest Louisiana. Nutrient loss from agriculture and other sources, particularly nitrogen and phosphorous, is contributing to over-enrichment of waterways, not to mention loss of nutrients is a cost to producers. It is estimated that fewer than 25 percent of southwest Louisiana rice producers apply nutrients following recommendations for an up-to-date soil test and fewer than 5 percent of those are using precision application of nutrients. Those who attempt grid soil sampling and precision application quickly see the benefits and further adopt the practice. However, getting producers to take the first step can be a hurdle due to perceived cost. This project will use planning and application of NRCS EQIP practice 590 (Nutrient Management) on 23,000 acres to advance water quality improvements in the Mermentau Basin. Additional partnerships such as Chevron and Ducks Unlimited's will work to install grade stabilization structures, and research and development of rice varieties and management systems to perfect nutrient budgets for modern rice varieties will ensure success to this proposal.

Shifftail Canal Watershed Project (FY16); \$360,000 (State); Lead Partner: Caddo SWCD; Participating State(s): Louisiana. The fundamental aim of this project is to holistically address water quality, soil health, wildlife habitat, water quantity and energy conservation concerns within a working farm using highly effective approaches. The core strategy will be to identify several working land tracts within the watershed to implement a comprehensive conservation system that integrates Environmental Quality Incentive Program conservation practices and Conservation Technical Assistance. Conservation plan development for the project will be accomplished through an interdisciplinary planning team that will work to integrate water quality improvement practices, soil health management practices, wildlife enhancement practices and irrigation water management practices. In addition, an economic evaluation will be conducted to

provide a cost-benefit analysis of conservation practices implemented to improve water quality, soil health and irrigation efficiency.

Fallow and Derelict Rice Land Enhancement (FY17); \$157K (State); Lead Partner: Louisiana Department of Agriculture and Forestry; Participating States: Louisiana (Lead State). The Fallow and Derelict Rice Land Enhancement project will focus on poorly drained, fallow and derelict rice fields in southwestern Louisiana. In this area, historically a tall-grass prairie ecotype, there are approximately 80,000 acres of fallow rice fields that are currently being grazed or are completely neglected and overgrown with Chinese tallow and other invasive or undesired tree and brush species. Across the same region, there also are approximately 100,000 un-leveed acres of undeveloped rangeland, some of which may have been periodically cropped in rice, soybeans or sorghum in past decades and which currently are grazed at low stocking rates with little or no form of prescribed grazing, forage management, mowing, prescribed burning or other favorable vegetative enhancements. With slight to moderate vegetative enhancement and hydrologic restoration practices applied to most of these overgrown areas, wetland prairie habitat potential will quickly rebound and may prove as seasonally beneficial and resilient a waterfowl/whooping crane habitat as most rice stubble fields.

Gulf of Mexico Hypoxia Reduction (FY17); \$1.57M (State); Lead Partner: Louisiana Department of Agriculture and Forestry, Office of Soil and Water Conservation; Participating States: Louisiana (Lead State). The Gulf of Mexico Hypoxia Reduction project partners will develop strategies to minimize quick nutrient loss from precision agriculture and mitigate nutrient runoff after irrigation or rain events. By managing the amount of fertilizer spread and proper placement of fertilizer, loss of excess nutrients will be lowered, reducing the amount of fertilizers that reach the Gulf.

Vermilion River Working Lands, Wildlife and Water (FY17); \$1.5M (State); Lead Partner: The Conservation Fund; Participating States: Louisiana (Lead State). The Vermillion Parish Working Lands, Wildlife and Water Partnership project aims to permanently conserve large-scale agricultural lands within the coastal zone of Louisiana, with substantial natural resource value, through the purchase of conservation easements under Agricultural Conservation Easement Program. The focus lands in Vermilion Parish are under threat of conversion, with real potential for loss of wildlife habitat and further water quality degradation critical to the economy and environment both locally and across the broader geography of the Gulf of Mexico. Big picture success would be completing this first of its kind project, using this success to replicate an innovative agricultural lands protection model across the State.

Gulf Coast Water and Wildlife Conservation (FY18); \$5.43 M (National); Lead Partner: Ducks Unlimited, Inc.; Participating States: Louisiana (Lead State) and Texas. The Gulf Coast prairies, marshes and bays of Louisiana and Texas comprise one of North America's most productive land resource regions and are the most important migration/wintering areas for water birds. The landscape is threatened with more than 90 percent coastal wetland loss and a population forecast doubling to 50 million by 2050. Project partners will assist NRCS in Hurricane Harvey recovery efforts and address water quantity and habitat concerns in the Gulf Coast.

Improving Soil and Water Quality in Bayou Pierre (FY18); \$350,000 (State); Participating States: Louisiana (Lead State). This project will manage natural resources to address soil quality degradation, water quality degradation and inefficient water use on the crop acres within the Bayou-Pierre watershed in Red River Parish, Northwest Louisiana. Conservation practices potentially implemented are expected to improve aquatic habitat, increase crop productivity, and provide economic benefit to the farmers. This project will serve as an example for other sites throughout the Louisiana's Red River Basin.

Cultivating Water Conservation on Working Lands (FY18); \$450K (State); Lead Partner: Ducks Unlimited, Inc.; Participating States: Louisiana (Lead State). This project will restore degraded cypress-tupelo brakes in seven Parishes in Louisiana. The hydrological restoration of brakes on working agriculture lands to capture surface water and storm runoff from agricultural fields is an innovative practice to improve water quality, conserve and utilize water resources, and improve habitat for wildlife while reducing input costs from pumping ground water from the substantially declining alluvial aquifer.

MAINE

Improving Connectivity for Coldwater Salmonids in Maine Headwater Streams (FY14/15); \$200K (State); Lead Partner: Atlantic Salmon Federation. This project will increase access to spawning and rearing habitat for fish including endangered Atlantic salmon, sea-run alewives, Eastern brook trout and other fish species. The project goals will be accomplished by replacing road crossing that have been identified as fish barriers.

Protecting Potato Fields: Public-Private Partnerships to Improve Soil Health and Water Quality, Aroostook County (FY14/15); \$600K (State); Lead Partner: Maine Potato Board. The project will create a public-private partnership between government and potato industry to address soil erosion, soil health, and water quality within Aroostook County, Maine. This project will reduce soil loss from potato fields, prevent sedimentation of public roads, ditches and rights-of-way and improve ambient water quality in rivers and tributary streams and protect sources of public drinking supplies.

Maine Mountain Collaboration for Fish and Wildlife (FY16); \$4.6M (National); Lead Partner: The Trust for Public Lands; Lead State: Maine. This project will help improve inadequate fish and wildlife habitat, particularly for listed species, and biodiversity in the mountains of western Maine, a nationally important forested mountain corridor along the spine of the Appalachians recognized for its importance in climate adaptation. The project will be regional in scope but will pilot the approach in a smaller, priority geography with plans to replicate successes across the landscape in the future. The project involves three principal activities: 1) purchasing conservation easements, including permanently protecting 9,350 acres of high priority conservation lands (gaps in lands which are already conserved). Thirty-year conservation easements on surrounding lands will also be purchased; 2) engaging more small and medium sized private landowners in active management for wildlife; and 3) enhancing conditions for upstream passage of aquatic organisms on surrounding lands.

The Young Forest Initiative for At-Risk Species (FY16); \$5.2M (National); Lead Partner: Wildlife Management Institute. This project will help increase technical and financial

assistance to non-industrial private forestland owners who implement practices outlined in the Environmental Quality Incentives Program that result in an increase in the quantity and quality of young forest habitats. This support is critical, since young forest habitat is necessary to meet the critical needs of several recognized at-risk species.

Maine Aquatic Connectivity Restoration Project (FY17); \$6M (National); Lead Partner: The Nature Conservancy; Maine (Lead State). The 25,000-square-mile Maine Aquatic Connectivity Restoration Project will restore some of the State's highest-value aquatic networks from habitat fragmentation and degradation caused by road-stream crossings. Led by the Nature Conservancy and 18 other partners, the project will use with Stream Smart design and installation to improve habitat and aquatic organism passage and reduces the impacts of increasingly volatile storm flows.

Conserving Farmland and Marsh Habitat in Maine (FY18); \$1.44M (National); Lead Partner: Maine Farmland Trust; Participating States: Maine (Lead State). Farms are often the largest remaining blocks of undeveloped land in coastal communities, and they often contain substantial wildlife habitat in addition to their agricultural conservation values. Development pressure in these coastal communities is the highest in the State, and farmland and marsh habitat are disappearing rapidly. This project focuses on the protection of Maine farms that contain high value marsh habitat by preventing, eliminating or reducing stressors that degrade this habitat. Partners will seek to protect agricultural resources and habitat for fish and wildlife through easements, and they will work with producers to identify resource concerns and the conservation practices that could be implemented to support the health of marsh habitat.

Little Kennebec Bay Farmland Protection (FY18); \$600K (State); Lead Partner: Maine Farmland Trust; Participating States: Maine (Lead State). The Little Kennebec Bay Farmland Protection project is located in coastal Washington County, Maine, where 17 percent of the population is considered to be food insecure. This project will focus conservation efforts on six farms and will place ACEP easements on properties landowners are eager to protect.

MARYLAND

Cerulean Warbler Appalachian Forestland Enhancement (FY14/15); \$8M (National); Lead partner: American Bird Conservancy (ABC); States: Ohio, Kentucky, Pennsylvania, Maryland, and West Virginia. To address habitat loss, soil health, and water quality, the project will focus on suites of conservation practices intended to enhance acres of forest habitat on private lands for cerulean warblers, an at-risk species, and associated species. The Nature Conservancy has committed to enrolling additional acres into easements, and the American Chestnut Foundation, the Appalachian Regional Reforestation Initiative, and Green Forests Work will reforest acres of reclaimed mine lands to biodiverse forest.

Accelerating Chesapeake Bay Watershed Implementation Plans (FY14/15); \$5.5M (CCA—Chesapeake Bay Basin); Lead partner: Maryland Department of Agriculture. To meet a large unmet demand for conservation programs that will contribute to meeting the Chesapeake Bay TMDL, this project will utilize State implementation plans to accelerate targeted, cost-effective conservation in Delaware, Maryland, and Virginia. Implementation will be adapted to each State's high priorities and opportunities for innovation. For example, in Maryland, high-

resolution imagery will help prioritize locations for riparian buffers as part of the Chesapeake Bay Riparian Forest Buffer Initiative, while Delaware will offer vouchers to offset the cost of buffers through the Buffer Bonus Program.

Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay (FY14/15); \$7M (CCA-Chesapeake Bay Basin); Lead Partner: National Fish and Wildlife Foundation. A large, diverse group of partners will use a “raise the bar” approach that rewards agricultural producers in Virginia, West Virginia, and Pennsylvania for implementing higher impact, priority conservation practices in targeted sub-watersheds and counties of the Chesapeake Bay Watershed. The approach will address both water quality degradation and inadequate habitat for fish and wildlife in the CBW through a combination of comprehensive conservation planning, conservation practice implementation, and strategic habitat restoration. A new concept of conservation delivery is proposed: the conservation brokerage, where agency-neutral funding is used to best address resource concern. The partners will also use cost-benefit targeting to focus financial assistance dollars.

Delmarva Whole System Conservation Partnership—From Field to Stream: (FY14/15); \$5M (CCA-Chesapeake Bay Basin); Lead Partners: The Nature Conservancy and the Delaware Maryland Agribusiness Association. This public-private partnership in Maryland, Delaware, and Virginia will use a science-based approach to achieve important environmental objectives: 1) improve water quality through the implementation of advanced nutrient management practices on acres and restoring, enhancing, and protecting acres of natural filters (wetlands and buffers); and 2) expand wildlife habitat by enhancing, restoring, and protecting acres of high-quality wetlands and buffers. The partners estimate that these conservation systems in priority locations will reduce total nitrogen, total phosphorus, and total suspended solids currently delivered to local waterways each year, which will support achieving the goals of the Chesapeake Bay TMDL.

Targeted Conservation Easement Acquisitions: (FY14/15); \$800K (State); Lead partner: Maryland Department of Natural Resources. NRCS Maryland has an RCPP project with the Maryland Department of Natural Resources to acquire targeted conservation easements in Western Maryland (Washington and Frederick Counties). These practices were originally established through USDA’s Conservation Reserve Enhancement Program and are located within the State’s targeted Rural Legacy Areas. Acquiring perpetual conservation easements help to achieve NRCS and partner resource conservation goals and protect water quality in the Chesapeake Bay Watershed.

Mason-Dixon Working Lands Partnership: (FY14/15); \$1.5M (CCA-Chesapeake Bay Basin); Lead Partner: Alliance for the Chesapeake Bay. Partners will bring substantial financial resources to areas of Pennsylvania and Maryland within the Chesapeake Bay to overcome common barriers to landowner adoption of conservation systems, including limited outreach, lack of technical assistance and funding, and limited coordination among programs and private markets. A focus on soil health and resilience—as well as harnessing natural systems including riparian forest buffers, restored wetlands, and healthy forests—will not only reduce nutrient loading to the Chesapeake Bay but also improve water quality in high-value streams and water bodies in the area for the benefit of fisheries, drinking water supply, and recreation.

DE & MD—Meeting WIP Goals in the Chesapeake Bay (FY16); \$4.5M (CCA); Lead Partner: Maryland Association of Soil Conservation Districts; Participating State(s): Delaware & Maryland (lead State). Partners will come together in this project to accelerate the installation of best management practices to enable Maryland and Delaware farmers to meet the nutrient and sediment water quality goals set forth in the Chesapeake Bay TMDL. In Maryland, the focus will be on animal related BMPs, including animal waste storage, stream fencing, heavy use areas and barnyard runoff. To meet Maryland’s new Phosphorus Management Tool requirements, conservation district staff will work with dairy farmers to install state-of-the-art liquid separation technology to overcome the cost of moving the liquid portion of manure long distances to crop fields that require more phosphorus. In Delaware, emphasis will be on crop production and expanded use of cover crops. On the Delmarva Peninsula, crop farmers will be advised on the recent research finding on innovative variable rate nitrogen application techniques (GreenSeeker) and be encouraged to sign up for advanced nutrient management practices. Conservation district staff will be trained on nitrogen removal woodchip bioreactors, which are showing up to 90 percent nitrogen removal on trial sites.

Promoting Rotational Grazing: Upper Potomac in Maryland (FY17); \$1.1M (State); Lead Partner: Chesapeake Bay Foundation; Participating States: Maryland (Lead State). The Chesapeake Foundation and seven partners will support roughly 20 livestock farmers in Maryland as they convert cropland to pasture or transition existing pasture-based operations to more intensive grazing systems. At the same time, partners will capitalize on opportunities to implement related practices such as stream livestock exclusion and forested buffers. Finally, the partnership will expand efforts to provide permanent easements on Conservation Reserve and Enhancement Program forested buffers in Frederick County as a model for future efforts. The project will target Maryland counties within the Upper Potomac watershed because these counties represent the highest number and/or concentration of dairy and livestock operations within Maryland and pollution load modeling high loads of nitrogen and phosphorus to local waters and the Bay.

Taking Soil Health to the Next Level (FY18); \$1M (State); Lead Partner: Maryland Department of Agriculture; Participating States: Maryland (Lead State). This project supports conservation practices that enhance soil health and improve both air quality through increased carbon sequestration and water quality through increased efficiency of nutrient use and water management. Conservation practices include adaptive nutrient management, cover crops, crop rotations, variable rate technology, residual and tillage management crop rotations, precision farming, edge of field tools, composting, forest and biomass planting and other practices supportive of soil health. These practices have production benefits including increased organic matter, reduced soil erosion, more efficient nutrient cycling, improved water retention, and reduced weed and pest competition. Increased soil health results in long-term soil productivity and the efficiency of production inputs. The project will include farmer to farmer workshops and three demonstrations at participating farms.

Chesapeake Bay Farm Stewardship and Preservation (FY18); \$6M (Critical Conservation Area—Chesapeake Bay); Lead Partner: Sustainable Chesapeake; Participating States: Delaware, Maryland and Virginia (Lead State). The Chesapeake Bay Farm Stewardship and Preservation project supports a diverse three State partnership to accelerate the adoption of precision nutrient management and soil health practices. Financial and technical assistance will

be focused where: 1) practices will have the greatest impact on Chesapeake Bay water quality; 2) farmers have demonstrated enthusiasm for these practices; 3) partner outreach and education and technical assistance efforts support financial assistance delivery; and 4) prime farmland are located. Funds from this project will make major contributions to reducing nitrogen and sediment loading to the Chesapeake Bay, helping the agricultural sector to meet Chesapeake Bay TMDL milestone goals.

MASSACHUSETTS

Integrating sustainable forestry and energy to support sustainable communities in Massachusetts' most forested, rural and low-income region (FY14/15); \$700K (State); Lead partner: Massachusetts Department of Conservation and Recreation. This project will create a model, holistic approach to support sustainable rural communities and economies through engaging landowners to conserve working woodlands in the landscape known as the Mohawk Trail Woodlands Partnership region. This area is mapped by The Nature Conservancy as containing one of only four focus landscapes in the northeast for the Open Space Institute's Landscape Resiliency Program. The communities in this region are among the lowest income towns in Massachusetts, and this model will promote the building of strong communities based on exemplary forest management that enhances habitat for at-risk species, builds climate resiliency, strengthens renewable and independent energy and supports local forestry and farming economies. Ten additional partners will collaborate on this project leveraging other programs to improve forest health and community health in northeast Massachusetts.

Long Island Sound Watershed RCPP (FY14/15); \$10M (National); Lead partner: Connecticut Council on Soil and Water Conservation. Excess nutrients have been identified as the primary driver of hypoxic conditions in Long Island Sound and are also impacting upland water resources within the watershed, which encompasses areas of Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. This project will develop a comprehensive, whole-farm management certainty program for farmers in the area and use both working lands and easement programs to improve soil health and nutrient management, establish community resiliency areas with a focus on enhancing riparian areas, and institute a land protection program to protect agricultural and forestry areas.

The Young Forest Initiative for At-Risk Species (FY16); \$5.2M (National); Lead Partner: Wildlife Management Institute; Participating State(s): Connecticut, Massachusetts, Maine, New Hampshire (lead State), New York, Rhode Island & Vermont. This project will help increase technical and financial assistance to non-industrial private forestland owners who implement practices outlined in the Environmental Quality Incentives Program that result in an increase in the quantity and quality of young forest habitats. This support is critical, since young forest habitat is necessary to meet the critical needs of several recognized at-risk species.

Ground Based Water Quality Implementation (FY17); \$9.69M (State); Lead Partner: Massachusetts Association of Conservation Districts; Participating States: Massachusetts (Lead State). The Massachusetts Association of Conservation Districts will create a Human Portal—boots on the ground—within each conservation district to serve as a “general contractor” to help producers implement conservation practices. Producers are concerned about the complexity and administrative burdens of the Federal conservation programs. The required

paperwork and follow-through can impede implementation. MACD proposes to establish one staff member in every Conservation District who can serve as the “general contractor” for producers to assist them in completing the paperwork needed to not only apply for conservation funds but also manage those contracts after awarded. The overall goal is to increase the follow-through and quality of implementation on the ground. When a farmer documents the conservation practices he has applied, he would be allowed “safe harbor” from certain regulatory requirements.

Connecting the Connecticut River Watershed (FY18); \$4.98M (National); Lead Partner: The Nature Conservancy; Participating States: Connecticut, Massachusetts (Lead State), New Hampshire and Vermont. This project addresses habitat for fish and wildlife, water quality and climate resilience in high priority aquatic and terrestrial sites across the four-State Connecticut River Watershed. Partners will work with land owners to improve and connect aquatic and riparian habitat; reduce sedimentation and nutrients; and identify and prioritize parcels of land that will safeguard water quality, protect riparian or wetland resources, and increase resiliency to climate change.

Massachusetts Collaborative for Private Forestland (FY18); \$1.77M (State); Lead Partner: Massachusetts Division of Fisheries and Wildlife; Participating States: Massachusetts (Lead State). The Massachusetts Division of Fisheries & Wildlife hopes to expand the successful model of the Habitat Management Grant Program to encourage private and municipal landowners to create adequate habitat for fish and wildlife and improve plant conditions. The program provides financial assistance to landowners for habitat management while fostering partnerships to encourage landscape scale habitat management.

Saving Farmland in the Lower Merrimack Watershed (FY18); \$1M (State); Lead Partner: Essex County Greenbelt Association, Inc.; Participating States: Massachusetts (Lead State). Essex County’s watershed area harbors over 7,000 acres of unprotected working farmland. Rapid urbanization, high land values, and aging landowners render these farms vulnerable to conversion, with corresponding losses for water quality and habitat. This project will lead the effort to preserve 400 acres of the most critical farmland over the next 5 years through the acquisition of Agricultural Land Easements.

MICHIGAN

ABC: Improving Forest Health for Wildlife Resources in Minnesota, Wisconsin, and Michigan (FY14/15); \$5M; (National); Lead partner: American Bird Conservancy. Building on a strong existing partnership with NRCS, American Bird Conservancy (ABC) seeks to improve forest management on acres of nonindustrial forestland in order to provide essential habitat for the golden-winged warbler and other potential threatened and endangered (T&E) species. Partners will implement additional forest management on acres on public and private lands. Goals of the project include achieving a better distribution of forest habitat to benefit potential T&E species, increasing the population of golden-winged warblers on private lands, and, ultimately, avoiding its listing under the Endangered Species Act. The listing decision is scheduled for 2017.

Michigan/Indiana St. Joseph River Watershed Conservation Partnership (FY14/15); \$6.8M (National); Lead partner: Michigan Department of Ag and Rural Development. The partnership strives to find solutions to increasing ground water withdrawals and sediment and nutrient loading that are economically good for the farmer but also have multiple conservation benefits, including optimizing ground water use, improving infiltration, and reducing nutrients and sediment while also improving wildlife and fisheries habitat. Innovative methods to target high-priority areas and appropriate conservation practices will take an already developed watershed management plan to the next level. Monitoring will be used to adaptively manage this project at various levels, from the field-scale to the entire watershed. Partners have a strong history of working with both NRCS and producers.

Saginaw Bay Watershed Conservation Partnership (FY14/15); \$10M (CCA-Great Lakes Region); Lead partner: The Nature Conservancy. Saginaw Bay, an embayment of Lake Huron, hosts the largest coastal wetland in Lake Huron and faces numerous water quality challenges, including loss of habitat, excessive nutrients and sediment, and algal blooms. This project will set ecologically relevant implementation goals, track progress using new online tools, and harness the influence of agribusiness as a complementary delivery mechanism in order to reach goals of treating acres with conservation practices through EQIP and restoring acres of wetlands through ACEP by 2019. The partners will track effectiveness using the Great Lakes Watershed Management System to quantify acres implemented and total sediment and nutrients reduced annually while also working with project partners to monitor long-term trends in fish community health.

Tri-State Western Lake Erie Basin Phosphorus Reduction Initiative (FY14/15); \$17.5M; CCA—Great Lakes Region; Lead partner: Michigan Department of Agriculture and Rural Development. A diverse team of partners will use a targeted approach to identify high-priority sub-watersheds for phosphorus reduction and increase farmer access to public and private technical assistance—including innovative demonstrations of practices that NRCS does not yet cover—in Michigan, Ohio, and Indiana. Identified actions are coordinated with the Ohio Phosphorus Task Force Report and will move Lake Erie toward goals developed in the Great Lakes Water Quality Agreement Annex 4 Nutrient Strategies. The partners will gauge success and monitor results using project-wide water quality monitoring and watershed modeling conducted by national experts from multiple scientific entities and institutions.

Training Foresters to Enhance the Sustainable Management of Private Forest Land: (FY14/15); \$1M (State); Lead partner: Michigan Department of Natural Resources, Forest Resources Division. NRCS and the Michigan Department of Natural Resources (DNR), Forest Resources Division (FRD) will train both public sector and private sector professional land managers to enhance private forest land management in Michigan. Through the partnership, NRCS will provide financial assistance to landowners and the DNR will increase the capacity of land managers to offer technical assistance to forest landowners in Michigan and train staff to educate the general public about the NRCS programs that offer financial assistance for forest landowners. Resource concerns to be addressed include soil erosion, soil quality, and water quality degradation on private forestland in Michigan. The results will be demonstrated by monitoring the implementation of Best Management Practices when harvesting timber, implementing NRCS conservation practices or conducting other forest management activities. This project will build upon the organizational strengths of the DNR to train foresters and

wildlife biologists while also increasing the collaboration with the Michigan NRCS. This partnership will multiply the Michigan NRCS forestry capacity tenfold as there are currently only a few NRCS staff foresters and 45 Technical Service Providers for forestry conservation planning and practices in Michigan.

Tribal Stream and Michigan Fruitbelt Collaborative: (FY16); \$7.9M (CCA); Lead Partner: Grand Traverse Band of Ottawa and Chippewa Indians; Participating State(s): Michigan. To achieve long-term restoration and protection of a multiracial fishery, partners will address aquatic organism passage, aquatic habitat and water quality resource concerns at 66 stream crossings and dams throughout northwest Lower Michigan. To ensure conservation investments are long lasting and not undermined by drastic changes in watershed hydrology, land conservancies will preserve nearly 3,000 acres of unique, specialty-crop agricultural land with permanent conservation easements in one of the fastest developing areas in the project area and Great Lakes. This additional land protection and stream work will help protect a major portion of the network of globally rare, cold and cool water, ground water input, sandy substrate habitats connected by large forested corridors that deliver the highest quality water inputs and comprise the backbone of resiliency for the Great Lakes. Protection of water quality and re-connection of Aquatic habitat in this region is vital as these natural resources underpin two major and interdependent portions of Michigan's economy: agriculture and tourism.

Low Grand River Watershed Habitat Restoration - Farmland Conservation Project: (FY17); \$8M (Critical Conservation Area—Great Lakes Region); Lead Partner: Grand Valley Metro Council; Participating States: Michigan (Lead State). The Watershed Habitat Restoration - Farmland Conservation Project addresses priority resource concerns in the Lower Grand River Watershed of water quality degradation and inadequate habitat for fish, wildlife and invertebrates. The project will use innovative, creative designs to revitalize 2.5 miles of the river flowing through Grand Rapids. Indian Mill Creek and Rogue River are tributaries of the Grand River upstream from the restoration area, with watersheds that are over 40 percent agricultural. The project also will encourage conservation practices, possibly through financial assistance or cost share funds, using new technology in managing large river systems to address resource concerns. The over twenty project partners have committed substantial contributions, almost doubling the Federal conservation investment, to deliver a targeted outreach campaign; provide public and private financial and technical assistance to landowners applying for Natural Resources Conservation Service programs; and coordinate monitoring efforts to document project outcomes. A participatory conservation approach of working with property owners through workshops, one-on-one interactions and bilingual materials will reach both experienced and underserved producers in critical areas. The inclusion of many private organizations will increase knowledge of conservation practices and build capacity for developing a local workforce focused on improving water quality and providing adequate habitats for fish and wildlife.

The Huron River Initiative (FY17); \$1.8M (State); Lead Partner: Legacy Land Conservancy; Participating States: Michigan (Lead State). Through the Huron River Initiative, the Legacy Land Conservancy and partners will work with producers in the upper Huron River watershed to address soil quality degradation and water quality degradation—improving, sustaining and building upon the Emerald Arc of conserved lands in Southeast Michigan. Depression Era State legislators envisioned an arc of conserved lands benefitting the

growing population of Detroit, and their efforts in the mid-twentieth century resulted in the State and metro parks systems seen today, stretching from Lake Erie to Waterloo State Recreation Area to Port Huron. The Huron River watershed, the cleanest urban river in Michigan, plays a big and important role in this landscape—as do the agricultural producers within the watershed. The Emerald Arc also consists of prime agricultural soils, expansive farmland, and producers who play critical roles in the health of these lands and adjacent waters. Today, partners can offer new tools and approaches to agricultural land conservation that benefit both individual producers and the broader community, combining permanent land protection with landowner incentives.

Maple Watershed Fish Habitat Improvement (FY18); \$890K (CCA—Great Lakes Region); Lead Partner: Institute of Water Research; Participating States: Michigan (Lead State).

The Maple River Watershed has experienced diminished fish habitat and degraded water quality as ground water uses have expanded. Field crops in parts of the watershed require great amounts of irrigation to produce maximum yields. Water withdrawals compete with subsurface flows feeding nearby streams impacting fish populations by changing stream temperature. Catchments in the Maple are in need of measures that offset the negative impacts of withdrawals on baseflow and temperatures. This project will improve fish habitat and water quality through a variety of conservation measures such as no till, buffer strips, and drainage management.

Ann Arbor Greenbelt: Saving Michigan Farms (FY18); \$1M (State); Lead Partner: City of Ann Arbor Greenbelt Program; Participating States: Michigan (Lead State). Located near the struggling Western Lake Erie Basin (WLEB) and southeast Michigan’s rapidly growing Ann Arbor/Detroit metropolitan areas, the Ann Arbor Greenbelt: Saving Michigan Farms project provides an opportunity to protect agricultural lands key to food security and the local economies, preserve the agricultural heritage and quality of life of residents, and combat the NRCS resource concerns of water quality degradation, soil quality degradation and inadequate habitat for fish and wildlife.

MINNESOTA

ABC: Improving Forest Health for Wildlife Resources in Minnesota, Wisconsin, and Michigan (FY14/15); \$5M (National); Lead partner: American Bird Conservancy. Building on a strong existing partnership with NRCS, American Bird Conservancy (ABC) seeks to improve forest management on acres of nonindustrial forestland in order to provide essential habitat for the golden-winged warbler and other potential threatened and endangered (T&E) species. Partners will implement additional forest management on acres on public and private lands. Goals of the project include achieving a better distribution of forest habitat to benefit potential T&E species, increasing the population of golden-winged warblers on private lands, and, ultimately, avoiding its listing under the Endangered Species Act. The listing decision is scheduled for 2017.

Minnesota Agricultural Water Quality Certification Program National Demonstration Project: (FY14/15); \$9M (National); Lead partner: Minnesota Department of Agriculture. In 2013, the Minnesota certification program kicked off in four small watershed pilot project areas, offering producers that demonstrate superior water quality conservation management a 10-year certification by the State of Minnesota and regulatory certainty that will be in compliance with any new State water quality laws and rules that take effect during the certification period.

This project will establish and administer a State-level agricultural water quality certification program for export and adoption by States throughout the country. Success will be gauged both by the establishment of the statewide program and also on a farm-by-farm basis, ensuring successful mitigation and prevention of water quality risks within each operation in the program.

Red River Basin of the North Flood Prevention Plan: (FY14/15); \$12M (CCA—Prairie Grasslands Region); Lead partner: Red River Retention Authority. This project uses all of NRCS's authorities—EQIP, ACEP, CSP, and PL-566—to reduce flooding, ponding, and excess water on farm lands, thereby increasing the resiliency of agriculture, as well as to reduce nutrient loads in this region of Minnesota and North Dakota. Once completed, six to eight discreet projects will store approximately 50,000 acre-feet of flood water. The long-standing partnership across State boundaries includes the Red River Retention Authority, which has the power to raise revenue.

Driftless Area—Habitat for the Wild and Rare (FY16); \$2.9M (National); Lead Partner: Trout Unlimited; Number of Partners: 30; Participating State(s): Minnesota & Wisconsin (lead State). The Driftless Area (DA) was bypassed by the last continental glacier and features steep valleys, sandstone bluffs and more than 600 unique spring-fed creeks and ridges once covered in prairie and scattered oaks. This ancient landscape supports a variety of plants and animals, including dozens of uncommon species of birds of woodland and grassland habitats, reptiles and amphibians, and abundant populations of native fish found in the high concentration of cold-water streams. The DA's diversity of habitat provides critical habitat for dozens of species of concern in the State Wildlife Action Plans and has been cited as one of North America's most important resources. Early European settlement and agricultural practices took a heavy toll on the DA, resulting in devastating erosion and serious damage to rivers. Land use practices and conservation efforts have helped heal the land, but the legacy of the past damage is still visible in the sediment-filled valleys and steep, eroding stream banks. For the past nine years Trout Unlimited's Driftless Area Restoration Effort has been working with partners to restore structural diversity, ecological function and overall health. This project will provide a new comprehensive, targeted regional approach to restoring prairie, oak woodlands and streams for the benefit of the many at-risk species and abundant concentrations of native species found in the DA landscape.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Number of Partners: 12; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead State) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment; habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a U.S. Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

Lower Mississippi River Feedlot Management in MN (FY16); \$1.6M (CCA); Lead Partner: Minnesota Board of Water and Soil Resources; Number of Partners: 2; Participating State(s): Minnesota. This project will focus on fixing priority livestock feedlots under 300 animal units that are currently not in compliance with the Minnesota Administrative Rules, Chapter 7020, or with local county feedlot ordinance requirements within the Lower Mississippi River Basin in MN. This project will include financial assistance for practices to mitigate pollution from open lot runoff, poorly managed pastures and land application of manure. Funds from BWSR and NRCS EQIP will be used for financial assistance to construct appropriate BMPs with cooperating landowners. This project will help meet the goals and objectives of the Minnesota Nutrient Reduction Strategy, the Lower Mississippi River Fecal Coliform TMDL, and locally adopted county water plans.

Camp Ripley Sentinel Landscape (FY17); \$2.8M (State); Lead Partner: Morrison Soil and Water Conservation District Number of Initial Partners: 11 Participating States: Minnesota (Lead State). The Camp Ripley Sentinel Landscape includes high quality water features, including 40 miles of the first 400 miles of the Mississippi River and four tributaries; two ecological zones; and thousands of acres of public and private lands. This landscape is one of Minnesota's most important source drinking water protection area; 1.2 million people between Camp Ripley and the Twin Cities rely on the Mississippi for drinking water. The 34 minor watersheds within the CRSL are not confined to political boundaries, hence, efforts across this landscape are critical to protect, maintain, and restore lands resulting in cleaner water, less erosion, high quality habitat and recreational opportunities. The Camp Ripley Sentinel Landscape project, a partnership among 11 organizations, will combine the current use of easements and fee title acquisition with management practices on the landscape to protect and enhance our military mission and natural resources.

Driftless Area Habitat for the Wild & Rare Phase 2 (FY18); \$9.2 M (National) Lead Partner: Trout Unlimited; Participating States: Illinois, Iowa, Minnesota and Wisconsin (Lead State). The Jo Daviess Conservation Foundation and its partners will target areas in the Driftless Area where land restoration and land protection will have the most positive impact on water quality. RCPP funding will provide a new comprehensive, targeted regional approach to restoring cold-water streams and their riparian areas for the benefit of the many at-risk species. The project will assist landowners implement conservation practices that will reduce pollution and sediment runoff. Agricultural Conservation Easement Program funding will purchase agricultural conservation easements to install permanent conservation practices such as riparian buffers and filter strips.

One Watershed, One Plan Accelerated Implementation (FY18); \$2.5M (State); Lead Partner: Minnesota Association of Soil & Water Conservation Districts; Participating States: Minnesota (Lead State). Minnesota's One Watershed, One Plan (1W1P) program combines locally-led conservation and new tools to prioritize, target and measure non-point source pollution reduction strategies and practices in priority sub-watersheds. The 1W1P program brings together MN's water authorities of its soil and water conservation districts, counties, watershed districts and cities to work collectively through the locally-led process. Collectively, these partners have longstanding relationships with agricultural producers and forest landowners, within five major watersheds, to assure a high level of participation.

This project advances an implementation framework that can accelerate the prioritized and targeted implementation of conservation practices to improve water quality faster than current efforts.

MISSISSIPPI

Rice Stewardship Partnership—Sustaining the Future of Rice: (FY14/15); \$10M; National; Lead partner: Ducks Unlimited, Inc. (DU). The Rice Stewardship Partnership composed of DU, the USA Rice Federation, and collaborating partners, will assist rice producers to address water quantity, water quality, and wildlife habitat in Mississippi, Arkansas, California, Louisiana, Missouri, and Texas. Using remote sensing to estimate bird population carrying capacity in shallow waters and the Field-to-Market Fieldprint Calculator to monitor results over time, the partners offer several innovations to augment conservation implementation and gain broader producer participation.

Migratory Bird Habitat Creation in the Lower Mississippi River Valley (FY14/15); \$900K (State); Lead partner: Mississippi Fish and Wildlife Foundation. The Migratory Bird Habitat Creation project in the Lower Mississippi River Valley will focus on the natural resource concerns of Inadequate Habitat for Fish and Wildlife and Insufficient Water. This project will create wetland habitats in conjunction with outreach and education efforts to increase landowner awareness of the benefits of wetlands and winter water, primarily on working agricultural lands and Wetland Reserve Easements. High-quality feeding and resting habitats will be provided to migratory birds headed south towards the Gulf of Mexico through the utilization of various conservation practices through the Environmental Quality Incentives Program and Agricultural Conservation Easement Program.

Wetland Habitat Restoration for Wildlife and Water Resources (FY14/15); \$1M (State); Lead partner: Delta Wildlife, Inc. The Wetland Habitat Restoration for Wildlife and Water Resources project improves wetland habitats, while protecting and enhancing water resources in the Mississippi Delta. Due to many land conversions for agricultural expansion in the area, valuable habitats were lost causing population declines of wildlife, degraded water quality and decreased enhancement of ground water using the Mississippi River Alluvial Aquifer. To address resource concerns of Inadequate Fish and Wildlife Habitat and Insufficient Water and Degraded Water Quality, the Agricultural Conservation Enhancement Program is proposed for this project.

Mississippi Grazing Land Management (FY16); \$275K (State); Lead Partner: National Center for Appropriate Technology; Number of Partners: 2; Participating State(s): Mississippi. This five-year project will focus on increasing the number of Mississippi livestock producers who use grazing techniques that improve the overall health of Mississippi grazing lands. Partners will assist producers in developing new grazing techniques, including season-long continuous grazing, rest-rotation grazing, deferred-rotation grazing, intensively managed grazing and familiarizing producers with the advantages of raising pastures rich with local forage varieties. Planting locally adapted perennial forages will increase the likelihood that producers can maintain forage-based management practices year-round and have been shown to optimize animal and plant performance, as well as improve or maintain pasture and range health. The target population for the grazing land management project is small livestock producers of large

and small ruminants and experienced grazers who are looking for alternative measures to keep their farm viable. This project will also nurture new Mississippi-based “pasture innovators,” who will be trained to use innovative grazing practices tailored for specific breeds of livestock. Project partners will also assist Mississippi producers in developing peer connections, fostering creative use of natural resources and grazing methods, and using long-term planning approaches.

North Mississippi Kudzu Control Project (FY16); \$200K (State); Lead Partner: North Central Mississippi Resource Conservation & Development; Number of Partners: 18; Participating State(s): Mississippi. The goal of this project is to provide cost-share assistance to private-owned forestlands in North Mississippi to help eradicate the invasive weed kudzu. Kudzu has invaded more than 546,000 acres of private-owned forestlands in Mississippi and has cost forest landowners \$54 million dollars annually from loss of timber sales. Kudzu makes it impossible to grow timber or re-establish timber where kudzu exists. Since there has been very limited funding through the Federal and State programs for kudzu control, this project hopes to provide a 75 percent cost-share program to at least 150 forest landowners in a 12-county area to address sustainable forestry and improve wildlife habitat. Partners will hold at least three meetings to inform historically underserved producers about the kudzu control program to ensure that 15 percent of the landowners receiving cost-share assistance are historically underserved producers.

RCPP-Skuna River Watershed Project (FY16); \$339K (State); Lead Partner: Mississippi Soil and Water Conservation Commission (MSWCC); Number of Partners: 3; Participating State(s): Mississippi. The RCPP-Skuna River Watershed Project proposes funding the installation of eligible conservation Best Management Practices (BMPs) on about 1,650 acres of cropland and pastureland for landowners located within a targeted area of the watershed located in Chickasaw County, Mississippi. MSWCC will pay for the replacement of two large in-channel grade control structures that have failed, causing serious degradation to the stream banks of the Skuna River Canal in the project area. Erosion of the soil resource base in the project area removes nutrients, reduces water-holding capacity, undermines plant-rooting systems, reduces soil organic matter content, reduces soil tilth and degrades water quality within the project area. With the installation of NRCS approved BMPS, both sedimentation and animal waste issues will be addressed in this project.

Southern Sentinel Landscapes Conservation (FY16); \$7.5M (National); Lead Partner: U.S. Endowment for Forestry and Communities; Number of Partners: 20; Participating State(s): Georgia (lead State), Mississippi & North Carolina. This project will protect and restore 17,500–21,500 acres of longleaf and other working forest habitats on private lands important for at-risk species. The goal of this multistate effort—Mississippi, Georgia and North Carolina—is to reduce the likelihood that target species will be listed under the Endangered Species Act and to demonstrate the compatibility of working lands management with at-risk species conservation. These sites and species address shared conservation interests of the Departments of Agriculture, Defense, and Interior on proposed or potential Sentinel Landscapes. The proposed project advances goals of the Range-wide Conservation Plan for Longleaf Pine, the NRCS Longleaf Pine Initiative, and each State’s Forest and Wildlife Action Plans, while also contributing to military installation compatible-use buffers. By focusing on the overlapping interests of three Federal Departments, this proposal delivers more measurable benefits to At-

Risk Species than if the agencies followed separate paths. This proposal builds on the RCPP award the U.S. Endowment for Forestry and Communities received in 2014.

Pollinator Habitat and Cover Crops (FY18); \$75K (State); Lead Partner: Mississippi Urban Forest Council; Participating States: Mississippi (Lead State). This pollinator habitat project will include 16 pollinator habitat best management practice demonstration plots in eight urban/rural communities and eight specialty crop farms. These plots will demonstrate the connection between cover crops and pollinator health. The goal is to accelerate technology transfer and adoption of pollinator health practices within the target communities.

MISSOURI

Little Otter Creek Watershed Project (FY14/15); \$6M (CCA); Lead Partner: Caldwell County. Commission Development and Green Hills Regional Planning Commission. Previously authorized under PL-566, this project in Caldwell County, Missouri, will include installation of an earth embankment dam and 345-acre multipurpose reservoir, implementation of wildlife habitat management and enhancement practices around the fringe of the new reservoir, full mitigation for stream and wetland impacts, and development of basic facilities for recreational use. The partner has committed a large cash contribution and has already secured the majority of land rights. At completion, the residents and businesses in the county will have a dependable, long-term raw water supply, increased outdoor recreational opportunities and facilities, and reduced flood damages to crops and infrastructure along Little Otter Creek.

Our Missouri Waters Targeted Conservation (FY14/15); \$6M (CCA); Lead partner: Missouri Department of Natural Resources (MDNR). This project will use a collaborative statewide partnership approach called Our Missouri Waters (OMW) to implement geographic targeting of cost-effective farm conservation practices in identified high priority 12-digit Hydrologic Unit Code (HUC) watersheds and catchment basins. A high partner match, clearly identified goals, and a nutrient trading program, currently under development, will ensure that activities will maximize improvements in water quality and wildlife habitat. Water quality monitoring and modeling will be used to evaluate the success of the project. The partners have a robust history of targeted working with producers, conservation implementation, and monitoring results.

Regional Grassland Bird and Grazing Lands Enhancement Initiative (FY14/15); \$5M (National); Lead partner: Missouri Department of Conservation. The goal of this project, which includes portions of Kansas, Missouri, Iowa, and Nebraska, is to create and implement management strategies that provide for the adoption of scientifically proven and culturally acceptable pasture and grassland management practices. Conservation implementation will maintain the tall grass prairie ecosystem without the need for government regulation and enroll high-quality grasslands into conservation easements and contracts. The highly targeted approach identified in the proposal will strengthen existing partnerships and implementation plans.

Rice Stewardship Partnership—Sustaining the Future of Rice (FY14/15); \$10M (National); Lead partner: Ducks Unlimited, Inc. (DU). The Rice Stewardship Partnership composed of DU, the USA Rice Federation, and collaborating partners, will assist rice producers to address water quantity, water quality, and wildlife habitat in Mississippi, Arkansas, California,

Louisiana, Missouri, and Texas. Using remote sensing to estimate bird population carrying capacity in shallow waters and the Field-to-Market Fieldprint Calculator to monitor results over time, the partners offer several innovations to augment conservation implementation and gain broader producer participation.

Northwest Missouri Urban and Rural Farmers United for Conservation (FY14/15); 800K (State); Lead partner: Jackson County Soil and Water Conservation District. This project will focus on addressing water quality and quantity, soil health and At-Risk/Declining Species issues experienced by both rural and smaller underserved urban farmers. While vegetable production is the primary crop in the urban setting and corn/soybeans are the common crops for rural farms, the resource concerns are common across both grower groups. This project brings together experienced partners who have worked on these issues independent of one another for years. Success of the project will be monitored by: implementation of NRCS conservation practices; participants' adoption of new management practices; outreach activities completed; development of plans and standards for small farmer vegetation composters; completion of on-farm water audits and outcome summaries; and development of standards for urban runoff catchments for irrigation.

Restoring Glade and Woodland Communities for Threatened Species in the Ozarks of Southeast Missouri (FY14/15); \$1.7M (State); Lead partner: Missouri Department of Conservation. The goal is to manage and restore glades, woodland, and forest habitats and treat cropland with Environmental Quality Incentives Program conservation practices, targeted to benefit threatened and declining species. This area includes several features that have been designated as areas of greatest conservation need and contains numerous listed species and imperiled habitats. The primary resource concern to be addressed is Inadequate Habitat for Fish and Wildlife-Habitat Degradation. At-Risk species include the Federally Endangered Grotto Sculpin, Indiana Bat, Ozark Hellbender, Hine's Emerald Dragonfly and several species of mussels and plants. Secondary resource concerns include Water Quality Degradation and Degraded Plant Condition. The Missouri Department of Conservation will gauge success of the project by the acres of habitat treated. The agency and its partners will continue to measure direct impacts on water quality in the Grotto Sculpin recharge zone and conduct population monitoring and studies on several of the listed species.

Cover Crops for Soil Health and Water Quality—State Project (FY16); \$2.4M (State); Lead Partner: Missouri Department of Agriculture; Participating State(s): Missouri. Missouri is continuing to expand the understanding of soil conservation by encouraging producers to consider land management practices that address both soil health and water quality resource concerns. This project will help expand the use of cover crops and no-till management throughout the State. With help from partner agencies, the department has established a goal of 20,000 acres planted in cover crops annually on acreage that qualify as highly erodible and/or have organic matter content less than 2 percent. Cost-share funding for cover crops, a demonstration farm, demonstration plots, Missouri Soybean Growers Bay Farm, NRCS Cover Crop Economics tool, Missouri Nutrient Tracking Tool, and Revised Soil Loss Equation (RUSLE 2) calculations will be used to help producers understand the importance of and proper implementation of cover crops to foster successful experiences and encourage wide-spread adoption among fellow producers.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead State) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment; habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a U.S. Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

Conservation Ranching Program for Missouri Farmers (FY17); \$1M (State); Lead Partner: Missouri Department of Conservation; Participating States: Missouri (Lead State). The Conservation Ranching Program for Missouri Farmers program will create and implement market-based management strategies that lead to the adoption of scientifically-proven pasture management practices that provide bird-friendly habitat on actively grazed pasture. The National Audubon Society has launched proof-of-concept pilots of the Conservation Ranching Program in four geographies, including Missouri. The program will link beef producers who voluntarily implement improved pasture and grassland management practices to the retail marketplace. Participating cattle producers will be rewarded with a premium price for pasture-raised beef that is produced on lands managed using applied conservation practices. The Conservation Ranching Program for Missouri Farmers Regional Conservation Partnership Program will provide financial and technical assistance to Missouri livestock producers to assist in the adoption of pasture management practices that align with the Audubon CRP habitat standards. The habitat standards and program protocols are aimed at holistic management practices that support grassland bird-friendly beef production, and provide other environmental benefits, including soil health, water quality and water quantity.

Northwest Missouri Partnership for Water Quality (FY17); \$1.1M (State); Lead Partner: Holt County Soil and Water Conservation District; Participating States: Missouri (Lead State). The Northwest Missouri Partnership for Water Quality will target counties that are adjacent to and drain directly into the Missouri River. As a baseline, the project partners will complete soil microbial analysis, soil carbon and nitrogen analysis and other soil processes. The project will focus outreach efforts to treat 50 to 80 percent of the contributing cropland with project practices and then show results of the treatment through monitoring. This partnership seeks to become a working model of how Federal and State Government along with not-for-profit entities, small business and institution of higher learning can come together with resources to achieve substantial improvement to water quality and quantity.

MONTANA

Missouri Headwaters and Lower Gallatin Basin Conservation & Restoration (FY14/15); \$3.8M (State); Lead partner: The Gallatin Valley Land Trust. The Gallatin Valley Land

Trust and other local and regional partners will implement an integrative and enduring RCPP project that will improve water quality, as well as conserve soil health and water quantity in the Missouri Headwaters and Lower Gallatin Basin of southwestern Montana. By utilizing three key NRCS conservation programs, the project will be extremely cost-effective in implementing high-priority, “shovel-ready” conservation projects that have been recently identified through an extensive, community-based watershed planning effort. The project will leverage strong relationships with agricultural producers and other private landowners to create perpetual conservation easements, as well as innovative on-the-ground restoration projects to improve stream health, water quality and water conservation.

Upper Clark Fork River Drought Resiliency Project (FY16); \$1.7 M (State); Lead Partner: Watershed Restoration Coalition; Number of Partners: 6; Participating State(s): Montana.

Severe competition for water in this basin prompted the Montana Legislature to close the Upper Clark Fork to new water rights appropriations in 1995, one of the first basins in the State to do so. Today, Montana Fish Wildlife and Parks classifies 100+ stream miles in the river and 10 of its tributaries above Deer Lodge as “dewatered,” stressing both agricultural operations and aquatic habitat. The Upper Clark Fork basin offers a unique opportunity to restore water resources and aquatic habitat on a basin-wide scale while benefitting agricultural operations with diverse water-saving practices. This project will implement major water conservation projects such as piping three leaky canals, constructing six new diversions, doubling the flow in a critical reach of the Clark Fork River, preventing entrainment of native fish, while also addressing the impacts of drought on forest and grazing lands in the upper watershed.

Yellowstone Region Agricultural Sustainability Project (FY17); \$1.2 M (State); Lead Partner: MillerCoors Number of Initial Partners: 11 Participating States: Montana (Lead State).

The Yellowstone Region Agricultural Sustainability Project, led by Miller Coors, will bring together multiple private and public agricultural partners in a three-county project based around defining a path towards agricultural sustainability through progressive conservation practices and sound conservation planning. This project seeks to define best management practices for irrigated agricultural producers in Southern Montana that would lower natural resource consumption and degradation. Over the five-year timeline, the project teams will work to lower the consumption of natural resources through the use of added incentives that would allow producers to mitigate financial risks while transitioning to adopt the practices. The project would, therefore, provide a pathway toward a model for agricultural sustainability.

NEBRASKA

Ogallala Aquifer & Platte River Recovery (FY14/15); \$2.7M (State); Lead partner: Central Platte Natural Resources District. The Ogallala Aquifer and Platte River are two of Nebraska’s most precious natural resources. NRCS will partner with the Central Platte Natural Resources District to help protect these critical resources. This project’s goal is to work with producers in central Nebraska to reduce surface water and ground water consumption by converting irrigated land to non-irrigated land uses. This project will also address surface water and ground water quantity and quality concerns by applying more efficient irrigation methods to increase irrigation efficiency, thus reducing impacts on the Platte River and local ground water supply.

Regional Grassland Bird and Grazing Lands Enhancement Initiative (FY14/15); \$5M (National); Lead partner: Missouri Department of Conservation. The goal of this project, which includes portions of Kansas, Missouri, Iowa, and Nebraska, is to create and implement management strategies that provide for the adoption of scientifically proven and culturally acceptable pasture and grassland management practices. Conservation implementation will maintain the tall grass prairie ecosystem without the need for government regulation and enroll high-quality grasslands into conservation easements and contracts. The highly targeted approach identified in the proposal will strengthen existing partnerships and implementation plans.

Cropland Cover for Soil Health and Wildlife (FY16); \$700K (State); Lead Partner: Nebraska Game and Parks Commission; Participating State(s): Nebraska. In Nebraska, the lack of sufficient water, frequent drought and soil erosion cause serious impacts to yields and producers' bottom lines. Similarly, vanishing habitat and increasingly intensive agricultural practices create struggles for wildlife. This project intends to help both producers and wildlife cope with constantly changing conditions. The project partners will implement EQIP practices encouraging producers to leave their cereal grain and sorghum stubble taller and standing in place to provide soil, water and wildlife benefits. The project will also encourage the planting of wildlife friendly cover crops and diverse seedings. Tall standing stubble cover crops and diverse seedings can help improve water quantity, soil erosion, soil quality and air quality while also providing valuable habitat for grassland birds including at-risk species and pollinators like honey bees and monarchs.

Innovative Tribal Conservation and GHG Management (FY16); \$1.8M (National); Lead Partner: Intertribal Agriculture Council; Participating State(s): Alaska, Nebraska, New Mexico, Oklahoma & South Dakota (lead State). As the impacts of climate change become more pronounced in Indian country, Native Nations and Indian landowners are faced with the challenge of implementing resource conservation land management systems that incorporate greenhouse gas management activities, also known as carbon farming practices. As greenhouse gas management services gain value in environmental markets, it is vital that historically underserved Tribal conservation programs and American Indian farmers and ranchers develop conservation projects that demonstrate causal relationships between soil quality and ecosystem production functions such as carbon sequestration. This project will address the need for conservation stewardship projects on American Indian lands that integrate a carbon farming production possibilities frontier component. The project area will be national in scope covering a diversity of Tribal rangeland landscape types including Southwest Alaska, prairie grassland and Colorado River Basin regions. The project includes developing and implementing soil amendment, forestry and grazing management Conservation Activity Plans (CAP) and Conservation Stewardship Plans (CSP) on pilot project sites. The CAP/CSPs will establish a framework for inventorying the existing baseline carbon sequestration rate and propose cost-effective conservation practices to achieve multiple environmental quality and economic development goals. One of the anticipated outcomes from this project will be the development of carbon offsets from soil amendment and grazing land and livestock management activities. We will engage private investment in those pilot project sites that both meet investors and credit buyers' interest in charismatic high-quality carbon offsets, and Tribes' interest in promoting appropriate conservation practices and economic development on Indian lands.

Lower Elkhorn Water and Soil Conservation Project (FY16); \$400K (State); Lead Partner: Lower Elkhorn Natural Resources District (LENRD); Participating State(s): Nebraska.

The Lower Elkhorn Natural Resources District (LENRD), located in northeast Nebraska, will work to conserve water, protect and improve water quality and conserve and improve soils within its boundaries. It will do this through the utilization of Irrigation Water Management practices, the adoption of nutrient management practices and promotion of soil health conservation practices, such as no-till, diversified crop rotations and the integration of cover crops into cropping systems. Other benefits that will be realized include improved air quality, preservation of habitat for at risk species such as the Western Prairie Fringed Orchid and Topeka Shiner, and enhanced resilience and recovery from the detrimental effects of drought. The LENRD will develop on-farm demonstration sites to educate producers about the positive benefits of conservation practices and will prove that such practices allow growers to maintain or increase yields and financial returns.

Midwest Agriculture Water Quality Partnership (FY16); \$9.5M (National); Lead Partner: Iowa Department of Agriculture and Land Stewardship; Participating State(s): Illinois, Iowa (lead State) & Nebraska.

The Midwest Agriculture Water Quality Partnership has assembled over forty partners and \$38 Million in non-Federal funds to build an innovative public-private collaboration aimed at advancing a science-based, non-regulatory approach to reducing nutrient loss and improving water quality, soil health and habitat for at-risk species. The partnership has brought together diverse stakeholders from multiple sectors committed to improving water quality in alignment with the goals of the Iowa Nutrient Reduction Strategy. The geographic focus is Iowa, Illinois and Nebraska, with an emphasis on priority watersheds within Iowa. This proposal seeks to improve water quality through building bridges among the public, private, agriculture and environmental sectors and rural, urban, point source and non-point source communities as well as all segments of the agricultural supply chain to foster greater collaboration, improved coordination, increased alignment and more effective conservation delivery. This proposal merges traditional approaches to deliver conservation through scaling up conservation planning and conservation practices with a non-traditional, highly innovative precision agriculture platform integration component that will lead to greater practice adoption and improved conservation outcomes.

Republican Basin Conservation Partnership (FY16); \$2.1M (State); Lead Partner: Lower Republican Natural Resources District; Participating State(s): Nebraska.

This project brings together the Lower Republican, Middle Republican and Upper Republican Natural Resources Districts, which collectively have ground water regulation and conservation authority in an area of approximately 5.74 million acres—or nearly 9,000 square miles—within the thirteen counties encompassing the entire length of the Republican River in Nebraska from the Colorado to the Kansas borders. These districts also share responsibility for assisting the State of Nebraska in meeting the requirements of the 1943 Colorado-Nebraska-Kansas Republican River Compact. This project will enable, encourage and provide financial incentives toward: conversion of irrigated land to non-irrigated land through a widespread end-gun retirement program; improvement of irrigation system efficiency through implementation of high-tech soil moisture sensor technology and micro-irrigation systems; improvement of wildlife habitat with a focus on pollinator conservation and recovery in collaboration with the Nebraska Sustainable Agriculture Society; and improvement of soil health through increasing cover crop and crop rotation activities.

Wahoo Creek Water Quality Sites 26 and 27 (FY17); \$1.5M (Critical Conservation Area—Prairie Grasslands Region); Lead Partner: Lower Platte North Natural Resources District; Participating States: Nebraska (Lead State). The Lower Platte North Natural Resources District in Nebraska, with the assistance of the Natural Resources Conservation Service, completed the Wahoo Creek Watershed Plan and Environmental Impact Statement under the authority of Watershed Protection and Flood Prevention Act (Public Law 83-566). The watershed plan identified seventeen projects within the basin that will reduce rural and urban flooding, reduce sedimentation and scour, stabilize stream channels, enhance fish and wildlife habitat, enhance water quality, improve economic conditions and provide recreational opportunities. Seven of these structures were completed as an environmental enhancement project with the U.S. Army Corps of Engineers. Through this project, partners will construct two (Sites 26 and 27) of the remaining 10 uncompleted structures as identified in the Wahoo Creek Watershed Plan to address identified flooding and water quality concerns.

Divots in the Pivots (FY17); \$1.89M (State); Lead Partner: Upper Big Blue Natural Resources District; Participating States: Nebraska (Lead State). The Divots in the Pivots Project will restore habitat for wetland-dependent birds in Nebraska's Rainwater Basin through Natural Resource Conservation Service easements and enhanced irrigation efficiency through the Environmental Quality Incentive Program. Led by Upper Big Blue Natural Resources District and 14 partners, the project builds upon three decades of conservation projects, including easements, in the area. The integration of precision field mapping, monitoring soil moisture, evaluating crop water needs, and use of precision irrigation prescriptions will ensure irrigation is only completed when the crops need water, maximize inputs on the cropland and minimizing inputs within the restored wetland. The multiprogrammatic approach of the current project will provide ideal wildlife habitat while maximizing net-farm income.

Papillion Creek Site WP-1 Dam (FY18); \$4.46M (Critical Conservation Area-Prairie Grasslands Region); Lead Partner: Papio-Missouri River Natural Resources District; Participating States: Nebraska (Lead State). The Papio-Missouri Natural Resources District (NRD) seeks to amend the PL-566 Papillion Creek Watershed Work Plan to add flood control as a purpose of the D-31 site. The project will also fund the engineering and construction of the flood control and water quality control structure at the site located in Omaha, Nebraska. The proposed project site is in an area that is rapidly changing from an agricultural landscape to an expanding urban landscape of housing and industrial areas. The project partners identified this structure primarily to provide flood control benefits, with secondary benefits of grade stabilization, water quality improvements, recreation and wildlife habitat improvements. The proposed project meets the goals of multiple government agencies, including Federal, State, county, and local governments to provide flood protection, maintain water quality, reduce streambed erosion, and provide recreational opportunities in an evolving watershed.

NEVADA

Duck Valley Reservation Irrigation Improvement Project (FY14/15); \$3M (National); Lead partner: The Shoshone-Paiute Tribe of the Duck Valley Indian Reservation. Through close collaboration with the local community, the Duck Valley project in Nevada and Idaho offers specific and achievable activities to upgrade irrigation systems, remove livestock from riparian areas, and restore stream banks. This shovel-ready project will not only improve water quality

and the efficiency of irrigation use but also provide economic benefits to an underserved community.

Greater Outcomes for Greater Sage-Grouse (FY16); \$1.9M (National); Lead Partner: Partners for Western Conservation; Participating State(s): Colorado (lead State) & Nevada. Western States are gripped by a common need to improve sagebrush habitat and protect against its future loss. This regional partnership brings together Nevada and Colorado, who are actively investing in habitat improvements on private lands with the desire to demonstrate the effectiveness of actions to taxpayers and Federal agencies. The project will: 1) Enhance and protect rangeland for greater sage-grouse, and increase conservation outcomes generated by incorporating a habitat quantification approach in project selection and design, and building capacity of project support partners to implement habitat quantification approach; 2) Increase outcomes over time by adaptively managing habitat quantification tools; and 3) Increase transparency and demand for results from public investments by reporting outcomes generated by partner and RCPP funds invested online. State, EQIP and CSP funds will create “credit-ready” projects per the specifications of the Nevada Conservation Credit System and Colorado Habitat Exchange, and private funds will be leveraged to cover long-term stewardship of the improved project sites. This project addresses the issue of stacking credit payments to ensure that EQIP and CSP funds are not be used to offset impacts that require compensatory mitigation and investigates innovative mechanisms for partnering public and private funds to create revolving funds.

High Desert Drought Resilient Ranching (FY16); \$1.3M (National); Lead Partner: Trout Unlimited; Participating State(s): Idaho (lead State), Nevada & Oregon. Nevada, Idaho and Oregon ranchers have experienced a severe drought for the majority of years in the last 30-year cycle. This project will help reduce drought impacts to wildlife and livestock in the Owyhee watershed and adjacent communities in two lesser watersheds, which have been historically underserved. Project partners will work together to develop on-the-ground projects that keep water in streams longer for both livestock and wildlife. Project area selection will emphasize State and private land that currently provides habitat for three focal species: redband trout, greater sage-grouse and Columbia spotted frogs or is adjacent to known populations and has the capacity to restore habitat for these species.

Livestock in Harmony with Sage-Grouse (FY17); \$8M (National); Lead Partner: Eastern Sierra Land Trust; Participating States: California and Nevada (Lead State). In 2012, private landowners, non-profits, and Federal, State and local government partners developed the 2012 Bi-State Action Plan for Greater Sage-Grouse to proactively conserve key habitat and greatly reduce long-term threats to the Bi-State greater sage-grouse population in Nevada and California. Through the Livestock in Harmony with Sage-Grouse project, 11 collaborating partners will implement recommended water quality, rangeland and soil health conservation practices and monitoring on grasslands of special significance in Nevada and California; partners will secure conservation easements on at least 11,000 acres of sage-grouse habitat on working ranches. The project intends to protect and measurably enhance sage-grouse habitat on working ranchlands, improve water quality, and to assist producers in meeting or avoiding the need for natural resource regulatory requirements.

NEW HAMPSHIRE

Beebe River Aquatic Connectivity & Habitat Project (FY14/15); \$524K (State); Lead Partner: Trout Unlimited; Participating State(s): New Hampshire. Located in Campton and Sandwich New Hampshire, this project will utilize the Environmental Quality Incentive Program to restore water quality and eliminate habitat fragmentation by replacing undersized and degraded road stream crossings in the Beebe River watershed, a sub-watershed to the Pemigewasset and Merrimack Rivers and part of the largest drainage basin within New Hampshire. The primary focus of this project is to restore instream connectivity on five major tributaries whose headwaters are inaccessible due to severe road/stream crossing barriers by replacing these five undersized barriers with hydraulically and geomorphically compatible structures to reconnect the headwater reaches and to restore each tributary's natural functions. Once reconnected, these high priority cold-water tributaries will reopen close to six miles of upstream spawning and rearing habitat and an additional 15 plus miles of interconnected aquatic habitat.

The Young Forest Initiative for At-Risk Species (FY14/15); \$5.2M (National); Lead Partner: Wildlife Management Institute; Participating State(s): Connecticut, Massachusetts, Maine, New Hampshire (lead State), New York, Rhode Island & Vermont. This project will help increase technical and financial assistance to non-industrial private forestland owners who implement practices outlined in the Environmental Quality Incentives Program that result in an increase in the quantity and quality of young forest habitats. This support is critical, since young forest habitat is necessary to meet the critical needs of several recognized at-risk species.

Long Island Sound Watershed RCPP (FY14/15); \$10M (National); Lead partner: Connecticut Council on Soil and Water Conservation. Excess nutrients have been identified as the primary driver of hypoxic conditions in Long Island Sound and are also impacting upland water resources within the watershed, which encompasses areas of Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. This project will develop a comprehensive, whole-farm management certainty program for farmers in the area and use both working lands and easement programs to improve soil health and nutrient management, establish community resiliency areas with a focus on enhancing riparian areas, and institute a land protection program to protect agricultural and forestry areas.

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Protecting Farmland in New Hampshire's Monadnock Region (FY17); \$1.2M (State); Lead Partner: Monadnock Conservancy; Participating States: New Hampshire (Lead State). The Monadnock Conservancy and its partners will protect nearly 3,000 acres of important farmland in New Hampshire's Monadnock region by 2021. One thousand acres will be conserved through Natural Resources Conservation Service funds; the remaining 1,700 acres will be conserved using a combination of private funds, State grant funding and through donated easements. The project will target riverfront farmland, especially land along the Connecticut, Ashuelot and Contoocook as well as waterways that have been identified as impaired. While the main focus of this project is easement acquisition, the Monadnock Conservancy and its partners will also undertake education and outreach to promote conservation easements and good land stewardship practices to landowners.

Connecting the Connecticut River Watershed (FY18); \$4.98M (National); Lead Partner: The Nature Conservancy; Participating States: Connecticut, Massachusetts (Lead State), New Hampshire and Vermont. This project addresses habitat for fish and wildlife, water quality and climate resilience in high priority aquatic and terrestrial sites across the four-State Connecticut River Watershed. Partners will work with land owners to improve and connect aquatic and riparian habitat; reduce sedimentation and nutrients; and identify and prioritize parcels of land that will safeguard water quality, protect riparian or wetland resources, and increase resiliency to climate change.

Upper Valley Farmland Protection Initiative (FY18) \$1M (State); Lead Partner: Upper Valley Land Trust, Inc.; Participating States: New Hampshire (Lead State). The Upper Valley Land Trust, a leader in land conservation for over 30 years, in collaboration with its partners, seeks to excel the pace of farmland conservation in the Upper Connecticut River watershed. The goal is to stem the conversion and loss of vitally important agricultural and forest land. This partner-driven effort seeks to increase producer participation in the Agricultural Conservation Easement Program-Agricultural Land Easements program to permanently conserve viable farmland for protecting water quality and improving soil health. This project will priorities three areas: farms located near impaired waters, where there are low percentages of protected farms, and where historically underserved producers lack resources for improvements. The overall goal of this initiative is to protect 5,000 acres in the next five years.

NEW JERSEY

Delaware Bay Soil and Water Quality Protection Initiative (FY14/15); \$700K (State); Lead partner: New Jersey Conservation Foundation. This partnership effort focuses on protecting farmland in the Delaware Bay area of New Jersey. In addition to easement acquisitions, New Jersey Conservation Foundation (NJCF) will promote participation in NRCS conservation

programs to protect soil and water quality and wildlife habitat on preserved farms and forestland. NJCF has established productive partnerships with the agricultural community that will facilitate this outreach. As more farmers in the area implement practices like filter strips, buffers and cover crop, the soil health of their land will be maintained and improved. Practices like tree planting, invasive plant species control and forest stand improvement on forested land will keep it productive and improve wildlife habitat. Conservation activities like these will protect the investment made to preserve these properties and help keep farm and forest land in the Delaware Bay area viable for future generations.

Raritan Basin Partners for Source Water Protection (FY16); \$700K (State); Lead Partner: New Jersey Water Supply Authority (NJWSA); Participating State(s): New Jersey. The South Branch Raritan River and Lockatong and Wickecheoke Creek Watersheds in New Jersey are important to water supply and have documented water equality impairments and restoration recommendations. Partners will implement conservation practices and easements in these watersheds that benefit water quality and soil health. Project objectives include: 1) reducing nutrient, sediment and bacteria loads from agricultural properties by installing conservation practices on 10-15 farms; 2) improving soil health and preventing soil erosion on agricultural properties through use of appropriate conservation practices such as cover crops and nutrient management; 3) increasing the amount of conservation practice implementation in the target watersheds by offering additional cost-share, up to 100 percent, via NJWSA's source water protection fund; 4) establishing easements on 1–2 agricultural properties to ensure they will remain in agricultural production; 5) documenting the pollutant load reductions and/or pollutant loads avoided through the implementation of conservation practices and preservation; and 6) evaluating the impact of offering incentives on conservation practice implementation.

Whole Farm Systems Conservation Trial (FY17); \$644K (State); Lead Partner: New Jersey State Agriculture Development Committee; Participating States: New Jersey (Lead State). The New Jersey State Agriculture Development Committee and its preservation partners have been at the forefront of farmland preservation since 1983. With a full third of the New Jersey agricultural land base in permanent preservation, the average size of farms entering into permanent preservation now is shrinking. Anecdotally, these farms have more environmental constraints and require more staff time to close. Coupled with the new reality of smaller budgets, SADC is exploring options to leverage additional funding to help landowners steward their properties and to conserve additional farmland. As a pilot, this program will create one potential framework for continued farmland preservation in New Jersey. This project will utilize New Jersey farmland preservation funding and wetland restoration funds together to preserve actively farmed areas for agriculture while restoring modified wetlands. The SADC and partners hope to give landowners more choice in the way they preserve their farms while protecting additional farmland for future farmers.

Columbia Dam Removal & Restoration on Paulins Kill (FY18); \$567K (State); Lead Partner: The Nature Conservancy; Participating States: New Jersey (Lead State). In 2011, the Columbia Dam was ranked in the top five percent of all Northeastern US dams prioritized for removal to protect migrating fish. Since 2013, TNC, American Rivers and NJDEP have been working with stakeholders on plans to remove the Columbia Dam and a downstream remnant dam to restore and reconnect habitat for diadromous fish species including American shad, blueback herring, alewife, American eel and native sea lamprey. Plans also include restoring 32

acres of floodplain habitat currently inundated by the Columbia Dam. Removal of the Columbia Dam will open 20 miles of streams in the Paulins Kill watershed for migratory fish and restore degraded in-stream habitat in the 1.5-mile impoundment upstream of the Columbia Dam. The project team is currently communicating with regulatory agencies and expects the project to be shovel ready by Spring of 2018.

Black River Greenway—Soil and Water Protection (FY18); \$922K (State); Lead Partner: New Jersey Conservation Foundation. Participating States: New Jersey (Lead State). New Jersey Conservation Foundation (NJCF) is the lead partner in this project to preserve farms in the Black River using the Agricultural Conservation Easement Program-Agricultural Land Easements (ACEP-ALE) and implement sound conservation practices through Environmental Quality Incentives Program funding. The partners will prioritize farms based on incidence of Prime and Statewide soils, proximity to C-1 streams, and critical threatened and endangered habitat, and will assemble funding packages to provide matching funds for high priorities for ACEP-ALE.

NEW MEXICO

New Mexico Acequia Revitalization on Historic Irrigated Lands (NMAR) (FY14/15); \$1M (State); Lead partner: New Mexico Acequia Association, Interstate Stream Commission, New Mexico Association of Conservation Districts. The objective of the proposal is to facilitate and promote surface water conservation, increase irrigation system efficiencies/effectiveness and improve water quality on agricultural lands and for downstream purposes in primarily highly minority/underserved communities. The New Mexico Acequia Revitalization Initiative will use Environmental Quality Incentives Program and Conservation Stewardship Program contracts with farmers and ranchers operating irrigated lands served by an acequia system. Water quantity and quality will be improved by restoring historic acequias on agricultural lands supporting local families and communities.

North Central New Mexico Watershed Restoration Project (FY14/15); \$2.4M (State); Lead partner: Claunch-Pinto Soil and Water Conservation District (SWCD). Poor historic management of forest and riparian watersheds and climate change are creating a dire situation. Wildlife, fish, acequias, rural economies, tourism and outdoor recreation are all at risk from the associated impacts of watershed wildfires. Without a large-scale watershed solution wildfire will threaten more communities within the Wildland Urban Interface. Claunch-Pinto SWCD and its partners have identified forest restoration treatments on private, public, State and Tribal lands that are located within the upland ponderosa pine, pinon, and juniper watersheds and in the lower elevation riparian ones.

Innovative Tribal Conservation and GHG Management (FY16); \$1.8M (National); Lead Partner: Intertribal Agriculture Council; Participating State(s): Alaska, Nebraska, New Mexico, Oklahoma & South Dakota (lead State). As the impacts of climate change become more pronounced in Indian country, Native Nations and Indian landowners are faced with the challenge of implementing resource conservation land management systems that incorporate greenhouse gas management activities, also known as carbon farming practices. As greenhouse gas management services gain value in environmental markets, it is vital that historically underserved Tribal conservation programs and American Indian farmers and ranchers develop

conservation projects that demonstrate causal relationships between soil quality and ecosystem production functions such as carbon sequestration. This project will address the need for conservation stewardship projects on American Indian lands that integrate a carbon farming production possibilities frontier component. The project area will be national in scope covering a diversity of Tribal rangeland landscape types including Southwest Alaska, prairie grassland and Colorado River Basin regions. The project includes developing and implementing soil amendment, forestry and grazing management Conservation Activity Plans (CAP) and Conservation Stewardship Plans (CSP) on pilot project sites. The CAP/CSPs will establish a framework for inventorying the existing baseline carbon sequestration rate and propose cost-effective conservation practices to achieve multiple environmental quality and economic development goals. One of the anticipated outcomes from this project will be the development of carbon offsets from soil amendment and grazing land and livestock management activities. We will engage private investment in those pilot project sites that both meet investors and credit buyers' interest in charismatic high-quality carbon offsets, and Tribes' interest in promoting appropriate conservation practices and economic development on Indian lands.

NM Acequia Revitalization on Historic Lands (FY16); \$3M (State); Lead Partner: New Mexico Acequia Association, NM Interstate Stream Commission, and NM Association of Conservation Districts; Participating State(s): New Mexico. New Mexico has a rich history of community acequias supporting agriculture with approximately 800 acequias and community ditch associations serving many farmers or “parciantes” who make all, or part of their livelihood from farming and ranching. The majority of these farmers depending are minorities in underserved communities. The objective of this project is to facilitate and promote surface water conservation, increase irrigation system efficiencies/effectiveness and improve water quality on agricultural lands and for downstream purposes. Water quantity and quality will also be improved by restoring historic acequias on agricultural lands supporting local families and communities.

North Central NM Watershed Restoration Project (FY16); \$500K (State); Lead Partner: Claunch-Pinto SWCD. Participating State(s): New Mexico. This regional watershed project extends from Taos (North) to Bernardo (South) and Gallup (West) to Santa Rosa (East), including all major tributaries and sub-watersheds of the Rio Grande and Pecos River in that region. Poor historic management of forest watersheds and riparian zones along with current and forecast climate change are creating a dire situation for the condition and availability of New Mexico's forest, rangeland and water resources. Wildlife, acequias, rural economies, tourism and outdoor recreation are all at risk from the associated impacts of watershed wildfires. This project expands on previous work with established partners and aims to reduce wildfire risks, improve soils, hydrology and vegetation, and enhance social/economic needs.

Canadian River Watershed Restoration Project (FY17); \$3.6M (Critical Conservation Area—Prairie Grasslands Region); Lead Partner: Canadian River Riparian Restoration Project; Participating States: New Mexico (Lead State). Canadian River Watershed Restoration Project will encourage ranchers and landowners operating within the Prairie Grasslands Region of New Mexico to utilize the Environmental Quality Incentives Program. Each participating rancher, in collaboration with Federal and State land managing agencies, will develop a resource management plan. The leveraged EQIP funds will encourage restoration efforts outlined in the plan, like treating invasive plant species. Partners within the CRWRP have

been addressing resource concerns on ranches with mixed ownership lands for 11 years. This project was initiated when eight Soil and Water Conservation Districts encompassing the entire Canadian River Watershed began collaboration through a Joint Powers Agreement to restore the watershed of the Canadian River and its tributaries.

New Mexico Range and Forest Soil Health Initiative (FY17); \$7M (National); Lead Partner: New Mexico Association of Conservation Districts; Participating States: New Mexico (Lead State). The New Mexico Range and Forest Soil Health Initiative will bring Environmental Quality Incentives Program and partner funds together for New Mexico ranchers whose operations include Federal lands. Each rancher, State and Federal agency with lands included in the ranch operation will develop a coordinator resource management plan or CRMP. The CRMP will include range and forest soil health restoration strategies, such as forest thinning, to combat the increase in wildland fires. New Mexico experienced over 1.5 million acres in wildfires from 2009 to 2014. Restoration efforts through this initiative are critical to fund treatments on over 20 million acres of brush-invaded rangeland and 10 million acres of overstocked forest lands.

Building Resiliency in the San Juan-Rio Chama Region (FY17); \$3.25M (National); Lead Partner: East Rio Arriba Soil and Water Conservation District; Participating States: Colorado and New Mexico (Lead State). Completed by the Bureau of Reclamation in 1976, the San Juan-Rio Chama Diversion is a series of diversion structures and tunnels that together carry runoff 26 miles across the Continental Divide from the Colorado River watershed to the Rio Chama, in the Rio Grande watershed. This diversion, along with the Rio Chama, provides approximately one third of New Mexico's water supply for irrigators, agriculture, industry, communities and fish and wildlife. The Building Resiliency in the San Juan-Rio Chama Region project, managed by East Rio Arriba Soil and Water Conservation District and twenty partners, will complement recent diversion structures with additional forest health and watershed treatments to increase the resiliency of the landscape to withstand stressors such as drought, wildfire and climate change in southern Colorado and northern New Mexico. Between 2017 and 2021, partners in the San Juan-Rio Chama region of southern Colorado and northern New Mexico will complete 1,000–1,500 acres of watershed resiliency treatments per year utilizing \$6.4 million of Environmental Quality Incentives Program, Conservation Stewardship Program and the Agricultural Easement Program.

New Mexico Acequia Revitalization on Historic Lands (FY17); \$2.9M (State); Lead Partner: NM Association of Conservation Districts, NM Interstate Stream Commission, NM Acequia Association; Participating States: New Mexico (Lead State). New Mexico has a rich history of community acequias supporting agriculture. Approximately 800 acequias and community ditch associations serve many farmers or “parciantes” who make all, or part of their livelihood from farming and ranching. Farms served by acequias range in size from less than 1 acre to over 500 acres. The majority of farmers depending on acequias are minorities in underserved communities. Acequias are located in 12 of the most impoverished counties in the State. In New Mexico we say “agua es la vida” (water is life). This project will help sustain this critical social and spiritual connection as a matter of social and environmental justice. The objective of the proposal is to facilitate and promote surface water conservation, increase irrigation system efficiencies/effectiveness and improve water quality on agricultural lands and for downstream purposes. Critical riparian habitats for dependent wildlife and plant species will

be conserved. Water quantity and quality will be improved by restoring historic acequias on agricultural lands supporting local families and communities. Traditional acequias in irrigated valleys of northern New Mexico provide multiple hydrological benefits including, aquifer recharge, temporary reservoir storage, and delayed return flow. Recent studies indicate that hydrologic functions of traditional acequia systems prolong the river runoff hydrograph, save water through reduced transpiration loss from ground water storage in comparison to above ground storage, while ameliorating climatic variation on local and regional water users. Some aspects of the traditional acequia system resemble natural hydrologic processes and mitigate altered hydrologic characteristics. These altered characteristics include stream channelization and flood control structures. Irrigation via acequias provides functions similar to overbank flooding and meandering streams. A coordinated/collaborative effort with the Interstate Stream Commission and the New Mexico Acequia Association throughout the entire planning and implementation process will serve as the basis for program implementation.

North Central NM Watershed Restoration Project (FY17); 969K (State); Lead Partner: Claunch-Pinto SWCD; Participating States: New Mexico (Lead State). This is a regional watershed project aimed at reducing wildfire risk while at the same time improving soils, hydrology, vegetation, and enhancing social/economic needs. The watershed approach provides a framework for coordinating project needs among private landowners, State and Federal agencies, Tribes, communities, and other interested stakeholders. The project extends from Taos (North) to Bernardo (South) and Gallup (West) to Santa Rosa (East), including all major tributaries and sub-watersheds of the Rio Grande and Pecos River in that region. This project will expand on previous work with established partners to improve the natural resources of this critically important region. Forest restoration practices have been shown to reduce high-severity wildfire and to improve watershed health, water quality, and water quantity. Poor historic management of forest watersheds and riparian zones along with current and forecast climate change are creating a dire situation for the condition and availability of New Mexico's forest, rangeland and water resources. This situation must be alleviated with natural resource restoration efforts. Montane coniferous forest watersheds and riparian areas that experience extensive mid- and high-severity wildfires have greatly diminished water storage capacity because the soils do not absorb or hold water after fire. Rainwater runoff generated during storms has the potential to cause extreme flooding, sedimentation, and debris flows into the main tributaries of the burned watersheds. The large amounts of post-fire sediment that move into rivers, streams and reservoirs during these flood events diminish water quality and disrupt water delivery and storage. Wildlife, acequias, rural economies, tourism and outdoor recreation are all at risk from the associated impacts of watershed wildfires. Without a large-scale watershed solution addressing wildfire, more acres will continue to be severely impacted, which will place critical water and other natural resources in jeopardy and threaten more communities within the Wildland Urban Environment (WUI).

NRCS-NFWF Pecos Partnership (FY18); \$1.35M (Critical Conservation Area-Prairie Grasslands Region); Lead Partner: National Fish and Wildlife Foundation; Participating States: New Mexico (Lead State). The Pecos River Watershed in New Mexico and Texas is home to the Permian Basin, one of the largest and most important oil and gas reserves in the country. NFWF and its partners will collaborate with at least four major oil and gas producers on the Pecos River Watershed Initiative to promote the conservation of the region's important rangeland and riparian features. NFWF will use Environmental Quality Incentives Program,

Conservation Stewardship Program and PL-566 programs to support riparian restoration, grazing system improvements, water development and irrigation improvements, establishment of native riparian and rangeland species and removal of invasive species.

North Central NM Watershed Restoration Project (FY18); \$3.42M (State); Lead Partner: Launch-Pinto SWCD; Participating States: New Mexico (Lead State). This regional watershed project, in the Rio Grande and Pecos River watersheds, will reduce wildfire risk while improving soils, hydrology, vegetation, and enhancing social/economic needs. This project expands on previous work to improve the forestry management in this critically important region. Montane coniferous forest watersheds and riparian areas, damaged by wildfires, have greatly diminished water storage capacity because the soils do not absorb or hold water. Rainwater runoff generated during storms has the potential to cause extreme flooding, sedimentation, and debris flows into the main tributaries of the burned watersheds. The large amounts of post-fire sediment diminish water quality and disrupt water delivery and storage. Wildlife, acequias, rural economies, tourism and outdoor recreation are all at risk from the associated impacts of watershed wildfires.

NEW YORK

Accelerated Implementation of Agricultural and Forestry Conservation Practices in the Lake Champlain Watershed of Vermont and New York (FY14/15); \$16M (National); Lead partner: State of Vermont Agencies of Agriculture, Food and Markets, & Natural Resources. This renewed effort among long-standing partnerships to accelerate the impact of private lands conservation on water quality concerns in Lake Champlain uses several innovative tools, including the use of modeling to target conservation practices for optimal environmental benefits, an extensive monitoring network to assess conservation effectiveness, sliding scale cost-share to gain the support of producers, and an incentive-based Environmental Stewardship Program to provide some certainty to producers that they will get credit for the conservation practices they apply.

Long Island Sound Watershed RCPP (FY14/15); \$10M (National); Lead partner: Connecticut Council on Soil and Water Conservation. Excess nutrients have been identified as the primary driver of hypoxic conditions in Long Island Sound and are also impacting upland water resources within the watershed, which encompasses areas of Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. This project will develop a comprehensive, whole-farm management certainty program for farmers in the area and use both working lands and easement programs to improve soil health and nutrient management, establish community resiliency areas with a focus on enhancing riparian areas, and institute a land protection program to protect agricultural and forestry areas.

Delaware River Watershed Working Lands Conservation and Protection Partnership (FY14/15); \$13M (National); Lead partner: American Farmland Trust. This project originated from a rigorous watershed-wide assessment and prioritization process initiated by key stakeholders in the Delaware River Basin (DRB) in 2012 by the William Penn Foundation to define and address water quality and quantity concerns. To augment the implementation of conservation systems through NRCS assistance, the National Fish and Wildlife Foundation and the Open Space Institute will administer competitive grant and capital programs to award funds

to important, well vetted restoration and land protection projects. Private funding will provide streamlined access to some practices and encourage participation by some who prefer not to use government funding. Through these mechanisms, the partners anticipate working with more farmers and forest landowners on more acres in this important region.

Greater Adirondack Agricultural Environmental Enhancement Program (FY14/15); \$1.5M (State); Lead partner: Greater Adirondack Resource Conservation and Development Council, Inc. Encompassing the entire northern portion of New York State, this program will address water quality, soil health and inadequate habitat issues utilizing Environmental Quality Incentives Program funding throughout the Upper Hudson River, St. Lawrence River, Black River and Lake Champlain Watershed. Five objectives are to be achieved; use NRCS funding to provide services directly to producers (farmers and non-industrial forest land owners) for conservation planning; use NRCS funding to create a ranking matrix for project prioritization; use NRCS funding to invest in innovative BMPs on agricultural and forestry lands throughout the region; monitor progress by creating and utilizing a monitoring database; and educate local producers. The overarching goal of this project is to reduce nutrient, sediment and bacterial loading into surface waters and improve habitat within these watersheds utilizing strong regional partnerships.

Enhancement to the NYC Watershed Ag Program (FY16); \$12M (State); Lead Partner: Watershed Agricultural Council of the NYC Watersheds, Inc; Participating State(s): New York. The Watershed Agricultural Program (WAP) is a conservation partnership that develops and maintains Whole Farm Plans on active farms within the NYC water supply watersheds. Currently, there are 298 farms in the Catskill and Delaware watersheds that are participating in the WAP and are the focus of this project. Partners will work with the WAP farmers to accelerate implementation of conservation practices for the purpose of protecting surface water quality for the 9 million consumers of the NYC Water Supply. EQIP funds will allow additional water quality protection measures that address agricultural waste management to be implemented, while also assisting NYC with meeting Federal and State regulatory requirements associated with the Safe Drinking Water Act.

Genesee River Sediment and Phosphorus Reduction (FY16); \$3M (CCA); Lead Partner: New York State Soil & Water Conservation Committee; Participating State(s): Pennsylvania & New York (lead State). The Genesee River Sediment and Phosphorus Reduction project will address pollutants entering Lake Ontario. Sediment and phosphorus loading from the Genesee River has been identified as having substantial negative impacts on near-shore waters and aquatic habitat and possibly impacting human health through harmful algal blooms. The Genesee River Watershed is heavily farmed with 52 percent of the land base being in agricultural production. Through this RCPP Project, EQIP funding will be used to address phosphorus laden sediment inputs entering the Genesee River directly or through tributaries.

Projects will focus on soil health and riparian corridor management, as well as, sediment control practices on lands adjacent to watercourses. This project will work with an array of State and local programs to remove the impaired portions of the Genesee River targeted for TMDL development on the CWA Section 303(d) list.

Upper Susquehanna Agricultural BMP Implementation (FY16); \$4.1M (CCA); Lead Partner: Tioga County Soil and Water Conservation District; Participating State(s): New York. Since agriculture has been identified as a major source sector of nutrients and sediment, it's critical that farms in the Upper Susquehanna River watershed need to adapt and implement Best Management Practices (BMPs) to reduce their environmental impacts. This project will address nutrient reductions and water quality improvements locally by increasing landowner enrollment in USDA EQIP conservation program and by installing conservation practices that will address local, State and national water quality objectives.

The Young Forest Initiative for At-Risk Species (FY16); \$5.2 M (National); Lead Partner: Wildlife Management Institute; Participating State(s): Connecticut, Massachusetts, Maine, New Hampshire (lead State), New York, Rhode Island & Vermont. This project will help increase technical and financial assistance to non-industrial private forestland owners who implement practices outlined in the Environmental Quality Incentives Program that result in an increase in the quantity and quality of young forest habitats. This support is critical, since young forest habitat is necessary to meet the critical needs of several recognized at-risk species.

Agricultural Stewardship in the Peconic Estuary (FY17); \$1.2 M (State); Lead Partner: Suffolk County, Department of Economic Development & Planning, Participating States: New York (Lead State). Agricultural Stewardship in the Peconic Estuary project—a partnership among government agencies, non-profit organizations, academic institutions and private farmers—will provide technical assistance and financial resources to Suffolk County farmers within the federally designated Peconic Estuary Watershed in New York. With these resources, farmers can conduct nutrient management plans and integrated pest management plans to adapt best management practices, which will improve water quality, soil vitality and wildlife habitat. The project will support an agricultural specialist at the Suffolk County Soil and Water Conservation District whose primary responsibility will be to assist farmers with their nutrient and pest management plans. The project also will provide farmers with access to trained professionals who can provide information about additional Natural Resources Conservation Service funding needed to enhance agricultural stewardship efforts.

East of Hudson Watershed Water Supply Protection (FY18); \$590K (State); Lead Partner: Watershed Agricultural Council; Participating States: New York (Lead State). This project will address water quality degradation in the 13 reservoirs and 3 controlled lakes in NYC's East of Hudson watershed. The NYC water supply system delivers one billion gallons of drinking water to more than 9.5 million people daily, approximately half of the population of New York State. Along with its partners, Watershed Agricultural Council will use Environmental Quality Incentives Program funding to accelerate the implementation of animal waste management practices to reduce the risk of excess nutrients, pathogens, and sediment from leaving livestock farms and contaminating surface water. This project will expand and enhance the ongoing work with East of Hudson Program's 77 active farm partners to protect the NYC water supply.

NORTH CAROLINA

Western North Carolina Stream, Wetland, and Water Quality Initiative (FY14/15); \$1.5M (State); Lead partner: Resource Institute, Inc. The project will involve the restoration, enhancement and stabilization of streams and wetlands that have been degraded by agricultural

land use throughout the geographic region of North Carolina counties that make up the existing Western North Carolina Stream Initiative. RCPP funding will be leveraged with funding through the partner to continue extensive stream restoration, and address water quality, quantity, soil erosion and at-risk species habitat. For this project, NRCS and Resource Institute, Inc., has assembled a diverse and proven team of project partners who will collaboratively work together to provide financial and technical assistance, promote stakeholder involvement and utilize innovation to develop cost effective solutions to improve at-risk ecosystems and promote conservation.

African American Forest Restoration and Retention (FY16) \$1.6M (CCA); Lead Partner: U.S. Endowment for Forestry and Communities; Participating State(s): Alabama, North Carolina & South Carolina (lead State). Through an existing partnership, the Sustainable Forestry and African American Land Retention Program (SFLR), this project will address degraded plant conditions and enhancement of wildlife habitat by supporting forest restoration on African American-owned forestlands in high poverty regions of the Southeastern United States. In this region, African American family-owned forests tend to be degraded due to lack of pro-active forest management. During its 30-month pilot phase, the SFLR program was effective at building a bridge of trust between landowners and USDA programs supporting 157 EQIP applications for forestry practices with more than \$1 million in EQIP contracts directed to African American project participants. The project will support landowners through direct provision of forestry, land tenure (heirs' property) and technical services as well as the brokering of services from other private and government providers including forestry commissions, consulting foresters, extension services and conservation organizations.

MBGro: NC Grain Nutrient Management & Soil Health (FY16); \$500K (State); Lead Partner: Environmental Defense Fund (EDF); Participating State(s): North Carolina. Environmental Defense Fund is collaborating with Smithfield Foods Hog Production Division to improve the sustainability of its feed grain supply chain by reducing the water quality and greenhouse gas impacts of nitrogen fertilizer use and improving soil health. Smithfield is assisting farmers that grow corn, wheat, sorghum and soy to promote the adoption of advanced nutrient management tools, technologies and practices; soil health practices such as no-till and cover crops; and practices that trap and filter nutrients. Smithfield calls this initiative MBGro and hired an agronomist to provide extensive outreach, education and technical support to growers in Smithfield's grain sourcing region. EDF assists Smithfield in selecting the practices to promote, ensuring MBGro is based in sound science, designing watershed projects and tracking outcomes. Other partners will show the economic and environmental benefits of the practices. The project's goal is to engage 165,000 corn and wheat acres as well as at least 40,000 soy acres in one or more fertilizer optimization, soil health and nutrient filtration initiatives.

Southern Sentinel Landscapes Conservation (FY16); \$7.5M (National); Lead Partner: U.S. Endowment for Forestry and Communities; Participating State(s): Georgia (lead State), Mississippi & North Carolina. This project will protect and restore 17,500–21,500 acres of longleaf and other working forest habitats on private lands important for at-risk species. The goal of this multistate effort—Mississippi, Georgia and North Carolina—is to reduce the likelihood that target species will be listed under the Endangered Species Act and to demonstrate the compatibility of working lands management with at-risk species conservation. These sites and species address shared conservation interests of the Departments of Agriculture, Defense, and

Interior on proposed or potential Sentinel Landscapes. The proposed project advances goals of the Range-wide Conservation Plan for Longleaf Pine, the NRCS Longleaf Pine Initiative, and each State's Forest and Wildlife Action Plans, while also contributing to military installation compatible-use buffers. By focusing on the overlapping interests of three Federal Departments, this proposal delivers more measurable benefits to At-Risk Species than if the agencies followed separate paths. This proposal builds on the RCPP award the U.S. Endowment for Forestry and Communities received in 2014.

Western NC Stream & Water Quality Initiative—State Project (FY16); \$1M (State); Lead Partner: Resource Institute, Inc. Participating State(s): North Carolina. Partners will identify, design, construct and monitor projects that will restore, enhance and reestablish streams and wetlands that have been degraded by agricultural land use throughout Western NC. Projects will be conducted using the latest technological approaches in stream and wetland restoration and water quality BMPs. The project objective is to provide measurable improvements in the quality of water resources in this region by reducing erosion, increasing aquatic habitat availability and diversity, restoring stream functions, promoting riparian and wetland areas and increasing the amount of protected land along stream corridors. By improving function and increasing the amount of protected lands, riparian buffers and wetlands, the project will help reduce the overall load of non-point source agricultural pollutants entering water bodies in the region. This outcome will benefit resource users in the watershed, as well as help producers reduce or avoid the need for regulation of agricultural land use.

Forever Farms: Easements at the Eminence (FY17); \$8M (National); Lead Partner: Blue Ridge Forever; Participating States: North Carolina (Lead State). The Southern Blue Ridge Mountains of North Carolina contain the headwater sources of drinking water for millions of people throughout the South Eastern United States, in nine river basins emanating on either side of the Eastern Continental Divide. Large mountain farms are particularly scarce because they are prone to fragmentation and development upon landowner succession, yet they are critically important for clean water and climate resiliency as they typically encompass diverse topography and extensive alluvial floodplains. Through the project, Blue Ridge Forever and local partners will assist landowners with voluntary agricultural conservation easements to ensure these farms remain in agriculture.

Western North Carolina Stream and Water Quality Initiative (FY17); \$7M (National); Lead Partner: Resource Institute, Inc.; Participating States: North Carolina (Lead State). The Western North Carolina Stream and Water Quality Initiative team will identify, implement and monitor projects that will restore, enhance and reestablish streams and wetlands that have been degraded by agricultural land use throughout Western North Carolina. Partners will provide local landowners with financial and technical assistance to develop and implement cost effective solutions to improve at risk ecosystems. By improving function and increasing the amount of protected lands, riparian buffers and wetlands, the project will reduce the overall load of non-point source agricultural pollutants entering waterbodies in the region. This outcome will benefit resource users in the watershed and help producers reduce or avoid the need for regulation of agricultural land use.

NC Swine Floodplain Buyout (FY18); \$2.49M (National); Lead Partner: NC Division of Soil & Water Conservation; Participating States: North Carolina (Lead State). The Swine

Farm Floodplain Easement Program was created in 1999 in the wake of devastation caused by Hurricanes Dennis, Floyd, and Irene. North Carolina again experienced devastating floods in 2016, renewing the concerns about the water quality risk associated with swine operations located in flood-prone locations. The objective of the proposed project is to voluntarily remove 7-10 operations from the floodplain. The project will use the Agricultural Conservation Easement Program's Agricultural Land Easements program and State funding to acquire voluntary perpetual conservation easements on swine operations in the 100-year floodplain. Partners will also use the Environmental Quality Incentives Program to decommission waste lagoons and install additional best management practices specified in conservation plans on the participating farms.

SmithfieldGro: Sustainable Grain Supply Chains (FY18); \$1M (National); Lead Partner: Environmental Defense Fund; Participating States: Iowa and North Carolina (Lead State). This project expands an innovative collaboration between the Environmental Defense Fund and Smithfield Foods to address nutrient management and soil health in the company's grain supply chain. In 2014, the company created SmithfieldGro, a voluntary program that provides agronomic assistance and conservation incentives to grain growers in the company's sourcing region. In 2016, SmithfieldGro improved practices on about 300,000 acres in North Carolina and Iowa. This RCPP will launch new efforts in IA and expand efforts in NC. RCPP allows SmithfieldGro to engage new partners, incorporate strong science, and reach farmers who may not enroll in traditional conservation efforts.

NCSLHPPP for 2018 (FY18); \$7M (National); Lead Partner: North Carolina Department of Agriculture and Consumer Services; Participating States: North Carolina (Lead State). The North Carolina Department of Agriculture and Consumer Services (NCDA&CS) has partnered with the US Army, US Air Force, US Marine Corps, and others to develop the North Carolina Sentinel Landscapes High Priority Protect Program (NCSLHPPP) for 2018. This project will seek to place agriculture conservation easements on high priority parcels that provide compatible use by both the military and agriculture. Selection of these properties is vital, not only for these industries, but also for the preservation and conservation wildlife, natural resources, endangered species, and scenic beauty that is threatened by land use change due to increased population. The NCSLHPPP for 2018 focuses initially on approximately 8,000 acres of must-protect land parcels for the Eastern North Carolina Sentinel Landscapes (ENCSL) partnership. These land parcels were selected based upon a must-protect area for the continuance of military training in North Carolina and its high conservation value as a natural resource for farming and agriculture in the defined 33-county ENCSL.

Mills River Source Water Protection Project (FY18); \$730K (State); Lead Partner: Mills River Partnership; Participating States: North Carolina (Lead State). This project will occur on the mainstem of the Mills River and on Foster Creek, a direct tributary in Henderson County, North Carolina. The goal is to help protect the source water for 85,000 people in the cities of Hendersonville, Asheville, and surrounding counties who depend on the Mills River for their drinking water. It focuses on completely restoring a mile-long stretch of a deeply incised eroding streambank, constructing an agrichemical handling facility along the mainstem of the Mills River, and on-farm work with cattle operations where bank sloping, riparian fencing, and off-channel watering tanks will be implemented. In addition to protecting drinking water, the project will also improve degraded fish and wildlife habitat, help ensure future agricultural productivity,

foster locally produced foods, and expand a unique on-farm educational forum promoting sustainable agricultural practices.

NORTH DAKOTA

Medora Grazing Association North Billings Prairie Grasslands Conservation Project (FY14/15); \$800K (State); Lead partner: Medora Grazing Association. This project will provide a proactive approach for ranchers to augment their conservation stewardship on the National Grasslands under U.S. Forest Service (USFS) management. Conservation practices and grazing strategies will be implemented in a collaborative approach to meet the resource and sustainability goals of the agricultural producer, USFS and NRCS.

How Far Can We Grow (FY14/15); \$700K (State); Lead partner: Northern Plains Resource Conservation and Development. This project will demonstrate innovative approaches for the adoption of cover crops to improve soil health practices in a relatively cool, wet, and short-season climate in northern North Dakota. New techniques will be evaluated by agricultural producers under partnership of the Soil Conservation Districts, NRCS and North Dakota State University personnel.

Red River Basin of the North Flood Prevention Plan (FY14/15); \$12M (CCA); Lead partner: Red River Retention Authority. This project uses all of NRCS's authorities—EQIP, ACEP, CSP, and PL-566—to reduce flooding, ponding, and excess water on farm lands, thereby increasing the resiliency of agriculture, as well as to reduce nutrient loads in this region of Minnesota and North Dakota. Once completed, six to eight discreet projects will store approximately 50,000 acre-feet of flood water. The long-standing partnership across State boundaries includes the Red River Retention Authority, which has the power to raise revenue.

Bowman-Slope SCD Tree & Shrub Establishment (FY17); \$57K (State); Lead Partner: Bowman-Slope Soil Conservation District Number of Initial Partners: 1 Participating States: North Dakota (Lead State). The Bowman-Slope Soil Conservation District Tree and Shrub Establishment project will establish tree and shrub plantings in Bowman and Slope Counties in southwestern North Dakota to replace lost or older trees across the landscape. The new plantings will address resource concerns identified by working group of local producers and agencies, including inadequate wildlife habitat and livestock shelter, inefficient use of equipment and facilities, and excess flooding, drifting snow, and high-water table.

The Grand Forks Prairie Project (FY17); \$375 K (State); Lead Partner: University of North Dakota Number of Initial Partners: 3 Participating States: North Dakota (Lead State). The Grand Forks Prairie area in North Dakota provides forage production, wildlife habitat and water management services for the region. This grassland is interspersed with row-crop fields that, unlike other regions of the State, are most commonly managed with single crop, clean-field practices. A Memorandum of Understanding among State, Federal, non-profit and citizen partners established a working group to focus on grassland retention improved grazing practices and invasive species management in the area. Through the Grand Forks Prairie Project, the working group will promote restoration and sustainable use of the natural resources in this region through an integrated effort to implement and monitor Environmental Quality Incentive

Program cover and grazing practices. The group will engage producers and landowners through regional workshops and by potential financial assistance for adopting these practices.

Spiritwood Lake Water Quality Improvement Project (FY17); \$375 K (State); Lead Partner: City of Spiritwood Lake Number of Initial Partners: 5 Participating States: North Dakota (Lead State). Spiritwood Lake in North Dakota provides economic and recreation benefits to the local community and an aquatic wildlife habitat that supports those activities. The Spiritwood Lake Water Quality Improvement Project, led by the City of Spiritwood Lake and local partners, will restore and protect Spiritwood Lake and its tributaries by engaging landowners in a variety of conservation practices, including riparian improvements, nutrient and grazing management, no-till farming and use of cover crops and more diverse crop rotation.

OHIO

Cerulean Warbler Appalachian Forestland Enhancement (FY14/15); \$8M (National); Lead partner: American Bird Conservancy (ABC); States: Ohio, Kentucky, Pennsylvania, Maryland, and West Virginia. To address habitat loss, soil health, and water quality, the project will focus on suites of conservation practices intended to enhance acres of forest habitat on private lands for cerulean warblers, an at-risk species, and associated species. The Nature Conservancy has committed to enrolling additional acres into easements, and the American Chestnut Foundation, the Appalachian Regional Reforestation Initiative, and Green Forests Work will reforest acres of reclaimed mine lands to biodiverse forest.

Tri-State Western Lake Erie Basin Phosphorus Reduction Initiative (FY14/15); \$17.5M (CCA—Great Lakes Region); Lead partner: Michigan Department of Agriculture and Rural Development. A diverse team of partners will use a targeted approach to identify high-priority sub-watersheds for phosphorus reduction and increase farmer access to public and private technical assistance—including innovative demonstrations of practices that NRCS does not yet cover—in Michigan, Ohio, and Indiana. Identified actions are coordinated with the Ohio Phosphorus Task Force Report and will move Lake Erie toward goals developed in the Great Lakes Water Quality Agreement Annex 4 Nutrient Strategies. The partners will gauge success and monitor results using project-wide water quality monitoring and watershed modeling conducted by national experts from multiple scientific entities and institutions.

Promoting BMPs for Phosphorus (FY14/15); \$1M (State); Lead partner: Delaware Soil & Water Conservation District. The Delaware, Knox, Licking and Morrow Soil and Water Conservation Districts and the Upper Big Walnut Creek Water Quality Partnership will assist agricultural producers install phosphorus reducing best management practices on land in the Upper Big Walnut Creek watershed. This watershed, located in Delaware County, drains into the Hoover and O'Shaughnessy Reservoirs, the drinking water supply for the City of Columbus, Ohio. In addition to the phosphorus reducing conservation practices, the proposal also provides for the installation of two enriched bioreactors, water quality monitoring and data analysis.

East Fork Watershed Nutrient Reduction Initiative: (FY14/15); \$600K (State); Lead partner: Clermont Soil and Water Conservation Districts. Nutrients and sediment, including phosphorus and nitrogen, transported in water leaving agricultural fields within the East Fork of the Little Miami River watershed ultimately contribute to hypoxia in the Gulf of Mexico and

exacerbate locally occurring harmful algal blooms in East Fork Lake. The project sponsors will assist agricultural producers with installing nutrient and sediment reducing best management practices to improve water quality, reduce algal growth, and create a smart phone app to assist producers make fertilizer and management decisions. Edge-of-field and in-stream water quality monitoring in conjunction with algae sampling will demonstrate the impact of this project on water quality.

Clear Creek RCPP (FY16); \$425K (State); Lead Partner: Highland Soil and Water Conservation District; Participating State(s): Ohio. This innovative project will implement a series of agricultural best management practices to protect water quality, improve soil health and provide habitat for at risk species in the Clear Creek Watershed. It will also help protect the City of Hillsboro's drinking water supply and provide prescribed habitat for Ohio has diminished Bobwhite Quail population and native pollinators.

Project goals for conservation practices include the installation of 3,000 acres of cover crops, 3,000 acres of nutrient management, 6 acres of grassed waterways, and certain prescribed wildlife management practices that improve habitat for targeted species. Implementation of BMPs will be prioritized upstream of the City of Hillsboro's drinking water intake and within the wildlife focus area for Bobwhite Quail.

Jacoby Creek Partnership (FY18); \$1.44M (Critical Conservation Area-Mississippi River Basin); Lead Partner: Tecumseh Land Trust; Participating States: Ohio (Lead State). Tecumseh Land Trust (TLT) and its partners aim to improve water quality in the Little Miami River's Jacoby Creek and Yellow Springs Creek sub watersheds, to demonstrate and document the benefits of best agricultural conservation practices for water quality, aquatic and wildlife habitat, and soil health. The Jacoby Creek Partnership also seeks to permanently preserve prime farmland and well-functioning stream corridors.

Greater Cleveland Reforestation Project (FY18); \$770K (State); Lead Partner: Cuyahoga Soil & Water Conservation District; Participating States: Ohio (Lead State). The Cuyahoga Soil & Water Conservation District and its partners will address water quality degradation and air quality impacts through the Greater Cleveland Reforestation Project. Every summer, Clevelanders lose beach days due to fecal bacterial contamination stemming from the antiquated combined sewer overflow system that discharges raw sewage into the lake after major rain events. In addition, Cleveland tree canopy cover is down to 19 percent due to disease and other issues. Subsequently, Cleveland has been rated as the ninth worst metropolitan area for air quality. This project will use Environmental Quality Incentives Program funds for site preparation and tree/shrub establishment to address both water and air quality.

Spotted Knapweed Treatment for Ohio Producers (FY18); \$563K (State); Lead Partner: Morgan Soil & Water Conservation District; Participating States: Ohio (Lead State). The Spotted Knapweed Treatment for Ohio Producers (STOP) Project will focus on the treatment and control of spotted knapweed and other invasive weeds in four Appalachian counties in Southeastern Ohio. These counties have each experienced an exponential spread of spotted knapweed along State, county, township, and private roadways, which led to its severe invasion into surrounding privately owned pastures and hay lands. Through this project, the Morgan County Soil and Water Conservation District and its partners will provide Environmental Quality

Incentives Program financial assistance to producers to address soil erosion, water quality degradation, excessive plant pest pressure and degraded plant condition to restore degraded pastures and hay land.

OKLAHOMA

Elk City Lake Regional Conservation Partnership Program (RCPP) Project (FY14/15); \$1.4M (State); Lead partner: Oklahoma Conservation Commission. This project will pool State and NRCS resources to address water quality concerns in the Elk City Lake Watershed. The City of Elk City for recreation now operates Elk City Lake, built in 1970 for flood control. It is impaired by excess turbidity, and recent blue green algae blooms and fish kills in the Lake has increased its priority for rehabilitation. Oklahoma will use a combination of State and EPA 319 funds to provide project staff for education and outreach and provide technical support to landowners. In stream water quality monitoring will be used to evaluate program performance, along with watershed modeling and soil carbon sequestration verification. Cost-share assistance from Oklahoma, 319 and NRCS, will be used to install conservation practices focused on reducing pollutant loading from grazing lands and cropland in the watershed.

Oklahoma Healthy Soils (FY14/15); \$100K (State); Lead partner: The Oklahoma Association of Conservation Districts. Agriculture producers and partners voluntarily drive the Oklahoma Healthy Soils project. The project will focus on the implementation of soil health practices on cropland with an emphasis on establishing cover crop on-farm trials across the State of Oklahoma. Historically underserved producers will be targeted for up to 20 percent of the on-farm trials. Demonstrating cover crop plantings on a field scale has the potential to deliver practical benefits to producers by evaluating field level data over a variety of soil types. Many producers already engaged in no-till or those interested in converting to no-till, have the potential to incorporate cover crops into their rotation. The Southern Plains Regional Climate Hub will assist in loaning scientific equipment to the project for testing and monitoring. The project will build upon ongoing research into practical concerns facing producers who may be contemplating incorporating cover crops into their agronomic production systems.

Improving Water Quality through the Implementation of Forestry Practices and the Assessment of Riparian Systems in Kansas Priority Watersheds (FY14/15); \$13M (National); Lead partner: Kansas State University. Surface water reservoirs in Kansas and Oklahoma have lost 40 percent of their storage capacity and are experiencing frequent algal blooms, owing mainly to stream bank erosion. By implementing forestry best management practices on more acres and creating a protection framework for remaining riparian forests in high-priority watersheds, this project will help sustain reservoir storage and wildlife habitat, improve the drinking water supply, and increase recreation opportunities. The contributing partners have a strong track record in making water quality improvements and working with producers.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead State) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment;

habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a US Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

Innovative Tribal Conservation and GHG Management (FY16); \$1.8M (National); Lead Partner: Intertribal Agriculture Council; Participating State(s): Alaska, Nebraska, New Mexico, Oklahoma & South Dakota (lead State). As the impacts of climate change become more pronounced in Indian country, Native nations and Indian landowners are faced with the challenge of implementing resource conservation land management systems that incorporate greenhouse gas management activities, also known as carbon farming practices. As greenhouse gas management services gain value in environmental markets, it is vital that historically underserved Tribal conservation programs and American Indian farmers and ranchers develop conservation projects that demonstrate causal relationships between soil quality and ecosystem production functions such as carbon sequestration. This project will address the need for conservation stewardship projects on American Indian lands that integrate a carbon farming production possibilities frontier component. The project area will be national in scope covering a diversity of Tribal rangeland landscape types including Southwest Alaska, prairie grassland and Colorado River Basin regions. The project includes developing and implementing soil amendment, forestry and grazing management Conservation Activity Plans (CAP) and Conservation Stewardship Plans (CSP) on pilot project sites. The CAP/CSPs will establish a framework for inventorying the existing baseline carbon sequestration rate and propose cost-effective conservation practices to achieve multiple environmental quality and economic development goals. One of the anticipated outcomes from this project will be the development of carbon offsets from soil amendment and grazing land and livestock management activities. We will engage private investment in those pilot project sites that both meet investors and credit buyers' interest in charismatic high-quality carbon offsets, and Tribes' interest in promoting appropriate conservation practices and economic development on Indian lands.

Native Grazing Lands Protection in the Plains (FY16); \$3.6M (National); Lead Partner: The Nature Conservancy; Participating State(s): Kansas (lead State) & Oklahoma. Native grasslands of the central Great Plains are some of the most majestic yet least conserved landscapes in North America. The project area for this proposed effort encompasses the most intact native grazing lands remaining in Kansas and Oklahoma, which provide critical habitat for a number of rare and sensitive species, including the lesser prairie-chicken. By applying conservation easements and practices on native grazing lands, this project aims to prevent habitat fragmentation and conversion to non-grazing uses, improve wildlife habitat and reduce the spread of invasive species. One innovative component of this proposal will include working with Kansas State University to better quantify the changes in stream base flows following eastern red cedar removal in adjacent riparian areas and uplands. It is anticipated that approximately 12,000 acres of grazing lands will be protected via conservation easements and EQIP conservation practices will be delivered on over 40,000 acres.

OREGON

North Willamette Valley Upland Oak Restoration Partnership (FY14/15); \$2.2M (State); Lead partner: Yamhill Soil and Water Conservation District. This project will provide investments to restore oak and prairie habitats in Yamhill and Polk counties to improve conditions for critical wildlife. Historic oak, prairie and savanna habitats have declined in the Willamette Valley and efforts to restore this land will aid in the recovery of several endangered species, including the Fender's blue butterfly. This project will strengthen existing partnerships and facilitate the implementation of numerous regional conservation plans and priorities.

White River Irrigation Efficiency and Stream Flow Restoration Project (FY14/15); \$2M (CCA); Lead partner: Wasco County Soil and Water Conservation. Partners for this project in Oregon have identified specific goals, already planned through a collaborative approach in the county, including the installation of six unscreened fish passage barriers, saving acre feet of water annually, and restoring flows to miles of stream, of which 15 miles of stream were over-allocated and seasonally dewatered. Identified activities will increase water quality, improve irrigation efficiency, and improve fish habitat in this critical area.

North Slope Ochoco Holistic Restoration Project (FY14/15); \$5M (CCA); Lead partner: Wheeler Soil and Water Conservation District. The Wheeler Soil and Water Conservation District in Oregon has a long-standing, collaborative program that focuses on the improvement and protection of natural resources for the betterment of agricultural producers, the local community, and fish and wildlife. Using an innovative GIS approach to target treatment areas, the partners will implement a coordinated and directed effort to expand upon the current work being done to address key natural resource concerns in a ridge-top to ridge-top manner. EQIP, ACEP, and CSP will be used to accomplish objectives including pre-commercial thinning, irrigation efficiency projects, conservation easements, juniper removal, range restoration, spring developments, riparian restoration, and critical habitat restoration. Success will be gauged by the evaluation of measurable objectives and the expansion of established monitoring programs.

The Oregon Model to Protect Sage-Grouse (FY14/15); \$9M (National) Lead partner: Oregon Association of Conservation Districts. A thirty-year programmatic Candidate Conservation Agreement with Assurances (CCAA) for greater sage-grouse—which is a mechanism to maintain or improve habitat and assist producers in meeting or avoiding the need for regulatory requirements under the Endangered Species Act—has been developed for private lands in Harney County, Oregon, and similar agreements are currently being developed for the remaining six counties in Oregon within the range of sage-grouse. NRCS conservation practices are a critical piece to ensure producers have the tools and financial assistance they need to successfully meet the terms of the CCA. The project has a goal to reach producers and partners and provide additional technical and financial assistance, as well as monitoring support.

Unlocking Carbon Markets for NIPF Landowners in the Pacific Northwest (FY14/15); \$1M (National) Lead partner: Pinchot Institute. By aggregating landowners into groups, the American Carbon Registry (ACR) reduces transaction costs for carbon credit trading and allows small producers to participate. This project will target on-industrial private forest landowners in Oregon and Washington who wish to participate in a regional carbon crediting program and who possess lands in NRCS and State priority areas as defined in regional conservation strategies.

Targeted parcels will be between 75 and 4,000 acres in size, with the majority being less than 250 acres. NRCS and partner assistance will cover much of the initial expense of participating in carbon projects, specifically the development of a forest management plan and subsequent implementation of pre-commercial thinning to enhance carbon stocks.

Klamath-Rogue Oak Woodland Health and Habitat Conservation Project (FY14/15); \$3M (National); Lead partner: Lomakatsi Restoration Project. Many at-risk and listed species depend on quality oak woodlands that are threatened by conifer encroachment, densification, and severe wildfires in this project area, covering portions of Oregon and California. Working with landowners, including historically underserved producers, and using a sound, science-based approach, the partners will target high-priority acres recently identified in a Conservation Implementation Strategy to preserve, enhance, and restore the structural diversity, ecological function, and overall health and persistence of oak habitats and their watersheds.

Alder Slope Cooperative Partnership (FY16); \$1.1M (State); Lead Partner: Willowa Soil & Water Conservation District Participating State(s): Oregon. Partners will address irrigation efficiency and forest health in high priority Alder Slope areas. The irrigation portion of this project will increase irrigation efficiency by 15 percent, reduce water waste and generate power in the Alder Slope geographic priority area. A catastrophic fire on Alder Slope would result in negative resource impacts to forest health, soil conditions and endangered species such as bull trout, steelhead and salmon. The forest health portion of this overall project will create a defensible space from wildfire between public forests and private non-industrial forestland by reducing the density of overstocked stands, manipulating fuel arrangement, forest structure and substantially reducing the fuel load by an estimated 99,000 tons of fuel. The U.S. Forest Service will do the same on the federally owned lands to increase the defensible space.

Dairy-McKay Degraded Riparian Ecosystems (FY16); \$936K (National); Lead Partner: Tualatin Soil and Water Conservation District; Participating State(s): Oregon. During the past 10 years, the Tualatin SWCD and its partners have worked with over 70 private landowners to restore 39 miles of stream throughout the larger watershed using unique riparian restoration programs. Tualatin SWCD and its partners have ranked the Dairy-McKay and Middle Tualatin watersheds, sub-watersheds of the Tualatin River Watershed, as high priority for conservation treatment. This project proposes to work on land along priority stream reaches within this focus area to implement practices to restore fish and wildlife habitat that utilize the streams and riparian areas, increase efficient use of irrigation water, and decrease nutrients and pesticides in surface and ground waters. Objectives by 2021 are to: establish riparian forest buffers along 20 miles of priority stream reaches bordering agricultural lands; improve irrigation water use efficiency on 170 acres along priority stream reaches; decrease manure runoff from five livestock operations; and restore 20 acres of wetland in floodplain sites bordering priority stream reaches.

Grande Ronde Watershed Conservation Partnership (FY16); \$3.7M (CCA); Lead Partner: Union County Conservation District; Participating State(s): Oregon. The Grande Ronde Watershed Conservation Partnership is a diverse group with a 23-year history of collaboration and working with landowners to address local conservation priorities related to watershed health and fish and wildlife habitat. This partnership will implement critical watershed-scale projects addressing soil erosion, sedimentation, and water quantity and quality contributing to the

recovery of ESA listed salmon, steelhead and bull trout populations. Project success will be monitored and demonstrated through irrigation water management analysis, in-stream flow measurements, vegetative assessment surveys and fire danger assessments. Fish distribution and quantitative habit surveys will be conducted annually. Site visits for all upland projects will be conducted to ensure project implementation success, operations and maintenance.

High Desert Drought Resilient Ranching (FY16); \$1.3M (National); Lead Partner: Trout Unlimited; Participating State(s): Idaho (lead State), Nevada & Oregon. Nevada, Idaho and Oregon ranchers have experienced a severe drought for the majority of years in the last 30-year cycle. This project will help reduce drought impacts to wildlife and livestock in the Owyhee watershed and adjacent communities in two lesser watersheds, which have been historically underserved. Project partners will work together to develop on-the-ground projects that keep water in streams longer for both livestock and wildlife. Project area selection will emphasize State and private land that currently provides habitat for three focal species: redband trout, greater sage-grouse and Columbia spotted frogs or is adjacent to known populations and has the capacity to restore habitat for these species.

Lower Columbia Watershed Partnership (FY16); \$3M (CCA); Lead Partner: Columbia Soil and Water Conservation District; Participating State(s): Oregon. Through the Watershed Authority PL-566 and locally led contracting, this partnership will be able to involve more landowner participants and make measurable improvements to the health and viability of the Lower Columbia River Watershed. The project will focus on water quality degradation, with an emphasis on improving excessive sediment in surface waters by designing and implementing several stream bank protection projects as well as increasing vegetation to minimize excess nutrients and pesticides from getting into the stream systems. These actions would also assist in improving another resource concern, inadequate habitat for fish and wildlife. By bringing different expertise together in one specific regional area, this project can make major strides towards improving the habitat and water quality in the Lower Columbia Watershed.

SONEC Working Wet Meadows Initiative (FY16); \$2.6M (National); Lead Partner: Intermountain West Joint Venture; Participating State(s): California & Oregon (lead State). The Southern Oregon/Northeastern California (SONEC) region is one of the most important areas for migratory waterbirds in North America, supporting approximately 70 percent of the Pacific Flyway's wetland-dependent migratory bird population (>six million birds). These birds are attracted to SONEC because of the food resources provided by privately owned, flood-irrigated wet meadow habitats on working ranchlands within historic floodplains. However, these habitats are increasingly threatened by changing irrigation practices, aging water conveyance infrastructure and fragmentation. To address at risk species habitat, water quantity and drought resource concerns, this project will strategically utilize Farm Bill programs and partner contributions to conserve nearly 25,000 acres of wet meadow habitats and improve the resiliency of working ranchlands to drought. Specifically, the project will improve the sustainability of wet meadows for migratory birds by: enhancing infrastructure and improving the efficiency of flood-irrigation on critical wet meadows; acquiring conservation easements to remove fragmentation risk; and enhancing important foraging habitat for wetland-dependent migratory birds.

Water Quality and Quantity in the Klamath Basin (FY16); \$7.6M (National); Lead Partner: Trout Unlimited, Inc.; Participating State(s): Oregon. The Klamath Basin is well known for water related issues, as agricultural and environmental interests compete for an over allocated resource. The primary natural resource concerns in the basin are limited instream flows and external loading of nutrients into Upper Klamath Lake, problems that persist downstream through the mainstem Klamath River. Reduced instream flows contribute to elevated summer stream temperatures, and thereby limit the amount of cold water spawning and rearing habitat for a number of native fish species, including bull trout and redband trout. Lake-fringe wetlands and riparian buffers, which historically provided extensive nutrient filtration and critical habitat for endangered sucker, are now limited. Irrigators in the Klamath Basin have been hit hard by many years of drought, and it is clear that there is currently not enough water to meet irrigation needs and simultaneously address the natural resource concerns described above. The project goals are to: improve water quality; increase protected instream flows in tributaries and flowing into Upper Klamath Lake; increase drought resilience of producers and natural systems; and improve instream, wetland and riparian habitat for federally listed species. Tangible, measurable results of the innovative program activities will be tracked, including in-stream water quality, acre-feet of water saved through irrigation efficiencies, pasture condition scores, and acres of restored wetlands and proper functioning riparian buffers.

Three Sisters Irrigation District Innovation (FY17); \$990K (Critical Conservation Area—Columbia River Basin); Lead Partner: Three Sisters Irrigation District; Participating States: Oregon (Lead State). The Three Sisters Irrigation District in Oregon with government, private industry and nonprofit partners will implement multiple innovative projects to mitigate drought, improve water quality/quantity and improve fish habitat. The project includes the completion of piping Three Sisters Irrigation District Watson McKenzie Main Canal with two HDPE side-by-side buried, resulting in the conservation of 800-acre feet of annual canal seepage loss. The on-farm component of this project will encompass 61 projects, over 1500 acres, in the Upper District. The program will allow farmers in the Upper District to pipe private laterals, thereby providing access to pressurized water from the District's pipeline. Pressurized water will eliminate electrical pumps that use over 2.5 million kWh of electricity annually. A feasibility study will be conducted to determine the potential for 60 on farm hydro net metering projects. This project will allow TSID to mitigate drought by piping the District.

Conservation of Soil Health in Wallowa County, Oregon (FY17); \$3.19M (National); Lead Partner: The Nature Conservancy. Participating States: Oregon (Lead State). Through the conservation project, the Nature Conservancy and partners will maintain and improve soil health in targeted areas of Wallowa County, Ore., through innovative on-farm practices and permanent easements. The project capitalizes on the strengths of three well-respected organizations who have a history of working with local producers, the Natural Resources Conservation Service and each other. The project will target the use of NRCS financial assistance to address multiple resource concerns, including soil health, habitat, water quantity/quality and climate change resilience.

Blue Mountains Vegetative Health Initiative (FY17); \$1.19M (State); Lead Partner: Grant Soil and Water Conservation District; Participating States: Oregon (Lead State). The Blue Mountains Vegetative Health Initiative will improve forest conditions, increase streamflows and improve instream listed fish habitat on private lands near the Malheur National Forest in Oregon.

The project will be modeled after the Blue Mountains Forest Partners, a key partner in this effort, after their treatment of Malheur National Forest timber areas for fire resiliency. The project partners expect to complete two thousand acres of pre-commercial thinning in conifer stands and one thousand acres of juniper removal over a five-year period. The partners will prioritize treatment area using a GIS-based selection process similar to the one successfully developed by the U.S. Forest Service. Finally participating landowners and partners will develop prescribed grazing to ensure long-term management of the treatments.

PENNSYLVANIA

Cerulean Warbler Appalachian Forestland Enhancement (FY14/15); \$8M (National); Lead partner: American Bird Conservancy (ABC); States: Ohio, Kentucky, Pennsylvania, Maryland, and West Virginia. To address habitat loss, soil health, and water quality, the project will focus on suites of conservation practices intended to enhance acres of forest habitat on private lands for cerulean warblers, an at-risk species, and associated species. The Nature Conservancy has committed to enrolling additional acres into easements, and the American Chestnut Foundation, the Appalachian Regional Reforestation Initiative, and Green Forests Work will reforest acres of reclaimed mine lands to biodiverse forest.

Delaware River Watershed Working Lands Conservation and Protection Partnership (FY14/15); \$13M (National); Lead partner: American Farmland Trust. This project originated from a rigorous watershed-wide assessment and prioritization process initiated by key stakeholders in the Delaware River Basin (DRB) in 2012 by the William Penn Foundation to define and address water quality and quantity concerns. To augment the implementation of conservation systems through NRCS assistance, the National Fish and Wildlife Foundation and the Open Space Institute will administer competitive grant and capital programs to award funds to important, well-vetted restoration and land protection projects. Private funding will provide streamlined access to some practices and encourage participation by some who prefer not to use government funding. Through these mechanisms, the partners anticipate working with more farmers and forest landowners on more acres in this important region.

Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay (FY14/15); \$7M (CCA-Chesapeake Bay Basin); Lead Partner: National Fish and Wildlife Foundation. A large, diverse group of partners will use a “raise the bar” approach that rewards agricultural producers in Virginia, West Virginia, and Pennsylvania for implementing higher impact, priority conservation practices in targeted sub-watersheds and counties of the Chesapeake Bay Watershed. The approach will address both water quality degradation and inadequate habitat for fish and wildlife in the CBW through a combination of comprehensive conservation planning, conservation practice implementation, and strategic habitat restoration. A new concept of conservation delivery is proposed: the conservation brokerage, where agency-neutral funding is used to best address resource concern. The partners will also use cost-benefit targeting to focus financial assistance dollars.

Productive Farms and Clean Streams for Berks and Chester Counties (FY14/15); \$1.5M State; Lead partner: Stroud Water Research Center. Using substantial contributions from local partners, this project will focus on improving water quality in Berks and Chester Counties. The project’s purpose is to reduce nutrients and sediments in surface and ground water and

improve in-stream fish and wildlife habitat. A comprehensive approach will use various methods to provide cost-effective conservation practices to farmers to help address resource concerns such as water quality, soil erosion, fish and wildlife habitat and air quality.

Mason-Dixon Working Lands Partnership: (FY14/15); \$1.5M, CCA-Chesapeake Bay Basin; Lead Partner: Alliance for the Chesapeake Bay. Partners will bring substantial financial resources to areas of Pennsylvania and Maryland within the Chesapeake Bay to overcome common barriers to landowner adoption of conservation systems, including limited outreach, lack of technical assistance and funding, and limited coordination among programs and private markets. A focus on soil health and resilience as well as harnessing natural systems including riparian forest buffers, restored wetlands, and healthy forests—will not only reduce nutrient loading to the Chesapeake Bay but also improve water quality in high-value streams and water bodies in the area for the benefit of fisheries, drinking water supply, and recreation.

Genesee River Sediment and Phosphorus Reduction (FY16); \$3M (CCA); Lead Partner: New York State Soil & Water Conservation Committee; Participating State(s): Pennsylvania & New York (lead State). The Genesee River Sediment and Phosphorus Reduction project will address pollutants entering Lake Ontario. Sediment and phosphorus loading from the Genesee River has been identified as having substantial negative impacts on near-shore waters and aquatic habitat and possibly impacting human health through harmful algal blooms. The Genesee River Watershed is heavily farmed with 52 percent of the land base being in agricultural production. Through this RCPP Project, EQIP funding will be used to address phosphorus laden sediment inputs entering the Genesee River directly or through tributaries. Projects will focus on soil health and riparian corridor management, as well as, sediment control practices on lands adjacent to watercourses. This project will work with an array of State and local programs to remove the impaired portions of the Genesee River targeted for TMDL development on the CWA Section 303(d) list.

Soil Health: Improving Land, Water and Profitability (FY17); \$397K (State); Lead Partner: Chesapeake Bay Foundation; Participating States: Pennsylvania (Lead State). Through the Improving Land, Water and Profitability project, the Chesapeake Bay Foundation and public-private partners will build farmer management capacity to implement strategic farm conservation practices that promote soil health (i.e. maximize in soil organic matter, soil organisms, and nutrients) and improving “whole-farm” conservation performance. While addressing other resource concerns of the participating farms, the partners will focus on implementing high-level, innovative conservation stewardship practices on 1,000 acres annually for three years, with emphasis on watersheds in Clinton and Centre Counties in Central Pennsylvania. Project objectives include better soil health management practices to improve farm economic viability through reduced input costs and productivity gains associated with advanced management of soil as a living ecosystem, while also reducing soil erosion and nutrient loss. Partners will encourage farmers to consider implementing soil management practices through outreach and educational activities such as on-farm demonstrations, field days, educational materials, and on-farm research/monitoring outcomes. Additionally, in an effort to provide individualized solutions and reduce barriers to implementation, partners will construct specific mentor teams to provide practical advice for farmers throughout the planning and operational phases of implementing conservation practices.

CCCD Partnership for Chesapeake Bay Water Quality (FY18); \$3.6M (Critical Conservation Area-Chesapeake Bay Watershed); Lead Partner: Chester County Conservation District; Participating States: Pennsylvania (Lead State). The Chester County Conservation District (CCCD) and its partners will address a surplus in Farm Bill financial assistance applicants in the Chesapeake Bay Watershed, by working closely with NRCS and private agricultural consultants to develop plans and installing conservation practices. As part of the RCPP ranking process, applicants will be given a higher score based on their willingness to implement or maintain a stream buffer, and commitment to work with one or more of the listed partners to develop plans and/or best management practices (BMPs). The CCCD's RCPP program will conduct site visits with each landowner after the contract is complete to discuss continued operation and maintenance of their conservation practices, and by incentivizing private consultants to assist in the contracting process by writing comprehensive nutrient management plans.

Implementing BMP's & CNMP's on PA Preserved Farms (FY18); \$6.37M (Critical Conservation Area-Chesapeake Bay Watershed); Lead Partner: Pennsylvania Department of Agriculture-Bureau of Farmland Preservation; Participating States: Pennsylvania (Lead State). The Pennsylvania Department of Agriculture and its partners will identify producers, including dairy farms, to work with NRCS conservation planning staff for installing conservation practices and implementing comprehensive nutrient management plans. Highest priority will be given to farmland preservation program applicants who will complete conservation practices as part of an approved conservation plan. Second priority will include farms already preserved; third priority will include any farm located in the focus area regardless of farmland preservation status. This proposal builds on successful projects which invested in livestock manure management practices on farms in high-priority landscapes. The project will assist producers to ensure that livestock and crop production are compatible with natural resource protection.

RHODE ISLAND

Long Island Sound Watershed RCPP (FY14/15); \$10M (National); Lead partner: Connecticut Council on Soil and Water Conservation. Excess nutrients have been identified as the primary driver of hypoxic conditions in Long Island Sound and are also impacting upland water resources within the watershed, which encompasses areas of Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. This project will develop a comprehensive, whole-farm management certainty program for farmers in the area and use both working lands and easement programs to improve soil health and nutrient management, establish community resiliency areas with a focus on enhancing riparian areas, and institute a land protection program to protect agricultural and forestry areas.

Partners Protecting Source Waters of Rhode Island (FY14/15); \$600K (State); Lead partner: University of Rhode Island. The long-term goal of the project is to improve water quality and wildlife habitat in Rhode Island through the expanded adoption of NRCS riparian area management practices, with special attention focused on the underutilized Riparian Forest Buffer practice. The project will make use of prior assessments of impaired stream crossings to create extensive, continuous stream reaches with quality habitat and connectivity. A new tool will be developed for designing functional riparian buffers with varying widths depending on the slope, soils and existing land use. The project will increase the number of conservation practices

on agricultural and forest land resulting in benefits to soil health, water quantity and wildlife habitat in Rhode Island.

Enhancing Soil Health in the Ocean State (FY16); 600K (State); Lead Partner: Rhode Island State Conservation Committee (RISCC); Participating State(s): Rhode Island.

Healthy soils are the cornerstone to sustainable food production and clean waters, and this project intends to convey the importance of healthy soils while assisting RI agricultural producers with the first steps toward improving their farm's soil health. Partners will develop criteria for Soil Health Management Conservation Activity Plans (SHMcaps) and choose two pilot farms. SHMcaps will include criteria that standardizes a format for summarizing results from the farm's soil health testing, identifies various systems of BMPs that will improve the farm's soil & plant health, reduce soil erosion and improve water quality and provides implementation schedules that meet the farm's objectives. Implementation of the SHMcap will resolve pinpointed soil health limitations and ultimately enhance farm production and soil function, while improving water quality throughout the State.

The Young Forest Initiative for At-Risk Species (FY16); \$5.2M (National); Lead Partner: Wildlife Management Institute; Participating State(s): Connecticut, Massachusetts, Maine, New Hampshire (lead State), New York, Rhode Island & Vermont. This project will help increase technical and financial assistance to non-industrial private forestland owners who implement practices outlined in the Environmental Quality Incentives Program that result in an increase in the quantity and quality of young forest habitats. This support is critical, since young forest habitat is necessary to meet the critical needs of several recognized at-risk species.

Rhode Island Farm Conservation Plans (FY17); Proposed NRCS Investment: \$600K (State); Lead Partner: RI State Conservation Committee; Participating States: Rhode Island (Lead State). Through the Rhode Island Farm Conservation Plans project, the Rhode Island State Conservation Committee, local conservation districts and partners will assist local farmers with farm conservation plans that address natural resource concerns. The conservation plans will entitle the landowners to qualify as a farm under the FFOS current use tax program and increase landowner participation in Natural Resources Conservation Service technical and financial assistance programs.

RI Farm Conservation Implementation (FY18); \$800K (State); Lead Partner: Rhode Island State Conservation Committee; Participating States: Rhode Island (Lead State). The Rhode Island State Conservation Committee and its partners will promote and encourage implementation of best management practices on statewide agricultural lands and monitor the impacts on RI's surface water quality between 2018 and 2022. This project will: increase the implementation of agricultural best management practices statewide, improve water quality, expand the capacity of RI NRCS with focused technical assistance from CD Agricultural Technicians, emphasize under-utilized water quality and soil health practices for small-scale agriculture, pilot a one-on-one, on-site composting training for livestock owners in the Scituate Reservoir Watershed and increase non-point source pollution mitigation throughout the State at a local level.

SOUTH CAROLINA

Securing Private Working Forests to Benefit Longleaf Pine, Threatened and Endangered Species, and Military Readiness (FY14/15); \$12M (CCA); Lead partner: U.S. Endowment for Forestry and Communities. The partners will target acres of working longleaf in South Carolina, Georgia, Florida, and Louisiana, with a greater than one-to-one match from the Department of Defense and other partners. Protecting longleaf forest and maintaining lands in and surrounding up to ten military installations— each with individual goals—will support existing longleaf and gopher tortoise efforts while also maintaining critical land areas around military bases.

Improving Energy Efficiency in South Carolina Animal Facilities and Greenhouses: A Partnership for Education, Outreach, and Technology Adoption (FY14/15); \$1.2M (State); Lead partner: Clemson University. A partnership between Clemson University and the South Carolina Department of Natural Resources will be developed through this project, and a team of professionals will be assembled that will provide the outreach and the technical assistance needed to help South Carolina farmers with animal and plant production buildings, access assistance funds to adopt energy efficient technologies and improve profitability. Rising energy costs, particularly the cost of electricity and LP gas, have more than doubled since 2000, resulting in sharp increases in energy costs for farms that produce poultry, swine, dairy and plants in greenhouses.

African American Forest Restoration and Retention (FY16); \$1.6M (CCA); Lead Partner: U.S. Endowment for Forestry and Communities; Participating State(s): Alabama, North Carolina & South Carolina (lead State). Through an existing partnership, the Sustainable Forestry and African American Land Retention Program (SFLR), this project will address degraded plant conditions and enhancement of wildlife habitat by supporting forest restoration on African American-owned forestlands in high poverty regions of the Southeastern United States. In this region, African American family-owned forests tend to be degraded due to lack of pro-active forest management. During its 30-month pilot phase, the SFLR program was effective at building a bridge of trust between landowners and USDA programs supporting 157 EQIP applications for forestry practices with more than \$1 million in EQIP contracts directed to African American project participants. The project will support landowners through direct provision of forestry, land tenure (heirs' property) and technical services as well as the brokering of services from other private and government providers including forestry commissions, consulting foresters, extension services and conservation organizations.

Upstate Land Preservation Partnership (FY18); \$770K (State); Partner: Upstate Forever; Participating States: South Carolina (Lead State). The Upstate Land Preservation Partnership project will lead a concerted effort, with the help of NRCS, to protect up to 930 acres of high priority farmlands through conservation easements. This area is the fastest growing area east of Texas, so project partners are seeking an effective solution for saving remaining farmland. The Oconee County Conservation Bank, the Keowee Toxaway Habitat Enhancement Program, and the North Saluda Watershed Protection Fund, along with local foundations, represent sustainable grant sources engaged to match Agricultural Conservation Easement Program financial assistance and technical assistance funds.

SOUTH DAKOTA

Central Big Sioux River Water Quality Project (FY14/15); \$2M (State); Lead partner: Minnehaha Conservation District. The primary resource concern of the Central Big Sioux River Water Quality Project is the degradation of surface water quality from bacteria, nutrients and sediment. The project will assist landowners and producers with improving water quality by avoiding, controlling, and trapping nutrient and sediment runoff, and reducing agricultural non-point source pollution within the watershed.

Red River Basin of the North Flood Prevention Plan (FY14/15); \$12M (CCA); Lead Partner: Red River Retention Authority. This project uses all of NRCS's authorities—EQIP, ACEP, CSP, and PL-566—to reduce flooding, ponding, and excess water on farm lands, thereby increasing the resiliency of agriculture, as well as to reduce nutrient loads in this region of Minnesota and North Dakota. Once completed, six to eight discreet projects will store approximately 50,000 acre-feet of flood water. The long-standing partnership across State boundaries includes the Red River Retention Authority, which has the power to raise revenue.

Innovative Tribal Conservation and GHG Management (FY16); \$1.8 M (National); Lead Partner: Intertribal Agriculture Council; Participating State(s): Alaska, Nebraska, New Mexico, Oklahoma & South Dakota (lead State). As the impacts of climate change become, more pronounced in Indian country, Native Nations and Indian landowners are faced with the challenge of implementing resource conservation land management systems that incorporate greenhouse gas management activities, also known as carbon farming practices. As greenhouse gas management services gain value in environmental markets, it is vital that historically underserved Tribal conservation programs and American Indian farmers and ranchers develop conservation projects that demonstrate causal relationships between soil quality and ecosystem production functions such as carbon sequestration. This project will address the need for conservation stewardship projects on American Indian lands that integrate a carbon farming production possibilities frontier component. The project area will be national in scope covering a diversity of Tribal rangeland landscape types including Southwest Alaska, prairie grassland and Colorado River Basin regions. The project includes developing, implementing soil amendment, forestry, grazing management Conservation Activity Plans (CAP), and Conservation Stewardship Plans (CSP) on pilot project sites. The CAP/CSPs will establish a framework for inventorying the existing baseline carbon sequestration rate and propose cost-effective conservation practices to achieve multiple environmental quality and economic development goals. One of the anticipated outcomes from this project will be the development of carbon offsets from soil amendment and grazing land and livestock management activities. We will engage private investment in those pilot project sites that both meet investors and credit buyers' interest in charismatic high-quality carbon offsets, and Tribes' interest in promoting appropriate conservation practices and economic development on Indian lands.

Lewis & Clark/Lower James River WQ Project: (FY16); \$2.7M (State); Lead Partner: James River Water Development District; Participating State(s): South Dakota. This project will assist land owners and producers with saline and sodic problem soils; improving water quality by avoiding, controlling and trapping nutrient and sediment runoff; reducing agricultural non-point source pollution; improving grassland and riparian area conditions and improving soil health and wildlife habitat within the watersheds. The South Dakota Department of Environment will develop a monitoring program for the project to assess current river and watershed conditions and gauge the impacts of past and planned conservation practices.

Prairie Pothole Working Lands Partnership: (FY17); \$4.1M (Critical Conservation Area—Prairie Grasslands Region); Lead Partner: Ducks Unlimited, Inc, Participating States: South Dakota (Lead State). Through the Prairie Pothole Working Lands Partnerships, Ducks Unlimited and over twenty conservation partners will improve water quality, soil health and wildlife habitat within the Mississippi River watershed through working lands solutions for agricultural producers at local scales. The project will provide additive acres to Federal EQIP, ACEP, and CSP financial assistance programs while utilizing additional partner contributions and programs to leverage Federal funds and promote program opportunities. Through EQIP, cost-sharing practices to promote the retention of expired CRP contracts into “working grasslands” projects will be prioritized. Under CSP, partners will provide incentive payments to producers who experiment with fall seeded cover crops, small grain crops in problem soils and protect cropped wetlands from drainage. By leveraging additional funds, the ACEP program will provide easement payments and cost share for practice implementation on enrolled properties. The project will also utilize existing local partnership programs to provide incentive payments to landowners who voluntarily conserve wetlands.

James River Watershed (FY17); \$2.7M (State); Lead Partner: Ducks Unlimited, Inc.; **Participating States: South Dakota (Lead State).** Ducks Unlimited and ten diverse partners will offer innovative cost-share assistance and incentives to increase the quantity and quality of certain conservation practices being applied within the James River Watershed. The partners will promote sustainable conservation practices with landowners through targeted application of National Resources Conservation Service financial. On a broader scale, the partners will establish a series of "long-term demonstration farms" in key landscapes that will be instrumental in changing attitudes towards various conservation farming strategies being promoted. The project partners expect the work to improve water quality, soil health, wildlife habitat and long-term sustainability of the James River Watershed.

TENNESSEE

Providing financial and technical assistance services to address soil & water resource concerns in 303(D) Listed Watersheds of Tennessee (FY14/15); \$1.2M (State): Lead partner: State of Tennessee, Department of Agriculture. This project seeks to use RCPP funds to expand financial and technical assistance services provided across TN to address resource concerns & improve quality of Tennessee waters. The RCPP funds awarded will finance cost-share on conservation projects identified as contributing to the watershed being listed on the State 303(d) list. Outside technical assistance will primarily come from Technical Service Providers listed in NRCS’s “TechReg”, but contracts with other qualified professionals such as professional engineering firms may be used. Pre-established pay rates for services will be developed for applicable NRCS conservation practice planning, design and construction inspection. The plan is to focus the additional financial and technical assistance resources on projects located within watersheds that are listed as impaired on the 2012 303(d) list. This listing identifies more than 10,000 stream miles across Tennessee that are impaired from some agricultural concern; such as, crop production, livestock impacts, pasture grazing, etc. Treatment of primary resource concerns will address and minimize impacts from siltation/sedimentation, nutrients and pathogens. Success will be measured in the number of projects implemented, and the whole or partial de-listing of streams from subsequent 303(d) lists issued by the State environmental regulatory agency.

Increasing Row Crop Sustainability in the Obion River Watershed (FY14/15); \$400K (State); Lead partner: University of Tennessee Extension. This project is to promote adoption of agricultural Best Management Practices (BMPs) in the North Fork Obion River Watershed that will ultimately reduce nutrients and sediment from degrading the quality of our State's surface waters and ultimately the Mississippi River Basin. Secondary resource concerns to be addressed include: degraded plant condition, soil erosion and soil quality degradation. We are proposing: to implement establishment of cover crops; site-specific soil sampling and University fertilizer recommendations on a variable-rate basis; and application of USGS SPARROW model for West Tennessee in order to estimate total nitrogen and total phosphorus loads in West Tennessee watersheds, including North Fork Obion River Watershed. These sites will promote the benefits of cover crops on improving soil and water quality, as well show that chemical fertilizers

Upper Clinch-Powell Watershed Partnership (FY16); \$4.5M (National); Lead Partner: The Nature Conservancy—Clinch Valley Program; Participating State(s): Tennessee & Virginia (lead State). The globally important Upper Clinch-Powell River Watershed, located in the Appalachian Mountains of Virginia and Tennessee, is a leading national hotspot for biodiversity and imperiled species sustaining over 40 varieties of rare mussels and supporting at least 129 native types of fish. Surrounding the rivers is a rural landscape that includes forests, coal mining areas, sensitive caves which are critical to ground water, working farms, and small Appalachian towns struggling to remain economically viable. To protect and sustain this region, The Nature Conservancy and partners formed the Clinch-Powell Clean Rivers Initiative (CPCRI) to document and address ecosystem stressors including excess sediments and nutrients, metals, dissolved solids, pesticides and persistent organics. This project is designed to improve water quality and aquatic habitat by developing a local working group for resource identification and bmp prioritization, designing a GIS-based ranking system to prioritize RCCP project investments, implementing agricultural and mining BMPs in biologically critical areas, and assessing the positive impacts of these BMPs on water quality.

West Tennessee Floodplain & Wetland Restoration (FY16); \$934K (State); Lead Partner: West Tennessee River Basin Authority (WTRBA); Participating State(s): Tennessee. Sediment from agricultural production and in-stream sources is west Tennessee's largest freshwater pollutant and has contributed to large-scale ecological degradation and economic loss. This project addresses water quality, aquatic and riverine habitat resource concerns in several watersheds located in five counties of west Tennessee. The goal of this project is to measurably improve the water quality and ecological integrity of the identified watersheds through implementation of NRCS soil health initiative practices, grade stabilization structures, riparian forest buffer, sediment basins, wetland enhancement and wetland restoration.

Advanced Precision Ag for Sustainable Conservation (FY18); \$5.48M (Critical Conservation Area—Mississippi River Basin); Lead Partner: Security Seed & Chemical, Inc; Participating States: Kentucky (Lead State) and Tennessee. The Cumberland River basin in Tennessee and Kentucky spans nearly 18,000 square miles and is home to nearly 2.5 million people. This project will occur in the Red River and Lower Cumberland watersheds, two of the 14 watersheds that make up the Cumberland River Watershed. Both surface water and ground water impairments are a concern in the watershed with nutrients, bacteria, and sediment being the primary issues. The partners will work with producers to improve water quality by

maximizing fertilizer uptake, preventing sediment and nutrient losses, using science-based precision agricultural practices, and implementing high nutrient reducing structural practices. The partners' goal is to advance the implementation of on-farm precision agriculture practice to help ensure the sustainability, resilience, and continued productivity of the area's working lands while simultaneously improving the producer's bottom line. The partners assembled for this project are some of the most advanced, cutting edge companies in the U.S., which assures that both producers and NRCS staff will have access to the most up-to-date technologies available today. Another goal of this project is to work with NRCS to improve and update practice standards and enhancements, so they work better for producers and achieve higher results for the environment.

Reversing Declines in Grassland Biodiversity (FY18); \$4.5M (National); Lead Partner: Central Hardwoods Joint Venture; Participating States: Indiana, Kentucky and Tennessee (Lead State). The Central Hardwoods Joint Venture and its partners will use a multifaceted conservation program that will complement existing efforts to reverse the decline of grassland habitats in the Southeast U.S., especially near protected landscapes. The project seeks to recover populations of grassland bird species deemed in need of conservation attention by Partners in Flight, as well as the native biodiversity associated with the historic grassland landscapes of the Interior Low Plateaus ecoregion of Tennessee, Kentucky, and Indiana. Conservation efforts will include removal of woody cover and prescribed fire, reconversion of cropland or fescue pastures to native grasses, increasing forb-to-grass ratios, changing grazing intensities, and altering haying regimes.

Working Forests for Wildlife (KY, TN, VA) (FY18); \$4.99M (National); Lead Partner: The Nature Conservancy, Kentucky; Participating States: Kentucky (Lead State), Tennessee and Virginia. Working Forests for Wildlife project seeks to conserve 25,000 acres of high priority forest in Kentucky, Virginia and Tennessee. By connecting forestland owners with The Nature Conservancy's existing carbon markets, these forests can be managed to improve biological diversity and provide habitat for endangered species.

TEXAS

Rice Stewardship Partnership—Sustaining the Future of Rice (FY14/15); \$10M (National); Lead partner: Ducks Unlimited, Inc. (DU). The Rice Stewardship Partnership composed of DU, the USA Rice Federation, and collaborating partners, will assist rice producers to address water quantity, water quality, and wildlife habitat in Mississippi, Arkansas, California, Louisiana, Missouri, and Texas. Using remote sensing to estimate bird population carrying capacity in shallow waters and the Field-to-Market Fieldprint Calculator to monitor results over time, the partners offer several innovations to augment conservation implementation and gain broader producer participation.

Texas Gulf Coast Stream and Wetland Initiative (FY14/15); \$7.1M (State); Lead partner: Resource Institute Inc. The Texas Gulf Coast region is experiencing rapid growth and development that is putting pressure on the aquatic resources of the region and is contributing to the degradation of the Gulf of Mexico. The project will focus on the restoration and protection of headwater stream and wetland systems on agriculture land to improve function and provide protection against future developmental impacts. It will also work to improve water quality and

quantity, reduce soil erosion and enhance/create habitat for at risk species through education, outreach and engagement of landowners and land managers for installing conservation practices on their land in the region.

Lower Rio Grande Valley Water Improvement Initiative (FY14/15); \$4.3M (State); Lead partner: Texas Water Resources Institute. The Lower Rio Grande Valley is experiencing substantial population growth which has contributed to degraded water quality and limited water supplies, which has increased the need for improved irrigation efficiency. Through partners, funds and educational efforts will be leveraged to work with landowners to reduce nutrient and sediment loading in local water bodies as well as improve agricultural water use efficiency. This project will also enhance agricultural production in the Valley.

Fort Hood Private Lands Conservation Initiative (FY16); 700K (State); Lead Partner: Compatible Lands Foundation (CLF). The Fort Hood Private Lands Conservation Initiative is a partnership between the CLF and the United States Army to preserve 22,000 acres of grazing lands adjacent to Fort Hood Army Base in Coryell County, Texas, through the acquisition of permanent conservation easements. Through this program, grazing lands will be preserved, wildlife habitat for such species as the Golden Cheeked Warbler and Monarch Butterfly will be protected, and water quality and quantity in the Trinity Aquifer will be protected by the conservation of important recharge lands. Additionally, military training occurring at Fort Hood will not be disrupted from incompatible land uses on adjacent properties.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead State) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment; habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a US Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

Limited Applied Irrigation Assistance Program (FY16); \$2M (State); Lead Partner: High Plains Underground Water District; Participating State(s): Texas. This project will address inefficient use of irrigation and moisture management concerns within the Ogallala Aquifer by encouraging agricultural water users to leave water in the ground through adoption of on-farm water conservation strategies, improved irrigation efficiency or conversion to non-irrigated production for the life of the project. The proposed project will build on existing programs such as EQIP, CSP and AWEP to address water conservation needs in the proposed region and establish an economic incentive for producers to participate in the project. Additionally, by leveraging State and local cost-share for the purchase of equipment, this project will result in

measured data on applied irrigation water and allow for producer compensation based on actual on-farm water savings.

Oaks and Prairie Joint Venture Grassland Restoration Incentive Program (FY17); \$2.92M (Critical Conservation Area—Prairie Grasslands Region); Lead Partner: National Wild Turkey Federation; Participating States: Oklahoma and Texas (Lead State). The Oaks and Prairie Joint Venture partners, with the National Wild Turkey Federation serving as the lead partner, will address the substantial decline in grassland wildlife populations and loss of natural hydrologic conditions through the improvement and restoration of native grassland ecosystems in the southern great plains. The project will include dedicated staff to work side by side with staff from Texas Parks and Wildlife Department, Oklahoma Department of Wildlife Conservation, Texas and Oklahoma NRCS, and other OPJV partner organizations to strategically deliver grassland ecosystem improvement projects on private lands. Through this collaborative effort, the OPJV will continue to offer their highly successful Grassland Restoration Incentive Program. The program has already delivered over \$1.1 million in funding to producers who have restored wildlife habitat on over 57,000 acres of grasslands in its first 3 years of existence. Additional financial assistance will be provided through the Environmental Quality Incentives Program on qualifying projects in Texas and Oklahoma. The deliverable for this combined effort is 95,000 acres of improved native grasslands over the life of the project.

Lower Colorado River Authority Regional Conservation Partnership Program (FY17); \$8M (Critical Conservation Area—Prairie Grasslands Region); Lead Partner: Lower Colorado River Authority; Participating States: Texas (Lead State). The Lower Colorado River Authority and partners will construct an off-channel reservoir in Colorado County to increase the region's water supply and help preserve regional economies susceptible to frequent and prolonged droughts. The reservoir will provide critically needed irrigation water to farmers and Lakeside rice fields, which also provide habitat for waterfowl and water birds. The project will implement complementary Conservation Stewardship Program or CSP enhancements in Colorado, Wharton and Matagorda counties near the Texas Gulf Coast, including outreach and funding for CSP enhancements on rice lands that provide habitat for migratory birds and other wildlife and aid in water conservation.

Elm Creek Watershed Regional Conservation Partnership Program (FY17); \$4.91M (Critical Conservation Area—Prairie Grasslands Region); Lead Partner: Texas State Soil and Water Conservation Board; Participating States: Texas (Lead State). The Elm Creek (1250) Watershed Plan and Environmental Impact Statement were developed and authorized by the Natural Resources Conservation Service in 1981. The watershed plan, to be updated with a supplement, consists of seven floodwater retarding structures, two floodwater dikes, accelerated technical assistance for cropland erosion control and development of upland wildlife habitat. Due to funding limitations, only three floodwater retarding structures have been built in the Elm Creek Watershed (3R, 6R, and 7R). This Elm Creek Watershed project will include construction of one floodwater retarding structure, Site 1A, and assistance to agricultural producers for erosion control, water quality improvement, brush management and upland wildlife habitat improvement.

Hill Country Headwaters Conservation Initiative (FY18); \$5.15M (National); Lead Partner: Hill Country Conservancy; Participating States: Texas (Lead State). The Hill

Country region in the heart of Texas faces extreme drought and extreme flooding with increasing intensity and frequency. Climate change, compounded by development pressures and ecological vulnerability, threaten permanent damage to the region's rich natural resources, including water quality degradation and wildlife habitat loss. Like much of the rest of Texas, 95 percent of the Hill Country is privately owned; yet another conservation challenge. This project seeks to implement a replicable model for people and nature to thrive through thoughtful growth. Partners will use a combination of Environmental Quality Incentives Program, Conservation Stewardship Program, and Agricultural Conservation Easement Program funds to address the resource concerns innovatively by carefully vetting individual projects proposed through a structured application process.

Gulf Coast Water and Wildlife Conservation (FY18); \$5.43M (National); Lead Partner: Ducks Unlimited, Inc.; Participating States: Louisiana (Lead State) and Texas. The Gulf Coast prairies, marshes and bays of Louisiana and Texas comprise one of North America's most productive land resource regions and are the most important migration/wintering areas for water birds. The landscape is threatened with more than 90 percent coastal wetland loss and a population forecast doubling to 50 million by 2050. Project partners will assist NRCS in Hurricane Harvey recovery efforts and address water quantity and habitat concerns in the Gulf Coast.

UTAH

Catastrophic Wildfire Reduction Strategy (FY14/15); \$1.7M (State); Lead partner: Utah Division of Forestry, Fire and State Lands. This is a statewide, locally lead initiative aimed at greatly reducing the size, intensity and frequency of catastrophic wildfires in Utah in partnership with the Utah Division of Forestry, Fire and State Lands. Through the efforts of regional work groups, a statewide steering committee and a project coordinator, priority project areas will be identified based on a detailed risk assessment. Implementation project activities will then be developed to reduce fire risk. Farm Bill Environmental Quality Incentives Program funds will be used to assist local landowners to implement practices such as fuels reduction (brush management and forest thinning) as well as fuel breaks, riparian restoration and prescribed grazing. The project supports the goals of the National Cohesive Wildfire Management Strategy and Governor Gary Herbert's Catastrophic Wildfire Reduction Strategy Initiative.

Upper Bear River Stream Restoration and Irrigation Efficiency (FY14/15); \$1.2M (National); Lead partner: Trout Unlimited. This project in Utah and Wyoming will improve fish passage and stream flows to benefit habitat for native cutthroat trout and other aquatic and riparian dependent species, as well as improve irrigation efficiency and water management. Monitoring will assess project performance using a Conservation Success Index that includes decreasing fish loss to irrigation canals, improving fish habitat, increasing in stream flows, decreasing river water temperatures, improving operation and maintenance of irrigation infrastructure, and decreasing irrigation water loss from canal conveyance. The partners' keen understanding of NRCS programs and alignment with existing conservation plans mean this project is shovel ready.

Restoring Watersheds at a Landscape Scale in Utah (FY16); \$940K (State); Lead Partner: Utah Department of Natural Resources; Participating State(s): Utah. To prevent the sage-

grouse from being listed under the ESA, Utah has adopted a Greater Sage-grouse Conservation Plan, which emphasizes habitat restoration of sage-grouse habitat on State, private and Federal lands within priority areas identified as Sage-grouse Management Areas (SGMAs). Eleven of the twelve SGMAs have an increasing population trend over the last three years, but the Sheeprocks SGMA has decreased to a critically low population level. After identifying several threats to the this SGMA, an action plan was prepared to address the declining sage-grouse population. The actions proposed to address these threats including habitat restoration by removing pinyon juniper encroachment and controlling invasive weeds, wild fire resistance, sage-grouse transplants, targeted predator control, establishment of a managed OHV trail system and research and monitoring to measure vegetation and sage-grouse response to these actions.

Uintah County Efficiency Project (FY17); \$7.38M (Critical Conservation Area—Colorado River Basin); Lead Partner: Uintah Water Conservancy District; Participating States: Utah (Lead State). The Uintah Water Conservancy District in Utah is leading a county-wide effort to increase the quantity and improve the quality of water in the area through better management of existing and future water facilities and resources. Partners in this county-wide effort include two Federal agencies, three State government entities, Uinta County, Utah State University and several canal companies. These partners will implement nine separate project “components” in this coordinated effort and organize feasible salinity projects on a large scale, eliminating the piecemeal approach of the past.

Ute Indian Tribe Water Conservation (FY17); \$1.19M (Critical Conservation Area—Colorado River Basin); Lead Partner: Ute Indian Tribe; Participating States: Utah (Lead State). The Ute Indian Tribe in Utah currently is developing a Water Code for tribally-owned water and a Water Plan to inventory and prioritize Tribal water resource needs. The Ute Indian Tribe Water Conservation project will assist the Tribe and partners with resource need projects. For instance, the project will redirect cold water through Bottle Hollow to restore and stabilize the fishery while providing a delivery point for future improved irrigation projects. These projects are deemed vital and top priority for the Tribe in its efforts to more fully develop its water resources while maintaining healthy river systems and proper environmental conditions in cooperation with public and private water users in the Uintah Basin.

Wallsburg Watershed Improvement Project (FY17); \$500K (State); Lead Partner: Wasatch Conservation District; Participating States: Utah (Lead State). Main Creek in Wallsburg, has been 303(d) listed for phosphorous, E. coli and temperature. Main Creek flows into Deer Creek Reservoir which has also been listed as impaired because of high phosphorous levels. Deer Creek reservoir is a drinking water source for millions of Utahans along the Wasatch Front. In an attempt to improve water quality and aquatic habitat, stream restoration efforts have been ongoing in the Wallsburg Watershed for the past 3 years. Currently, there is a stretch of river approximately 1.2 miles in length, where no project work has been completed. This section is characterized by steep eroded banks. River sinuosity is nonexistent, which adds to erosion, bank loss and down cutting. The soils in the Wallsburg Watershed are naturally high in phosphorous. Stream restoration efforts would include putting meanders back into the system and would nearly double the length of the stream. The added meanders would help slow the river, add aquatic habitat, and greatly reduce erosion and dissolved phosphorous issues. The landowner would no longer lose valuable pasture and crop lands to stream erosion. Banks would be sloped, and native riparian vegetation would be planted. J-hooks and rock barbs would be

used to add roughness and bank protection. Cross vanes would be used to increase habitat and reduce the potential for down-cutting. The riparian area will be fenced off; however, water gaps and stream crossings will be installed to allow for improved grazing management. These combined practices will decrease in-stream temperature, erosion and phosphorous. The health and vitality of the watershed would improve. The landowner is willing to move forward with stream restoration efforts on the property, however, they have previously been ineligible due to AGI limitations. With RCPP allowing for an AGI waiver, the benefits of this project can be realized.

Efficient Water Management for People and Wildlife (VR) (FY18); \$4.28M (Critical Conservation Area-Colorado River Basin); Lead Partner: The Nature Conservancy; Participating States: Utah (Lead State). Within five years, partners will implement three integrated, locally-led projects on the Virgin River in Utah, including modernization of Hurricane's water delivery systems and Washington City's return flow system, and restoration of a key segment of river habitat for three federally-listed species (woundfin, Virgin River chub and southwestern willow flycatcher). The project will provide more efficient water management in a critically water-limited area with direct benefits to agricultural producers and the local community while also addressing vital habitat needs for wildlife.

Restoring Watersheds in Box Elder County (FY18); \$1.44M (State); Lead Partner: Utah Department of Natural Resources—Watershed Program; Participating States: Utah (Lead State). This project will address the declining sage-grouse population in western Box Elder County, as well as other resource problems in this part of the State. Identified threats include habitat degradation due to Pinyon/Juniper encroachment and spread of exotic invasive species, risk and impacts from catastrophic wildfire. These threats also impact livestock operators. The actions proposed to address these threats include habitat restoration by removing encroaching Pinyon and Juniper trees and controlling invasive weeds, wet meadow enhancement and post-wildfire rehabilitation.

VERMONT

Accelerated Implementation of Agricultural and Forestry Conservation Practices in the Lake Champlain Watershed of Vermont and New York (FY14/15); \$800K (State); Lead partner: State of Vermont Agencies of Agriculture, Food and Markets, & Natural Resources. This renewed effort among long-standing partnerships to accelerate the impact of private lands conservation on water quality concerns in Lake Champlain uses several innovative tools, including the use of modeling to target conservation practices for optimal environmental benefits, an extensive monitoring network to assess conservation effectiveness, sliding scale cost-share to gain the support of producers, and an incentive-based Environmental Stewardship Program to provide some certainty to producers that they will get credit for the conservation practices they apply.

Long Island Sound Watershed RCPP (FY14/15); \$10M (National); Lead partner: Connecticut Council on Soil and Water Conservation. Excess nutrients have been identified as the primary driver of hypoxic conditions in Long Island Sound and are also impacting upland water resources within the watershed, which encompasses areas of Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. This project will develop a

comprehensive, whole-farm management certainty program for farmers in the area and use both working lands and easement programs to improve soil health and nutrient management, establish community resiliency areas with a focus on enhancing riparian areas, and institute a land protection program to protect agricultural and forestry areas.

Planning for Accelerated Conservation Planning Implementation in the Lake Champlain Watershed of Vermont and Beyond (FY14/15); \$800K (State); Lead partner: Vermont Association of Conservation Districts. The core objective of Vermont Association of Conservation District's RCPP program is to reduce phosphorus loading into the Lake Champlain Basin through adoption of the Nutrient Management Plans. The secondary objective, are to increase participating agricultural producers' understanding of the benefits of nutrient management, conservation and land treatment planning, leading to increased conservation implementation on small farms operations, especially the operations of Historically Underserved producers.

Memphremagog Long-term Water Quality Partnership (FY16); \$674 K (State); Lead Partner: Orleans County Natural Resources Conservation District; Participating State(s): Vermont. With an emphasis on target sub-watersheds where water quality sampling indicates major contributions of phosphorus loading from agricultural lands to the phosphorus-impaired Lake Memphremagog and a nutrient-impaired stream within the Tomifobia River watershed, partners will plan and implement key conservation practices on agricultural land to improve water quality. The project will implement NRCS-approved practices on farms, focusing on NMPs, smaller BMP production area practices and field and pasture practices to address water quality, soil erosion and soil quality decline. Success will be evaluated using multiple performance measures including: water sampling results, NMPs completed, practices installed, phosphorus reductions per practice, acreage treated and social measures—such as changes in farmer behavior and establishment of an ongoing farmer workgroup.

The Young Forest Initiative for At-Risk Species (FY16); \$5.2 M (National); Lead Partner: Wildlife Management Institute; Participating State(s): Connecticut, Massachusetts, Maine, New Hampshire (lead State), New York, Rhode Island & Vermont. This project will help increase technical and financial assistance to non-industrial private forestland owners who implement practices outlined in the Environmental Quality Incentives Program that result in an increase in the quantity and quality of young forest habitats. This support is critical, since young forest habitat is necessary to meet the critical needs of several recognized at-risk species.

Cold Hollow Woodlots Program (FY17); \$640K (State); Lead Partner: Cold Hollow to Canada; Participating States: Vermont (Lead State). Cold Hollow to Canada (CHC), a regional conservation partnership operating in seven towns along the western spine of the Green Mountains, is proposing to expand an existing cross boundary management initiative, the Cold Hollow Woodlots Program. A pilot project engaged 12 landowners spanning over 2,000 acres in the town of Enosburg. We intend to increase the scope of work to 3 towns, close to 50 landowners and 8,000 acres. With more than two-thirds of Vermont's forests privately owned, managers must reach out to individual forest owners to manage wildlife habitat, to find solutions for the effects of climate change, and to develop ways to help forests adapt to changing conditions. Innovative methods such as the landscape-based social network formed through the CHWP, will provide a solution to this challenge. As the pilot project has shown, by coming

together around a shared passion for their land and working with informed professionals around common interests, private landowners are galvanized to participation. Woodlots ownerships also become demonstration sites, which can be leveraged to share the vision to the broader community and with other conservation organizations. CHC's approach to peer-to-peer woodlands management is unique because it engages landowners with contiguous properties in prioritized forest blocks. CHC then provides resources, technical assistance and educational support to guide the discussion among the group. The Woodlots group works together to develop a blueprint for a collaborative approach to future management actions. By securing resources for practice implementation for the pilot group in Enosburg and two new groups in the towns of Richford and Montgomery, CHC seeks to expand the base of engaged landowners in our region, furthering peer-to-peer engagement on these issues to increase the pace of conservation and to foster the stewardship of our forests' health, integrity and resiliency into the future.

Connecting the Connecticut River Watershed (FY18); \$4.98M (National); Lead Partner: The Nature Conservancy; Participating States: Connecticut, Massachusetts (Lead State), New Hampshire and Vermont. This project addresses habitat for fish and wildlife, water quality and climate resilience in high priority aquatic and terrestrial sites across the four-State Connecticut River Watershed. Partners will work with land owners to improve and connect aquatic and riparian habitat; reduce sedimentation and nutrients; and identify and prioritize parcels of land that will safeguard water quality, protect riparian or wetland resources, and increase resiliency to climate change.

Nutrient Management Planning for Soil and Water (FY18); \$800K (State); Lead Partner: Vermont Association of Conservation Districts; Participating States: Vermont (Lead State). The Vermont Association of Conservation Districts (VACD) and its partners will extend its successful RCPP Nutrient Management Planning (NMP) program to help an additional 80 small farm operators enhance soil health, protect water quality, and improve farm viability. The program will primarily focus in the Lake Champlain Basin, where 35 percent of phosphorus loading has been attributed to cropland in the Lake Memphremagog and Long Island Sound watersheds. Livestock farmers will develop their own NMPs through the "Digging In" Nutrient Management Planning course offered by UVM Extension, utilizing the innovative go Crop software also developed by UVM. Approximately 16,000 acres will be treated with NMP, resulting in an estimated 12,210-ton reduction in sediment and 12,848-pound reduction in phosphorus loading to Vermont's surface waters over four years.

VIRGINIA

Delmarva Whole System Conservation Partnership—From Field to Stream (FY14/15); \$5M (CCA); Lead Partners: The Nature Conservancy and the Delaware Maryland Agribusiness Association. This public-private partnership in Maryland, Delaware, and Virginia will use a science-based approach to achieve important environmental objectives: 1) improve water quality through the implementation of advanced nutrient management practices on acres and restoring, enhancing, and protecting acres of natural filters (wetlands and buffers); and 2) expand wildlife habitat by enhancing, restoring, and protecting acres of high-quality wetlands and buffers. The partners estimate that these conservation systems in priority locations will reduce total nitrogen, total phosphorus, and total suspended solids currently delivered to local waterways each year, which will support achieving the goals of the Chesapeake Bay TMDL.

Forests—Fundamental for Conservation in Virginia (FY14/15); \$1.3M (State); Lead partner: Virginia Department of Forestry. Well-managed, productive forests offer numerous conservation benefits, but the long growth cycle of trees can present a financial challenge for landowners seeking to retain and manage working forestlands. The Virginia Department of Forestry is leveraging its strong partnership with NRCS to help increase adoption of forest management planning and practices among Virginia’s more than 350,000 forest land owners through coordinated outreach, education and funding assistance. Installed practices will offer statewide conservation benefits from cleaner water in the Chesapeake Bay to restoration of declining tree species like the Longleaf Pine and re-establishment of habitat for bobwhite quail and pollinators. Landowner engagement through participation in the Conservation Stewardship Program will help ensure that forest stands are retained and enhanced for ongoing natural resource protection.

Accelerating Chesapeake Bay Watershed Implementation Plans (FY14/15); \$5.5M (CCA); Lead partner: Maryland Department of Agriculture. To meet a large unmet demand for conservation programs that will contribute to meeting the Chesapeake Bay TMDL, this project will utilize State implementation plans to accelerate targeted, cost-effective conservation in Delaware, Maryland, and Virginia. Implementation will be adapted to each State’s high priorities and opportunities for innovation. For example, in Maryland, high-resolution imagery will help prioritize locations for riparian buffers as part of the Chesapeake Bay Riparian Forest Buffer Initiative, while Delaware will offer vouchers to offset the cost of buffers through the Buffer Bonus Program.

Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay (FY14/15); \$7M (CCA); Lead Partner: National Fish and Wildlife Foundation. A large, diverse group of partners will use a “raise the bar” approach that rewards agricultural producers in Virginia, West Virginia, and Pennsylvania for implementing higher impact, priority conservation practices in targeted sub-watersheds and counties of the Chesapeake Bay Watershed. The approach will address both water quality degradation and inadequate habitat for fish and wildlife in the CBW through a combination of comprehensive conservation planning, conservation practice implementation, and strategic habitat restoration. A new concept of conservation delivery is proposed: the conservation brokerage, where agency-neutral funding is used to best address resource concern. The partners will also use cost-benefit targeting to focus financial assistance dollars.

Blue Ridge PRISM Landowner Programs Expansion (FY16); \$894K (State); Lead Partner: Shenandoah National Park Trust; Participating State(s): Virginia. The Blue Ridge PRISM project is the first Cooperative Weed Management Area (CWMA) in Virginia to address invasive plants. Since invasive species control is more effective if a large collection of adjacent landowners perform the same treatments, the project area identified ten counties with nearly three million acres to target along the northern Blue Ridge Mountains of Virginia. The Blue Ridge PRISM has designed an innovative grassroots program to solve a challenge of every CWMA—organizing contiguous landowners into large blocks and coordinating the work—called the Area Stewards Program. Area Stewards are proactive landowners who treat invasive plants on their own properties and enlist their neighbors to do the same.

Engaging Small Producers in the Nutrient Management Planning Process (FY16); \$4.57M (Critical Conservation Area—Chesapeake Bay Watershed); Lead Partner: Sustainable Chesapeake. Participating States: Virginia (Lead State). Partners will engage up to 100 Maryland and Virginia small dairy producers in the development and implementation of comprehensive nutrient management plans. This effort will support producer and State efforts to meet Chesapeake Bay and local pollution reduction goals.

Oyster Bottom Restoration through Aquaculture (FY16); \$852K (State); Lead Partner: Virginia Marine Resources Commission; Participating States: Virginia (Lead State). Wild oyster populations have declined dramatically over the past sixty years due to habitat degradation from human population growth within the Chesapeake Bay watershed, sedimentation from land-based activities, and from harvesting. Historically, oyster producers added shells to their privately leased oyster ground in order to catch wild oysters. As oyster diseases became more entrenched in Chesapeake Bay investment and oyster farming on these leases declined, leaving them fallow and leading to further habitat degradation. Modern aquaculture is hatchery-based and provides producers improved genetic stocks of oysters which grow faster and survive disease. Over the past decade, these selected stocks of native oysters have performed well and have resulted in the investment in oyster hatcheries and nurseries by private firms which provide seed oysters and larvae to a rapidly growing, modern oyster aquaculture industry. Virginia's oyster harvest from private leases has increased from less than 20,000 bushels in 2005 to over 356,000 bushels in 2015. This project will restore the degraded oyster habitat in Virginia's tidal tributaries of Chesapeake Bay by implementing a cost-share partnership between NRCS, Virginia Marine Resources Commission, Virginia Institute of Marine Science and Virginia oyster producers. The program would provide oyster shell substrate needed to rebuild a suitable habitat for oyster survival and growth on privately leased oyster bottom. In return, the producer would privately invest in planting the restored area with an adequate volume of spat-on-shell oysters. These oysters will address two priority natural resource concerns by improving water quality by removing excess nitrogen through filtration (feeding), and providing a needed habitat for a variety of fish, juvenile crabs and other wildlife. Increasing the amount of oysters planted on restored bottom would also help local governments meet the nutrient goals established in the Chesapeake Bay Total Maximum Daily Load.

Working Forests for Wildlife (KY, TN, VA) (FY18); \$4.99M (National); Lead Partner: The Nature Conservancy, Kentucky. Participating States: Kentucky (Lead State), Tennessee and Virginia. Working Forests for Wildlife project seeks to conserve 25,000 acres of high priority forest in Kentucky, Virginia and Tennessee. By connecting forestland owners with The Nature Conservancy's existing carbon markets, these forests can be managed to improve biological diversity and provide habitat for endangered species.

Franklin County Dairy Ag and Water Protection (FY18); \$850K (State); Lead Partner: Virginia Cooperative Extension; Participating States: Virginia (Lead State). Franklin County is home to 41 dairy farms. Eighty percent of these farms are located less than 300 feet from streams that drains into two major TMDL waterways, the Pigg River and Blackwater River. Additionally, the average age of major on-farm structures is 60 years old furthering water quality and soil erosion concerns. Project partners will identify and rank farms based on proximity to water sources and water quality, soil erosion and health, ag viability and animal health, and wildlife protection. Funding will help support the relocation and building of manure storage,

water runoff receptacles, and housing structures to an area outside the flood zone and away from stream banks.

Chesapeake Bay Farm Stewardship and Preservation (FY18); \$6M (Critical Conservation Area—Chesapeake Bay); Lead Partner: Sustainable Chesapeake; Participating States: Delaware, Maryland and Virginia (Lead State). The Chesapeake Bay Farm Stewardship and Preservation project supports a diverse three State partnership to accelerate the adoption of precision nutrient management and soil health practices. Financial and technical assistance will be focused where: 1) practices will have the greatest impact on Chesapeake Bay water quality; 2) farmers have demonstrated enthusiasm for these practices; 3) partner outreach and education and technical assistance efforts support financial assistance delivery; and 4) prime farmland are located. Funds from this project will make major contributions to reducing nitrogen and sediment loading to the Chesapeake Bay, helping the agricultural sector to meet Chesapeake Bay TMDL milestone goals.

WASHINGTON

Yakama Nation On-Reservation Lower Yakima Basin Restoration Project (FY14/15); \$4.6M (CCA); Lead Partner: Confederated Tribes and Bands of the Yakama Nation. This project addresses critical needs for the integrated conservation and restoration of fish and wildlife habitat, water quantity, and water quality on the Yakama Reservation in the lower Yakima River basin. The actions in this proposal will accelerate the recovery of threatened middle Columbia steelhead on the lower tributaries of the Yakima River, which currently produce more than 50 percent of the wild steelhead population in the Yakima basin. These actions will also benefit multiple other aquatic and riparian species, including chinook and sockeye salmon, Pacific lamprey, and important cultural plant species.

Confederated Tribes of the Colville Reservation Water Quality and Habitat Improvement Project (FY14/15); \$2M (State); Lead partner: Confederated Tribes of the Colville Indian Reservation. The project focuses on reducing soil erosion and stream sediment by repairing or removing stream crossings, decommissioning forest roads, installing road drainage and protecting wetland/riparian areas. In addition, this project will improve range conditions through feral horse management and improve wildlife habitat for the sharp-tailed grouse and Columbia River redband trout.

Palouse River Watershed (WRIA 34) Implementation Partnership (FY14/15); \$5.5 (CCA); Lead partner: Palouse Conservation District. Through implementation of the Palouse River Watershed Management Plan, more than 15 partners will work with producers to address TMDL concerns and reduce water quality regulatory action on producers in this area of Washington and Idaho. Innovative project components include promotion of the Farmed SMART Certification program (which provides an opportunity for environmental markets), enhanced incentives for riparian buffer establishment including five years of buffer maintenance, and the establishment of a watershed-wide monitoring effort that encourages landowner involvement in monitoring of natural resource conservation improvements. In addition to improved water quality, the project is expected to benefit fish and wildlife habitat, including four fish species of concern.

Precision Conservation for Salmon and Water Quality in the Puget Sound (FY14/15); \$9M, (National); Lead Partner: Washington State Conservation Commission. Partners will use an ecosystem-wide system for targeting high priority areas to improve water quality and habitat for at-risk species, including Chinook salmon, bull trout, and steelhead. Within focus areas, a farmer-to-farmer approach will be used to increase participation and ensure buy-in from the local community. Opportunities to provide additional outreach to Hispanic and Asian producers and a strong consideration of Tribal needs are included in the project plan.

Unlocking Carbon Markets for NIPF Landowners in the Pacific Northwest (FY14/15); \$1.1M (National); Lead partner: Pinchot Institute. By aggregating landowners into groups, the American Carbon Registry (ACR) reduces transaction costs for carbon credit trading and allows small producers to participate. This project will target Non-industrial private forest landowners in Oregon and Washington who wish to participate in a regional carbon crediting program and who possess lands in NRCS and State priority areas as defined in regional conservation strategies. Targeted parcels will be between 75 and 4,000 acres in size, with the majority being less than 250 acres. NRCS and partner assistance will cover much of the initial expense of participating in carbon projects, specifically the development of a forest management plan and subsequent implementation of pre-commercial thinning to enhance carbon stocks.

Greater Spokane River Watershed Implementation (FY16); \$7.7M (National); Lead Partner: Spokane Conservation District; Participating State(s): Idaho & Washington (lead State). Substantial sources of sediments and nutrients are carried to the Spokane River watershed by its larger tributaries, and low dissolved oxygen levels and algae blooms threaten aquatic life in the Spokane River, Lake Spokane and Coeur d'Alene Lake. Reducing nutrients is key to resolving water quality degradation throughout the Greater Spokane River Bi-State Watershed. TMDL and lake management implementation plans stress the need to address agriculture and forestry within these watersheds. This project supports regional momentum towards adoption of conservation tillage operations and best management practices. Tens of thousands of agricultural and forestry acres, including a Tribal farm, will benefit through voluntary NRCS programs. Wildlife and fish habitat will be protected, and long-term easements will be developed for several forest and wetland acquisitions. In addition, this project will introduce a new program that involves using the Risk Management Insurance models to compensate producers for the loss of productive land entered into vegetative buffers. This new commodity buffer program is designed to bridge the financial gap in current cost-share programs and encourage producers to cooperatively implement these practices on their farms. Project success will be evaluated by extensive watershed-based field monitoring to track improvements in water, soil and habitat.

WRIA 1 Salmon Recovery & Water Quality Improvement (FY16); \$1M (State); Lead Partner: Whatcom Conservation District; Participating State(s): Washington. The Nooksack watershed is in the top three percent of agricultural producing counties in the Nation and has threatened or endangered salmon species and imperiled shellfish harvest areas. Partners have recruited twenty-two landowners ready to implement priority projects remedying inadequate habitat for fish and wildlife in the Nooksack River watershed in North Puget Sound, Washington State. Partners will work with producers to: replace culverts on farm access roads, restoring fish passages in agricultural and rural areas; work with Tribes to construct instream wooden structures to provide habitat for salmon; and integrate and publicize NRCS programs into the rural, agricultural and Tribal communities. The result will be higher priority and more

strategic projects to recover salmon and improve water quality in downstream commercial, ceremonial and subsistence shellfish beds operated by the Lummi Nation.

Puyallup Watershed Partnership (FY17); \$8M (National); Lead Partner: Pierce Conservation District; Participating States: Washington (Lead State). Through the Puyallup Watershed Partnership, the Pierce Conservation District and ten diverse partners will assist landowners with permanent conservation easements and implement restoration activities through Environmental Quality Incentives Program funding assistance. The Puyallup in Washington contains the only remaining prime soils in Pierce County, is home to one of the most urban Tribal reservations and provides essential habitat for Endangered Species Act listed species of Coho and Chinook salmon, Steelhead, and Bull Trout. Since 2002, Pierce County has lost almost 10,000 acres of farmland, nearly five times the State average, due to rapidly encroaching development from the Seattle/Tacoma metropolitan area. That loss not only impacts farmers and food security but also diminishes the ecosystem benefits that farmland provides to water and soil quality.

Yakima Integrated Plan, Toppenish to Teanaway (FY17); \$7.54M (National); Lead Partner: Confederated Tribes and Bands of the Yakama Nation; Participating States: Washington (Lead State). The Yakima Integrated Plan will accelerate the recovery of threatened Middle Columbia Steelhead by targeting high priority watersheds which currently produce more than 50 percent of the wild steelhead run in the Yakima River Basin. These actions will also increase water supply and water quality for environmental, economic and cultural purposes. This project will fund actions supported by diverse partners to enact holistic, innovative solutions to natural resource conservation issues. These actions will restore fish habitat in over 50 miles of channels across 2,500 acres; restore riparian vegetation on over 10 miles of stream banks; enhance fish access to over 480 acres of aquatic habitat; increase water retention in 2,000 acres of ephemeral channels; and improve grazing management across 3,500 floodplain acres and 34,000 upland grazing acres. In addition, the project will target over 30,000 acres for irrigation efficiency enhancements, over 25,000 acres for Conservation Stewardship practices and protect 500 acres of floodplain farmland through easements. Monitoring of these actions will occur through existing programs. The project stems from extensive collaborative efforts in recent years by Yakima Basin Integrated Plan Workgroup, which represents over 20 stakeholders from environmental, agricultural, and Tribal interests working to restore habitat and conserve water resources in the Yakima Basin.

Southwest Washington Non-industrial Private Forest Conservation Partnership (FY17); \$1.3M (State); Lead Partner: Washington Department of Fish and Wildlife; Participating States: Washington (Lead State). Non-industrial private forest lands in southwest Washington are important to the regional and State economies. In addition to timber harvest, these working forests provide many functions including: fish and wildlife habitat, protection of water quality, flood reduction, recreational opportunities and carbon sequestration to help combat climate change. The project area includes Grays Harbor, Mason, Thurston, Lewis Pacific, Wahkiakum, Cowlitz and Clark Counties. Washington Department of Natural Resources and conservation districts will conduct outreach and education activities and provide technical assistance to NIPF owners to develop and implement stewardship plans with funding from the Environmental Quality Incentives Program and Conservation Stewardship Program. Washington State Conservation Commission will distribute NRCS technical assistance funding to the conservation

districts. Washington Department of Fish and Wildlife will administer the RCPP and assess fish and wildlife habitat and species presence on lands enrolled in the Healthy Forests Reserve Program and other participating lands with willing owners. The HFRP program will be focused in the Chehalis Watershed and includes provisions for conservation easements and habitat restoration to benefit marbled murrelet and northern spotted owl. Program participants could have multiple options for regulatory certainty by implementing conservation practices. Participating landowners will provide at least 25 percent cost share to match implementation funding from NRCS. Projects funded by the RCPP will improve fish and wildlife habitat, protect water quality, improve forest resiliency in the face climate change, and help meet regulatory requirements while keeping working forests working.

Upper John Day River Flow and Protection Project (FY18); \$4.94M (Critical Conservation Area—Columbia River Basin); Lead Partner: Confederated Tribes of the Warm Springs Reservation of Oregon; Participating States: Oregon (Lead State) and Washington. The John Day River Flow and Protection Project seeks to improve irrigation efficiency to conserve water and increase flow and ensure the future protection of these lands to enhance and improve overall watershed health, while maintaining agricultural practices throughout the landscape. Additionally, Confederated Tribes of the Warm Springs Reservation of Oregon and its partners seek to address inadequate habitat for fish and wildlife. Planned project components include irrigation efficiency improvements, irrigation ditch piping, diversion and culvert replacements, instream leases, fish screens installations, water measuring devices, channel reconnections to the mainstem John Day River, riparian fencing and planting, and instream restoration work. Multiple working lands conservation easements are in development to protect critical habitat for fish and wildlife along with keeping agricultural production in operation.

Whatcom County Working Lands Conserving Watersheds (FY18); \$1.3M (State); Lead Partner: Whatcom County; Participating States: Washington (Lead State); Whatcom County. Working Lands Conserving Watersheds aims to protect working lands within identified priority watersheds in Whatcom County to help to stabilize the critical land base needed to maintain a long-term commercially important agriculture industry. Many parcels within the priority watersheds are at risk of being developed to the degree where neither agriculture nor full ecosystem function can occur. Working Lands Conserving Watersheds will provide Whatcom County landowners financial incentives needed to keep their lands in production and will require actions are taken to address identified resource concerns.

WEST VIRGINIA

Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay (FY14/15); \$7M, (CCA); Lead Partner: National Fish and Wildlife Foundation. A large, diverse group of partners will use a “raise the bar” approach that rewards agricultural producers in Virginia, West Virginia, and Pennsylvania for implementing higher impact, priority conservation practices in targeted sub-watersheds and counties of the Chesapeake Bay Watershed. The approach will address both water quality degradation and inadequate habitat for fish and wildlife in the CBW through a combination of comprehensive conservation planning, conservation practice implementation, and strategic habitat restoration. A new concept of conservation delivery is proposed: the conservation brokerage, where agency-

neutral funding is used to best address resource concern. The partners will also use cost-benefit targeting to focus financial assistance dollars.

West Virginia's Chesapeake Headwaters Conservation Partnership (FY14/15); \$1.1M (State); Lead partner: West Virginia Agricultural Land Protection Authority. The project will target the placement of perpetual conservation easements on lands that are the most critical for the protection of water quality in the Chesapeake headwaters of West Virginia. This region is an important source of drinking water for over 4 million people in the Washington DC metro area. By incentivizing permanent buffers around sinkholes in karst areas, as well as buffers in riparian corridors and protecting high-quality forests this project will ensure better protection for these sensitive areas. Success will be gauged first by the willingness of landowners to implement the protection measures as part of their easement; and second by the movement toward future implementation of such measures on all easements containing those attributes identified as vital to the protection of vital resources in the Chesapeake headwaters region.

Cerulean Warbler Appalachian Forestland Enhancement (FY14/15); \$8M (National); Lead partner: American Bird Conservancy (ABC); States: Ohio, Kentucky, Pennsylvania, Maryland, and West Virginia. To address habitat loss, soil health, and water quality, the project will focus on suites of conservation practices intended to enhance acres of forest habitat on private lands for cerulean warblers, an at-risk species, and associated species. The Nature Conservancy has committed to enrolling additional acres into easements, and the American Chestnut Foundation, the Appalachian Regional Reforestation Initiative, and Green Forests Work will reforest acres of reclaimed mine lands to biodiverse forest.

WV Chesapeake Headwaters Conservation Partnership (FY16); \$1M (State); Lead Partner: West Virginia Agricultural Land Protection Authority; Participating State(s): West Virginia. The project will target the placement of perpetual conservation easements on lands that are the most critical for the protection of water quality in the Chesapeake headwaters of West Virginia. A substantial portion of the region is karst, with a direct connection between ground water and surface water. The conduit flow of water in the subsurface limestone can lead to rapid distribution of pollutants directly to streams, rivers and ground-water systems. This region is also an important source of drinking water for over four million people in the Washington DC metro area. By incentivizing permanent buffers around sinkholes in karst areas, as well as buffers in riparian corridors and protecting high-quality forests, this project will ensure better protection for these sensitive areas. Landowner applicants for a perpetual conservation easement will include any willing landowner with 20 acres or more in the eight-county Chesapeake headwaters region who makes a legal application. Landowners may also voluntarily implement buffer practices as a result of the education and outreach program.

West Virginia's Aquatic Passage: Working Farms (FY17); \$1M (Critical Conservation Area—Chesapeake Bay Watershed); Lead Partner: Trout Unlimited; Participating States: West Virginia (Lead State). Headwater fragmentation of brook trout habitat is a limiting factor for the range, population numbers and individual size of this well-respected species and indicator of healthy watersheds. Habitat becomes fragmented when improperly designed stream and road crossings prevent timely passage of fish and other aquatic species. Brook trout, a Chesapeake Bay Program priority species, is especially susceptible population decline due to habitat fragmentation. Through the Working Farms project, the partners will replace aquatic habitat

barriers to fish passage throughout the Potomac Headwaters of West Virginia by concentrating efforts of three coordinated State and Federal agencies with the common goal of strategically removing Aquatic Organism Passage barriers on public lands, roadways, and, under the terms of this proposal, on private lands. This area, rich in brook trout heritage, comprises a large, attractive area for visitors and residents to enjoy its natural resources while ensuring water quality standards are met. This program will serve as demonstration restoration project adds to the ecological benefits by producing social, economic and quality of life benefits to residents, visitors, wildlife and downstream water users.

West Virginia Chesapeake Headwaters Conservation Partnership (FY17); \$1M (State); Lead Partner: West Virginia Agricultural Land Protection Authority; Participating States: West Virginia (Lead State). Project partners will use an incentives approach that rewards landowners in the eight-county Chesapeake headwaters area of West Virginia who place perpetual conservation easements on lands that are the most important for the protection of water quality, and to implement water quality protection practices in these sensitive areas. This region is an important source of drinking water for over four million people in the Washington D.C. metro area. The partnership of eight county farmland protection boards and three land trusts proposes to provide incentives to landowners to protect high priority agricultural land with important ecological functions, to establish permanent buffers around sinkholes in karst areas and in riparian corridors and to protect high-quality forests. Success will be gauged first by the willingness of landowners to implement the protection measures as part of their easement; and second by the movement toward future implementation of such measures on all easements containing those attributes identified as vital to the protection of vital resources in the Chesapeake headwaters region.

WV Soil Health Partnership (FY18); \$1M (State); Lead Partner: West Virginia Agricultural Land Protection Authority. Participating States: West Virginia (Lead State). The West Virginia Agricultural Land Protection Authority and its partners will focus this project in the 11 eastern counties in West Virginia. Characterized by long parallel valleys with numerous streams and exceptionally good soils, this region has 35 percent of the State's agricultural acreage and produces 75 percent of its agricultural income. In addition to water quality and soil health, farmland preservation is a key strategy for water and soil resource protection. The project seeks to establish easements on 600 acres of agricultural properties.

WISCONSIN

Reducing Total Phosphorus and Sediment Loads in the Yahara Watershed through Wisconsin's Adaptive Management Option (FY14/15); \$1.6M (CCA); Lead partner: Dane County Land and Water Resources Department. Wisconsin is the first and currently only State in the country to formally include an innovative, regulatory compliance option for addressing phosphorus, called Watershed Adaptive Management. The primary goal in this proposal is to engage the Yahara watershed agricultural community in this collaborative, watershed-based approach to meet water quality standards and test four alternative conservation innovations, paid for by partner funds. This project will enable a diverse coalition of partners, including agricultural producers, to expand the geographic scope of adaptive management efforts, test innovative delivery approaches, and serve as a model for collaboration between the water, wastewater, and agricultural sectors.

Baraboo River Watershed Regional Conservation Partnership Program (FY14/15); \$1.3M (State); Lead partner: Sauk County Conservation Planning and Zoning Department. The Baraboo River Watershed RCPP will focus on improving water quality within the Baraboo River Watershed through the promotion and installation of soil and water conservation practices using USDA-NRCS standards and specifications. These activities will be carried out through collaborating partner agencies utilizing partner provided financial and technical assistance. The Baraboo River has been identified as the second greatest contributor of total phosphorus loading to the Wisconsin River. The primary resource concern that will be addressed through the Baraboo River Watershed RCPP is Water Quality Degradation, or specifically high phosphorus and sediment levels being contributed to surface waters within the watershed.

Oconomowoc River Watershed Water Quality and Soil Loss Improvements (FY14/15); \$500K (State); Lead partner: City of Oconomowoc. The main goal of the project is to improve water quality within and downstream of the Oconomowoc River Watershed. The City of Oconomowoc will be leading this project by working with producers and many other partners to improve water quality. A secondary objective is reduction of soil loss within the watershed. The activity to support these objectives will be working with producers to reduce the amount of soil loss and nutrients in the watershed. Benefits will be improved water quality, and reduced soil and nutrient loss from agricultural lands.

ABC: Improving Forest Health for Wildlife Resources in Minnesota, Wisconsin, and Michigan (FY14/15); \$5M (National); Lead partner: American Bird Conservancy. Building on a strong existing partnership with NRCS, American Bird Conservancy (ABC) seeks to improve forest management on acres of nonindustrial forest land in order to provide essential habitat for the golden-winged warbler and other potential threatened and endangered (T&E) species. Partners will implement additional forest management on acres on public and private lands. Goals of the project include achieving a better distribution of forest habitat to benefit potential T&E species, increasing the population of golden-winged warblers on private lands, and, ultimately, avoiding its listing under the Endangered Species Act. The listing decision is scheduled for 2017.

Driftless Area, Habitat for the Wild and Rare (FY16); \$2.9M (National); Lead Partner: Trout Unlimited; Participating State(s): Minnesota & Wisconsin (lead State). The Driftless Area (DA) was bypassed by the last continental glacier and features steep valleys, sandstone bluffs and more than 600 unique spring-fed creeks and ridges once covered in prairie and scattered oaks. This ancient landscape supports a variety of plants and animals, including dozens of uncommon species of birds of woodland and grassland habitats, reptiles and amphibians, and abundant populations of native fish found in the high concentration of cold-water streams. The DA's diversity of habitat provides critical habitat for dozens of species of concern in the State Wildlife Action Plans and has been cited as one of North America's most important resources. Early European settlement and agricultural practices took a heavy toll on the DA, resulting in devastating erosion and serious damage to rivers. Land use practices and conservation efforts have helped heal the land, but the legacy of the past damage is still visible in the sediment-filled valleys and steep, eroding stream banks. For the past nine years Trout Unlimited's Driftless Area Restoration Effort has been working with partners to restore structural diversity, ecological function and overall health. This project will provide a new comprehensive, targeted regional

approach to restoring prairie, oak woodlands and streams for the benefit of the many at-risk species and abundant concentrations of native species found in the DA landscape.

Improving Working Lands for Monarch Butterflies (FY16); \$6M (National); Lead Partner: National Fish and Wildlife Foundation; Participating State(s): Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Oklahoma, Texas (lead State) & Wisconsin. Our partnership will restore, manage and conserve wildlife habitat for monarch butterflies on agricultural and Tribal lands using four main strategies: conservation planning and assessment; habitat improvement and best management practices; building an adequate seed supply for milkweed and nectar plants; and, enhancing organizational coordination and capacity. To provide the greatest conservation outcomes, the project will focus work within two NRCS CCAs: Prairie Grasslands Region and Mississippi River Basin. Targeted areas will be identified through a US Geological Survey-led initiative examining fine-scale opportunities for the restoration of milkweed and other pollinator plants. This project will contribute to national goals in terms of habitat and increase the number of monarch butterflies. This in turn will represent the best opportunity to avoid future regulations related to monarch butterflies from being imposed on farmers and ranchers in the future.

Lafayette County Agricultural Enterprise Area Water Quality Project (FY17); \$600K (State); Lead Partner: Wisconsin Department of Agriculture, Trade and Consumer Protection; Participating States: Wisconsin (Lead State). Within the Pecatonica River watershed, there are many waterways identified on the Federal 303(d) list of impaired waters and sections of the watershed have been identified as priority areas for phosphorous and nitrogen reduction. The Lafayette County Agricultural Enterprise Area Water Quality Project aims to mobilize an existing informal network of landowners to address these water quality concerns through the widespread adoption and installation of conservation practices. The project's goal is to build a self-sustaining network of landowners and producers to take ownership over conservation activities in the watershed. Ten partners have committed to pooling their resources, more than doubling Federal investment, to support and advance landowner efforts to reduce runoff of excess nutrients and sediment from agricultural land. This collaborative effort to increase conservation work on agricultural lands will address soil health and water quality while ensuring continued agricultural viability for future generations farmers.

Baraboo River Watershed II (FY18); \$1M (Critical Conservation Area-Mississippi River Basin); Lead Partner: Sauk County Conservation, Planning and Zoning Department. Participating States: Wisconsin (Lead State). This project seeks to improve water quality within the Baraboo River Watershed in Sauk County and Juneau County in Wisconsin through the promotion and installation of soil and water conservation practices. The partners will target areas which contribute to phosphorus and sediment loading to surface waters. The Baraboo River has been identified as the second greatest contributor of total phosphorus loading to the Wisconsin River, which is a large tributary of the Upper Mississippi River.

Driftless Area Habitat for the Wild & Rare Phase 2 (FY18); \$9.2M (National); Lead Partner: Trout Unlimited; Participating States: Illinois, Iowa, Minnesota and Wisconsin (Lead State). The Jo Daviess Conservation Foundation and its partners will target areas in the Driftless Area where land restoration and land protection will have the most positive impact on water quality by implementing permanent conservation practices that reduce pollution and

sediment runoff into streams. RCPP funding will provide a new comprehensive, targeted regional approach to restoring cold-water streams and their riparian areas for the benefit of the many at-risk species. The project will assist landowners reduce pollution and sediment runoff through the adoption of key conservation practices. Agricultural Conservation Easement Program funding will purchase agricultural conservation easements to install permanent conservation practices such as riparian buffers and filter strips.

Little Plover River Watershed RCPP Project (FY18); \$295K (State); Lead Partner: Village of Plover; Participating States: Wisconsin (Lead State). This project will be the first in Wisconsin to apply ground water modeling to help deliver conservation practices to the locations in the Central Sands region of Wisconsin which will most effectively address resource needs. The partners will use EQIP to install on-farm practices. Match funding will implement larger scale restoration and municipal and agricultural infrastructure improvements. Project outcomes will be improved instream flows and water quality, increased ground water recharge, soil conservation, and improved fish and wildlife habitat.

Tall Pines Conservancy Farmland Protection Program (FY18); \$524K (State); Lead Partner: Tall Pines Conservancy; Participating States: Wisconsin (Lead State). This project, led by Tall Pines Conservancy (TPC), will use Agricultural Conservation Easement Program Agricultural Land Easements funding to acquire farmland easements at three different project sites in the watershed. Environmental Quality Incentives Program land practices will mitigate natural resource concerns at each project location. Additionally, Nutrient Management Plans will be developed as needed to identify resource concerns at the project locations. The long-term project goals are to decrease soil reduction; improve habitat quality; and reduce loading of sediments, nutrients, and pollutants into tributaries and lakes in the Oconomowoc River watershed. This will be accomplished by implementation of practices that conserve soil and slow overland flow in agriculture, forestry, and urban areas.

WYOMING

Water Quality and Habitat Improvements: Tongue River Watershed, Sheridan County, WY (FY14/15); \$1.9M (State); Lead partner: The Nature Conservancy-Wyoming Chapter. This project will further efforts of the NRCS, Sheridan County Conservation District, Sheridan Community Land Trust, The Nature Conservancy and other partners to accelerate project planning, completion and evaluation. Projects to be planned and implemented include, grazing management, range improvement, irrigation diversion restoration (with fish passage), irrigation infrastructure, stream bank and/or channel stabilization, riparian fencing/stock water developments, septic system replacements, invasive species treatment and easements to prevent fragmentation from residential development within the watersheds. Water quality monitoring has been underway for several years and will continue along stream stretches where impairments have been noted. New remote sensing analysis will be conducted to allow mapping of existing and future Russian olive densities, with a model developed that will be transferable to other Russian olive infestation areas and range monitoring will assess effects of riparian fencing and other restoration projects and fish passage will be monitored by fish surveys conducted within the watershed.

Upper North Platte Watershed Restoration (FY14/15); \$600K (State); Lead partner: Saratoga-Encampment-Rawlins Conservation District. The primary resource concern for the Upper North Platte River Watershed Restoration is surface water quality while balancing agricultural production, maintaining stable river channels, encouraging healthy riparian communities and promoting sustainable fish and wildlife habitat. Collaboration between landowners, State and Federal agencies, and non-governmental conservation organizations in the Upper North Platte Watershed has enjoyed numerous successes. With regards to agricultural production, this watershed-wide restoration will minimize land loss from river bank erosion, assure irrigation water delivery, provide off-channel watering as applicable, establish riparian fencing and seek deferred riparian grazing agreements with producers while native riparian plants re-establish.

Upper Bear River Stream Restoration and Irrigation Efficiency (FY14/15); \$1.2M (National); Lead partner: Trout Unlimited. This project in Utah and Wyoming will improve fish passage and stream flows to benefit habitat for native cutthroat trout and other aquatic and riparian dependent species, as well as improve irrigation efficiency and water management. Monitoring will assess project performance using a Conservation Success Index that includes decreasing fish loss to irrigation canals, improving fish habitat, increasing in stream flows, decreasing river water temperatures, improving operation and maintenance of irrigation infrastructure, and decreasing irrigation water loss from canal conveyance. The partners' keen understanding of NRCS programs and alignment with existing conservation plans mean this project is shovel ready.

Southeast Wyoming Wetlands Partnership (FY16); \$1M (State); Lead Partner: Ducks Unlimited, Inc.; Participating State(s): Wyoming. Partners will work with agricultural producers to help address NRCS priorities related to agricultural production, wildlife habitat development, water quality, sediment reduction and other natural resource issues.

Northeastern Wyoming Sage-Grouse Habitat Enhancement (FY17); \$200K (State); Lead Partner: Converse County Conservation District; Participating States: Wyoming (Lead State). The Northeast Wyoming Sage-Grouse Habitat Enhancement Project will help expand conservation efforts of the Thunder Basin Grasslands Prairie Ecosystem Association, the Douglas Core Area Restoration Team, and other partners operating in northeast Wyoming. The Association has been actively engaged in local and regional conservation efforts since 1999 while the Douglas Core Area Restoration Team was formed in 2013 to focus on restoration of sage-grouse habitat within the Douglas Core Area. The primary focus of this regional project is on developing and maintaining wildlife habitat for sage-grouse and other species of interest while maintaining viable agricultural operations. Conservation projects that will be planned and implemented include sagebrush restoration, grazing management, rangeland improvement, invasive species treatment (specifically cheatgrass), ephemeral and intermittent streambank restoration, restoration of wildfire and energy-related disturbances to minimize excessive erosion, protection and enhancement of upland ephemeral wetlands, and projects focused on enhancing soil quality. The initiative will build on existing collaborative efforts among landowners, State and Federal agencies, academia, and other conservation non-governmental organizations working in northeast Wyoming.

Northeast Wyoming Forest Resiliency Project (FY17); \$1.28M (State); Lead Partner: Wyoming Conservation Districts; Participating States: Wyoming (Lead State). Since 2012, local conservation districts and Natural Resources Conservation Service field offices have actively been working on forest health projects throughout Northeast Wyoming. The goal of this project will be to continue the efforts in this area to create a more resilient ecosystem for the future by partnering with local, State, and Federal partners. In total eleven partners will be participating on this project to coordinate, promote and administer the proposed project. They stand ready with the knowledge and technical expertise to ensure that this project is a success. This project will encompass three counties in the Northeast portion of Wyoming, with a priority area encompassing 785,000 acres. This project will have the potential to address forest resource concerns on approximately 2,200, acres which will result in improved forest stand conditions, increased forage production for livestock producers and wildlife, decrease wildfire risk, enhance wildlife habitat, and increase overall forest health. The project will be further extended on adjacent property managed Federal agencies, as they are currently implementing forest management on their lands. The objectives of this project are to improve forest health and resiliency, and improved rangeland health by reducing encroachment of juniper and pine. These objectives will be achieved with the use of the EQIP conservation program and practices.

Popo Agie River Watershed Health (FY18); \$1.18M (State); Lead Partner: Popo Agie Conservation District; Participating States: Wyoming (Lead State). The residents of Lander and the surrounding rural area rely on the Popo Agie River system as their primary source of drinking water, agricultural irrigation, stock water, fisheries, wildlife habitat and recreation. Some stream reaches in the watershed deemed impaired by the Wyoming DEQ and river flow in late summer slows to nearly a trickle in City Park. This project will build on the efforts of NRCS, Popo Agie Conservation District, the City of Lander, the USFWS Partners Program, Northern Arapaho and Eastern Shoshone Tribes, TNC, and others to accelerate project completion. Projects include innovative water use agreements, stream restoration, irrigation infrastructure improvement, off-stream water developments and other best management practices.

Securing the Grass Highway for Wyoming Migrations (FY18); \$5M (National); Lead Partner: The Nature Conservancy; Participating States: Wyoming (Lead State). This project focuses on addressing the most critical threats in the Greater Yellowstone migration corridors within Wyoming. GPS collar data will enable the project to target conservation efforts to benefit migratory species. The targeted corridors cross a complex web of private, State, and Federal land managed by dozens of landowners and multiple agencies. Bottlenecks caused by habitat conversions; fencing and other obstructions; exploding populations of invasives; and the degradation of stopover areas are all putting the corridors at risk. Conservation easements, fence modifications, and habitat enhancements will be used to secure critical areas within the corridors and to protect the grass highway these animals depend upon.

PUERTO RICO

Conservation Partnership Program for the Yabucoa Agricultural Reserve (FY14/15); \$700K (State); Lead partner: Soil Conservation District of Eastern Puerto Rico. The Conservation District of Eastern Puerto Rico, the Puerto Rico Land Authority and the University of Puerto Rico Cooperative Extension Service are partnering with NRCS in the Caribbean Area to control excess water and improve water quality in the fertile, level lowlands of the Yabucoa

Agriculture Reserve (YAR). The 10,490-acre YAR in eastern Puerto Rico is specially zoned to promote protection of prime agricultural land. A large area of the YAR is located in the Río Guayanés floodplain, where producers suffer damages from severe and prolonged flooding to plantain, banana and other starchy crops. Project partners aim to improve drainage and water flow in the YAR to reduce flooding duration, allow flood waters to return to the main channel of Río Guayanés and eliminate ponding of stagnant water. The project will manage runoff, flooding and ponding, while controlling the seasonal high water table, by planting critical areas, removing channel obstructions, protecting heavy use areas, and installing grassed waterways, lined waterways and outlets, water control structures and water and sediment control basins.

Sugar Cane Industry Restoration Project (FY17); \$2M (National); Lead Partner: Serralles Agricultural, LLC; Participating States: Puerto Rico (Lead State). Through the Sugar Cane Industry Restoration project, Serralles Agricultural LLC, the Government of Puerto Rico and multiple private landowners will promote sugar cane agriculture in the western and southern regions of Puerto Rico through agricultural management and natural resources conservation practices. The partners will restore and expand existing water systems to preserve and enhance local aquifers, particularly in the arid south, while increasing the productivity of agriculture in these economically depressed regions. The Project also will improve soil structure and limit erosion and water runoff, while enhancing air quality, especially in Ponce where sugar cane bagasse will replace oil for boilers at the Serralles Distillery and reduce carbon dioxide levels.

Adaptation Measures in Southwestern Puerto Rico (FY17); \$918K (State); Lead Partner: Southwest Soil and Water Conservation District; Participating States: Puerto Rico (Lead State). The Lajas irrigation system located in southwestern Puerto Rico was built in the mid-1950 to supply four acre-foot of supplemental irrigation water to nearly 20,000 acres of fertile agriculture land. Through the Adaptation Measure in Southwestern Puerto Rico project, the Southwest Soil and Conservation District and six partners will build a new water conveying system and feed several water storage lagoons to supply water by gravity to participating farms in the area to a semiarid region with fertile soils. The partners will develop application tools to assist farmers on when and how much water to apply for optimal soil moisture and water resources in the region. The partners will make applications available to all farmers in the region, so they can decide when and how much to irrigate based on simple data entry quests that uses information on crops and date of planting. The rest of the information will be retrieved from existing SSURGO databases, a new USGS climatological network for the area.

Appendix B: NRCS Methodologies to Estimate Conservation Effects

NRCS uses three main mechanisms to evaluate conservation effects of its recommended activities. They are: Network Effects Diagrams, Conservation Practice Physical Effects (CPPE) documents, and the Conservation Effects Assessment Project (CEAP). Each is discussed below.

Conservation Network Effects Diagrams

To assist in the analysis of environmental impacts of its conservation practices, NRCS has developed Network Effects Diagrams depicting the chain of natural resource effects resulting from the application of each conservation practice. Each of the diagrams first identifies the typical setting to which the practice is applied. This includes identification of the predominating land use and the environmental resource concerns that trigger use of the conservation practice.

The diagrams then identify conservation practices typically used to mitigate or address the resource concerns. A network effects diagram for each of the NRCS conservation practice standards can be viewed on the National Handbook of Conservation Practices (NHCP) website in the last column at:

https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/cp/ncps/?cid=nrcs143_026849

Following identification of the conservation practice, the diagrams identify the physical activities that are carried out to implement the practice. From there, the diagrams depict the occurrence of the direct, indirect, and cumulative effects of the practice. Effects are qualified with a plus or a minus which qualitatively denotes an increase (“+”) or decrease (“-”) in the effect. Pluses and minuses do not equate to good and bad or positive and negative. Impacts are characterized in this manner due to the fact that site-specific conditions can influence the degree or intensity of the potential environmental impact. Only the general effects that are considered the most important from a national perspective are illustrated.

Additional information on the process used to develop the Network Effects Diagrams is available in the NRCS Watershed Science Institute Report CED-WSSI-2002-2, “Analyzing Effects of Conservation Practices—A Prototypical Method for Complying with National Environmental Policy Act (NEPA) Requirements for Farm Bill Implementation.”¹

Conservation Practice Physical Effects

The CPPE documents, found in the Field Office Technical Guide—Section V, and the NHCP, display in subjective terms the physical effects conservation practices have on natural resources.

Technical specialists document in the CPPE the practice effects based on their experience and available technical information.

¹ This document is included in the NRCS National Environmental Compliance Handbook and is available at <https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=29897.wba>.

When creating the CPPE, the question is presented, “When this practice is installed according to NRCS practice standards and fully functional, what effect will it have on the various resource concerns?” The answer is in the form of a rating that represents the practice’s effect on the resource concern and the magnitude of the effect.

The following terms define “Effect” values:

- No effect—The conservation practice being evaluated has no discernible effect on the resource concern identified;
- Worsening—The conservation practice deteriorates the condition of the resource; and
- Improvement—The conservation practice improves the condition of the resource.

The following terms express the magnitude of the effects:

- Slight—Some effect (positive or negative) of the practice on the resource, but not enough to influence the decision to select the practice to solve the problem;
- Moderate—A measurable effect (positive or negative) of the practice on the resource; and
- Substantial—An extensive measurable effect (positive or negative) of the practice on the resource.

National technical specialists with responsibility for a given conservation practice establish CPPE values for each conservation practice. The effects listed in the national CPPE represent general conditions nationwide. For example, the national agronomist has determined that generally, the implementation of Conservation Practice Standard (CPS) Residue and Tillage Management, No-Till/ (Code 329) will extensively reduce the sheet and rill erosion problem because of increased surface cover and decreased soil disturbance. Therefore, a value is entered as “Substantial Improvement” to the Soil Erosion—Sheet and Rill Erosion resource concern. However, the implementation of CPS Code 329 may cause a slight increase in soluble nitrate nitrogen infiltration depending on the time and method of application, rainfall, nutrient form, organic matter, soil texture, and depth-to-water table, and therefore, a value is entered as “Moderate Worsening” to the Water Quality Degradation—Nutrients in Ground water resource concern.

Since data on the CPPE are national in scope, State-level offices are encouraged to review and localize the information as necessary to reflect those effects expected to occur under local conditions. Each State will review and, if needed, edit the values in the National CPPE based on local knowledge and experience to reflect typical conditions in their State. States use an interdisciplinary group to refine existing entries to ensure proper consideration of all effects to all of the resource concerns. If a State modifies the national CPPE, the State will provide a description of the local conditions and a depiction of the typical practice installation to justify the change. A well-written description of the typical practice installation will aid the planner when it comes time to conduct site-specific analysis.

Expanding on the example discussed below, assume the national agronomist determined that,

in general, the implementation of CPS Residue Management, Reduced Till (Code 345) results in a “Slight to Moderate Reduction” in the Soil Erosion-Wind problem. However, a State agronomist observes that implementation of CPS Residue Management, Reduced Till (Code 345) results in extensive reduction of wind erosion because the critical wind erosion period in that State occurs when the soil is covered with residue or crop. The State agronomist will change the value to “Substantial Improvement” in the Soil Erosion-Wind resource concern, with a statement explaining the rationale for deeming the practice to have an Extensive rather than a Slight to Moderate reduction in the wind erosion resource concern.

Conservation Effects Assessment Project

In addition to developing the network effects diagrams described above, following the 2002 Farm Bill, NRCS initiated an extensive effort to assess environmental impacts from implemented conservation practices. The resultant CEAP uses literature reviews, modeling, farmer surveys, watershed assessments, and regional studies in collaboration with partners in universities, agencies, and conservation organizations to conduct this assessment. It relies, in part, on the statistical framework developed for the National Resources Inventories (NRIs). Since the early 1980s, the NRIs have provided statistically reliable nationwide information on status and trends in soil erosion and land use. Besides estimates of acres in cropland, pastureland, rangeland, and forests, the surveys also classify land with prime farmland conditions and wetland characteristics. The CEAP cropland assessments use NRI points to collect additional information, through surveys with farmers, to evaluate how conservation practices may affect such trends and to connect other resource concerns into the modeling framework. The CEAP grazing lands, wetlands, and wildlife assessments are developing ways to use the NRI as a basis for modeling regional estimates as well.

Regional studies show that existing conservation practices on cultivated cropland have reduced sediment, nitrogen, phosphorus, and pesticide losses and increased soil carbon content at the basin scale. Smaller-scale analyses of watersheds across the country have helped refine CEAP models and incorporate additional elements into the framework. Other ongoing CEAP components are evaluating the environmental impacts of conservation practices on wildlife habitats, wetland ecosystem services and restoration, and grazing lands. Studies have so far shown positive benefits for those resources.²

CEAP cropland assessments show that voluntary, incentives-based conservation approaches are achieving measurable results. Further opportunities exist to reduce soil erosion and nutrient losses from cultivate cropland. Targeting enhances effectiveness and efficiency of conservation program funding and technical assistance. Plus, comprehensive conservation planning that includes a combination of erosion-control and nutrient management practices is essential. Conservation planning should account for regional variation in pressing resource concerns. For example, in the Chesapeake Bay, Great Lakes regions, and Upper-Mississippi River Basin, the most important issue is the loss of nitrogen through leaching. In the Ohio-Tennessee Basin, loss of phosphorous causes the most damage. In the Missouri Basin, wind erosion is the largest culprit.

Estimating the direct and indirect impacts of such practices is a complicated task. CEAP is the

² For specific details see the NRCS Web site on CEAP:
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/ceap/>

latest and most complex development toward that goal and is a continuing effort. The CEAP modeling framework allows researchers to account for variable topographical and soil characteristics as well as for the effects of weather and climate. The impact of each practice at each site is modeled through mathematical formulas based on empirical observations. Since the underlying data points are statistically distributed, results can be extended beyond the sample. Still, CEAP models currently do not have the capacity to assess the impacts on all different natural resource concerns. They focus on nutrients and pesticides in water, sediment losses, and changes in soil organic carbon, primarily on cropland. Projects within the other CEAP components—wildlife, wetlands, and grazing lands—are underway to extend the use of the models. In addition, CEAP modeling is the basis for development of decision tools that can be used in policy decisionmaking at the national or regional level, as well as in conservation planning at the farm or field level.

Additional CEAP Resources: CEAP National Assessments

- Cropland (reports for individual regions are available on this page):
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/ceap/na/?cid=nrcs143_014144
- Grazing Lands—
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/ceap/na/?cid=nrcs143_014159
- Wetlands—
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/ceap/na/?cid=nrcs143_014155
- Wildlife—
https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/nra/ceap/na/?cid=nrcs143_014151
- CEAP Watershed Assessments—
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/ceap/ws/>
- CEAP Dynamic Bibliographies— <https://www.nal.usda.gov/waic/conservation-effects-assessment-project-ceap-and-related-publications>

Appendix C: Integration of Environmental Considerations into NRCS Planning and Program Delivery

From soil erosion prevention, to wetland restoration, to water quality improvements, to wildlife and energy conservation efforts, the intent of NRCS conservation activities has been to improve the quality of the environment for future generations by mitigating the effects of agricultural production on our Nation's natural resources using the best available science-based information and technologies.

State and local conservationists, as well as members of the public, play a pivotal role in accomplishing this mission. In each State there is a State Technical Committee comprised of representatives from Federal, State, local, and Tribal Governments, as well as representatives of organizations knowledgeable about conservation and agricultural production issues, and other interested individuals. This Committee provides the NRCS State Conservationist with advice and recommendations on the implementation of NRCS-administered conservation programs.

Local, as well as State-wide priorities are considered so that when a local NRCS conservationist is developing a conservation plan, they can address natural resource concerns not only of national or State interest, but also those of most importance locally. Conservation plans can be designed to address environmental resource concerns on private, non-Federal, or Tribal Government lands, or a combination. NRCS conservationists help individuals and communities take a comprehensive approach to planning the proper use and protection of natural resources on these lands through a nine-step planning process described in the NRCS National Planning Procedures Handbook. (See <https://directives.sc.egov.usda.gov/36483.wba>.)

As part of this conservation planning effort, individual environmental reviews called environmental evaluations (EE) are completed which inform the conservation planning effort and assist the agency's compliance with NRCS regulations implementing National Environmental Policy Act (NEPA). The EEs are a concurrent part of the planning process in which the potential long- and short-term impacts of an action are briefly evaluated, and alternative actions explored. The EEs and conservation plans are developed to assist the landowner in making decisions and implementing the conservation practices identified in the conservation plan.

Conservation plans include practices and activities that meet or exceed NRCS conservation practice standards and specifications as documented in the Field Office Technical Guide (FOTG) and the National Handbook of Conservation Practices (NHCP). Conservation practices are developed through a multidisciplinary science-based process, including the opportunity for public comment, in order to minimize and mitigate the risk of unintended consequences. NRCS practice standards are established at a national level and set the minimum level of acceptable quality for planning, designing, installing, operating, and maintaining conservation practices. At a minimum, each conservation practice standard includes the definition and purposes of the practice, conditions in which the conservation practice applies, and the criteria supporting each purpose. (See NRCS conservation practices at: https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/cp/ncps/?cid=nrcs143_026849.)

When a conservation practice standard is developed or revised, NRCS publishes a notice in the Federal Register of the availability of the standard for review and comment for a period of not less than 30 days from the date of publication. Standards from the NHCP and interim standards are used and implemented by States, as needed, and may be modified to include additional requirements to meet State or local needs. Because of wide variations in site conditions such as soils, climate, and topography, States can revise these national standards and develop specifications to add special provisions or provide additional details in the conservation practice standards. State laws and local ordinances or regulations may also dictate more stringent criteria; in no case, however, can States use standards that are lower than national standards.

The Conservation Stewardship Program (CSP) includes funding for conservation activities known as “enhancements.” Each enhancement is associated with a conservation practice. Installation standards for CSP enhancements are defined in the applicable job sheet. Enhancements are developed specifically to provide a higher level of conservation treatment than what is required under the associated conservation practice standards. In many cases, this is achieved through implementation of additional management activities above and beyond the minimum requirements of the standards. Only practices that meet or exceed NRCS standards and specifications are eligible for funding through NRCS programs.

Standards for conservation practices are detailed in Section IV of the local FOTG.¹ Conservation practice standards, planning criteria, and local resource data are maintained in the FOTG to provide detailed information for planners to plan and design practices in a manner consistent with local conditions and resource concerns. Commonly, suites of conservation practices are planned and installed together as part of a conservation management system designed to enhance soil, water, and related natural resources for sustainable use. Conservation practice standards and State-specific conservation practice specifications include considerations that, when combined with the considerations identified during the EE process, are designed to minimize potentially adverse impacts to affected resources.

Typical effects of implementing conservation practices are summarized in each State’s Conservation Practice Physical Effects, contained in Section V of the FOTG. This collection of resource-based planning, design, and implementation documents provides NRCS employees and other users with the necessary information, modified for local conditions, to develop alternative approaches to addressing natural resource problems.

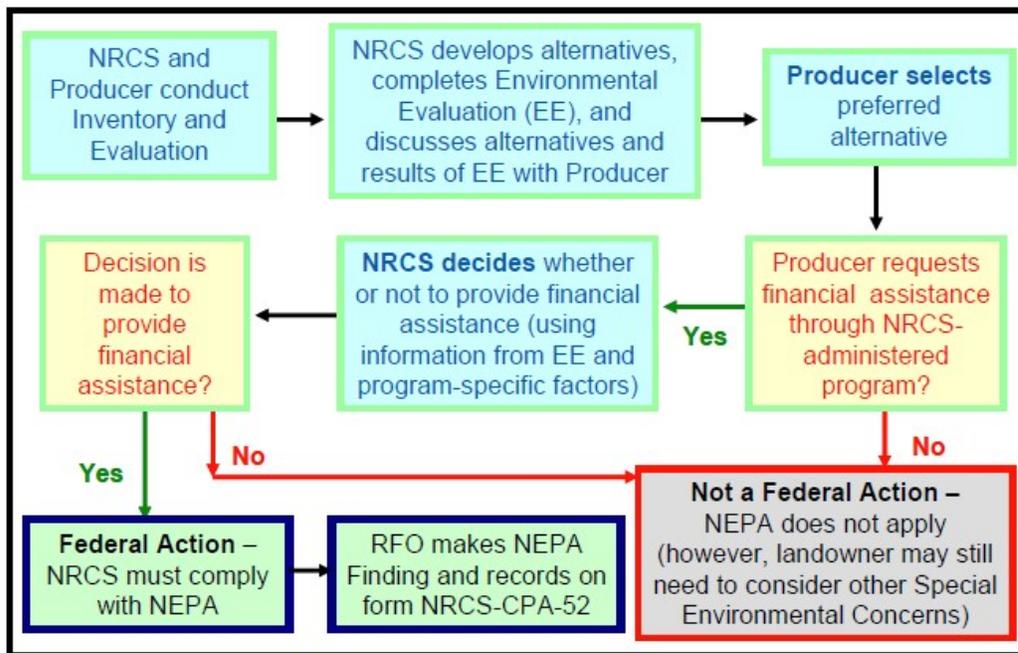
When an action has been proposed, the conservation planner conducts the EE and documents the results on the EE worksheet. The proposed action is evaluated against a No Action alternative and other alternatives being considered to address identified resource concerns to determine and quantify, to the extent feasible, impacts upon soil, water, air, plant, animal, and certain human and energy resources. The planner also considers and evaluates the proposed action and alternatives with respect to special environmental concerns identified by related laws, regulations, Executive Orders, and agency policies. Where adverse impacts or extraordinary circumstances are present, the planner identifies ways in which the alternative can be modified to avoid or minimize these effects.² Required permits or consultations with other agencies are also identified.

¹ See <https://efotg.sc.egov.usda.gov/#/> to access the FOTG for an NRCS office.

² See NRCS General Manual Title 190 Part 410.3B.

The results of the EE are shared with the producer, who then identifies the alternative and conservation practices they are willing to implement, if any. NRCS may then provide financial assistance or offer to purchase an easement if there are no significant adverse effects, funds are available, program-specific requirements are met, and the landowner is willing to follow NRCS conservation practice standards and specifications and other program requirements. The NRCS Responsible Federal Official (RFO) reviews the results of the EE to ensure any necessary consultation has been carried out and to determine whether NRCS NEPA analysis is sufficient, before Federal funding is provided. (See fig. 1.)

Figure 1: NEPA and the NRCS Process



This process is followed for all NRCS Farm Bill conservation programs. The effects of the practices may vary somewhat depending on the local ecosystem(s), methods of practice installation, and presence of special resource concerns in a particular State, such as the presence of a coastal zone, endangered or threatened species, historic or cultural resources, and the like. While effects on these resources may be described in general terms at the national level, they must be addressed at the State and local level. This is particularly true for endangered and threatened species, historic preservation, historic and cultural resources, essential fish habitat, and other resources that are protected by special authorities that require consultation. NRCS will consult on a State or site-specific level, as needed and appropriate, to ensure the RCPP actions do not adversely affect special resources of concern. NRCS will also implement practices in a manner that is consistent with the NRCS policy to avoid, minimize, or otherwise mitigate adverse effects to the extent feasible.

For example, to ensure compliance with the Endangered Species Act, State Conservationists will invite representatives of the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), as applicable, to all State Technical Committee meetings and

encourage their involvement in the development of program criteria within the State. NRCS will also conduct additional programmatic consultations with USFWS and NFMS at the State level, as needed, to ensure that RCPP implementation is not likely to adversely affect species listed as endangered or threatened or species proposed for listing as endangered or threatened or designated or proposed critical habitat. Such consultation will also be used to identify ways the RCPP might further the conservation of protected species and identify situations in which no site-specific consultation would be needed.³ Site-specific consultation will also be conducted as needed to avoid adversely affecting any protected species or habitat.

To ensure compliance with the National Historic Preservation Act and associated authorities, NRCS State offices will follow the procedures outlined in the Advisory Council on Historic Preservation's (ACHP) regulations (36 CFR part 800) or, in accordance with NRCS' alternate procedures (nationwide Programmatic Agreement), invite State Historic Preservation Officers (SHPO's) and federally recognized Tribes (or their designated Tribal Historic Preservation Officers) to enter into consultation agreements that highlight and focus review and consultation on those resources and locations that are of special concern to these parties. In addition, if no State-level agreements are developed with the SHPO's or Tribes, and if other consulting parties are identified, they will be afforded, as appropriate, an opportunity to advise the NRCS State Office during project-specific planning about their historic and cultural resource concerns so that they may be taken into account in accordance with the ACHP regulations. Similar processes will be followed, as needed and appropriate, to address other special requirements for the protection of the environment.

³ In addition to situations in which NRCS determines there is no effect on protected species or habitat, site-specific consultation should not be needed when NRCS and USFWS or National Oceanic and Atmospheric Administration Fisheries agree a category of Proposed Actions is not likely to adversely affect a protected species or habitat and NRCS obtains written concurrence based on that agreement.