

Healthy Soil Healthy Water

*Leveraging the 2018 Farm Bill to
Restore America's Soil and Water*



The Izaak Walton League of America

The Izaak Walton League of America is one of America's oldest and most successful conservation organizations. Founded in 1922 by 54 anglers, the League has worked to defend our nation's soil, air, woods, waters, and wildlife for nearly a century. The League has over 200 local chapters and 40,000 members across the country.

The League has been at the forefront of successful efforts to pass many of our country's landmark conservation laws, including the first Federal Water Pollution Control Act in 1948, the Wild and Scenic Rivers Act of 1968, and the Clean Water Act of 1972. From the very first Farm Bill in 1933, the League has supported better conservation on America's farms and ranches. The League's 1954 'Walton Soil Plan' presaged the 1956 Soil Bank Act and the creation of Conservation Reserve Program, Sodbuster, and Swampbuster in the 1985 Farm Bill.

Today the League's Agriculture Program is focused on reducing the impact of crop and livestock production on America's water resources. We educate federal, state, and local policymakers and others about soil health solutions, and advocate for policies and programs that help farmers and ranchers be better stewards of our soil, waters and wildlife.

To learn more about the Izaak Walton League of America, visit us at www.iwla.org.



About the author

Duane Hovorka is Agriculture Program Director at the Izaak Walton League of America. He has over 35 years of experience in agriculture, water, wildlife, energy, and transportation policy at the national and state level. Hovorka has a BA in Political Science from the University of Nebraska.

Contact: Izaak Walton League of America
707 Conservation Lane, Suite 222, Gaithersburg,
Maryland, 20878. Agriculture@iwla.org

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Healthy Soil, Healthy Water

Leveraging the 2018 Farm Bill to Restore America's Soil and Water



Congressional leaders writing the 2018 Farm Bill clearly recognized the value of healthy soil for farmers, ranchers, and our natural resources. The term “soil health” occurs dozens of times in the Conference Report on the legislation as enacted.¹

It is *not* the purpose of this publication to catalog the provisions of the 2018 Farm Bill that impact soil health — that has been done. The Soil Health Institute and National Sustainable Agriculture Coalition produced a report, *Impact of 2018 Farm Bill Provisions on Soil Health*² that captures and describes nearly five dozen provisions of the 2018 Farm Bill that impact soil health. Those are scattered throughout the conservation, crop insurance, research, and other titles of the Farm Bill.

This is also *not* a guide for farmers looking for help to develop or implement soil health plans. Your local conservation district or Natural Resources Conservation Service office is a good place to start, and there are some independent soil health advisors who are terrific.

What we hope to do in this publication is to highlight for state and local agencies, non-governmental organizations, and others the *soil health opportunities* we see in the new Farm Bill — the levers they might use to promote more widespread adoption of soil health systems.

Those soil health opportunities can be especially helpful in addressing the water quality challenges that plague our nation. Nearly 50 years after passage of the Clean Water Act, more than half of America's rivers and wetlands, and more than 70% of our lakes and reservoirs, are too polluted to meet basic water quality standards.³ The primary culprit is polluted runoff.

We see opportunities in the new Farm Bill to better focus the United States Department of Agriculture (USDA) Conservation Stewardship Program and Environmental Quality Incentives Program (EQIP) to address soil health at the state and local level. The EQIP Conservation Innovation Grant program was expanded, including a carve-out for on-farm soil health trials.

The Regional Conservation Partnership Program provides a great opportunity for agencies and organizations to target USDA dollars for soil health planning, testing, and practice incentives.

Agencies and organizations without a lot of resources can still leverage USDA's Continuous Signup Conservation Reserve Program to restore grass on degraded cropland as part of a long-term soil health strategy. For agencies with dedicated funding, the Conservation Reserve Enhancement Program offers a similar opportunity with some built-in advantages.

Agencies and universities may be interested in the soil health research opportunities included in the new Farm Bill, and at least two states are using federal crop insurance as a platform to promote soil health practices.

We hope this publication will stimulate conservation agencies and organizations to think creatively about ways to promote more widespread adoption of the soil health systems that provide so many benefits.

You can also find examples of innovative state and local soil health initiatives from around the USA in our companion report, *State and Local Soil Health Strategies: Building Soil Health Policy from the Ground Up*.⁴ Find it and others at www.iwla.org/agriculture.

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Why Soil Health?

Soil health is a frequent topic of conservation in agricultural circles – and with good reason. Healthy soils provide economic and operational benefits for farmers and ranchers.⁵

America has lost more than 50% of its topsoil to erosion,⁶ and the continuing erosion of topsoil puts our food system at risk. By increasing

aggregation, healthy soils reduce erosion from water or wind.⁷ Healthy soils help defend plants from pests and disease, reducing the need for pesticides.⁸ With higher organic matter, healthy soils provide additional nutrients to crops, allowing farmers to reduce their application of fertilizer.⁹

Healthy soils infiltrate water in wet times and hold that water for dry times, letting farmers get into fields earlier and providing more consistent yields and better resilience to changes in weather and climate.¹⁰ Healthy soils grow healthier plants, which can mean healthier, nutrient dense food.¹¹

Restoring America's Waters

More than half of America's streams and wetlands, and more than 70% of our lakes and reservoirs, are too polluted to meet water quality standards.³ Agricultural runoff and development are the leading sources of the pathogens, sediment, nutrients, and pesticides polluting our rivers. The Gulf of Mexico, Chesapeake Bay, Great Lakes and other estuaries suffer when the pollutants arrive from upstream.

Healthy soil absorbs water like a sponge, reducing polluted runoff from farmland into streams, lakes, and wetlands, and improving water quality. According to the USDA, increasing soil organic matter by just 1% can allow the soil to hold another 25,000 gallons of water per acre.¹²

Better water quality can reduce the cost of water treatment to downstream communities. Better water quality in rivers and lakes improves habitat for fish. By holding water in the soil, healthy soils can reduce the volume of floodwaters downstream.

Rebuilding soil health can also take large amounts of



Peggy Greb, USDA ARS

carbon from the air and store it in the soil as organic matter.¹³ Soil health practices like planting winter cover crops and rotational grazing provide wildlife benefits as well. When farmers reduce their costs and add resilience to their operations, more of their income stays local, benefitting rural communities.

“Healthy soil” means soil that is biologically active; it has large amounts and the right balance of beneficial bacteria and mycorrhizal fungi to support healthy plants. Beneficial bacteria, fungi, other microbes, and soil-dwellers like worms and nematodes break down dead plant material, fix nitrogen from the air into the soil, and help plants access nutrients and water and fight off pests and disease.

Maintaining healthy microbes requires a food supply: Organic matter in the soil and exudates from living plants -- carbohydrates, amino acids, and other compounds that plants release into the soil to attract and feed beneficial microbes.¹⁴ Farming practices like intensive tillage, heavy use of chemical fertilizers and pesticides, and over-grazing can reduce organic matter and harm soil health.

The levels of organic matter in our soil – the combination of dead plant material, bacteria, fungi, and critters – has fallen by half or more since Colonial times.¹⁵

The United States Department of Agriculture (USDA), academic experts, and non-governmental organizations have identified key farming practices that can restore and maintain soil health. Combining practices like reducing or eliminating tillage, planting cover crops, diversifying crop rotations, reducing the use of chemical fertilizers and pesticides, managed rotational grazing, and integrating livestock onto cropland can protect and feed the diverse population of microbes and soil-dwelling critters needed for healthy soil.¹⁶

By restoring the health of our soils, we can restore and protect the health of our rivers, lakes, and wetlands.

Working Lands: EQIP and CSP

Through the Environmental Quality Incentives Program and Conservation Stewardship Program NRCS provides financial help and advice to farmers and ranchers to help them adopt conservation practices and systems. Together, they provide over \$3 billion per year for farm and ranch conservation. Farmers apply for contracts, which are awarded through NRCS state offices to the highest ranking applications.

The Environmental Quality Incentives Program (EQIP) typically provides a share of the cost needed to help a farmer adopt conservation practices on a field or part of an operation. The Conservation Stewardship Program (CSP) provides funds to help farmers adopt and maintain conservation systems, and CSP contracts cover an entire farm.

With respect to the Conservation Stewardship Program, Congress was explicit: “To the maximum extent feasible, the Secretary shall manage the program to enhance soil health.”¹⁷ Unfortunately the interim final rules issued by USDA to implement the 2018 Farm Bill largely ignored this provision. The new Farm Bill specifically allows EQIP funds to be used for soil health testing, soil health planning, and practices (like soil health) that help adapt to increasing weather volatility.¹⁸

Each NRCS State Conservationist determines state-level priorities for the programs, with advice from a State Technical Committee made up of representatives from state, federal, and local agencies; farm, ranch, and conservation organizations; academic institutions and others. **By volunteering to serve on the NRCS State Technical Committee, an agency or organization can gain an opportunity to provide advice to the USDA on ways to better leverage the programs to improve soil health, including:**

- **Soil Health Planning.** The new Farm Bill allows CSP and EQIP funds to be used for soil health planning. At the state level NRCS can make soil health planning a top priority for the use of CSP and EQIP funds. NRCS has increased its soil health training for employees, and CSP and EQIP funds

could supplement NRCS staff by paying for private technical service providers to develop soil health plans for farmers and ranchers where NRCS planning staff is unavailable.

- **Prioritizing Soil Health.** In implementing CSP and EQIP, USDA selects priority natural resource concerns at the national level, and state NRCS offices identify priority resource concerns at the state and local level. State Conservationists could designate ‘soil quality limitation’ as a state-wide priority resource concern, giving additional points in scoring applications for both CSP and EQIP to farmers applying for funds to implement soil health systems.

- **Soil Health Testing.** NRCS state offices could make soil health testing a standard part of every CSP, EQIP, or Regional Conservation Partnership Program contract that includes a soil health practice. NRCS would pay a share of the cost of annual soil health testing, with results reported to the farmer and NRCS. Farmers need the data to understand the impacts of soil health practices on their fields, and USDA needs the data to understand the impact of combinations of soil health practices on soil health in different soils, climates, and farming systems.

- **90% Cost-Share.** The 2018 Farm Bill allows each State Conservationist to identify up to ten high priority conservation practices, and to reward farmers and ranchers who adopt them up to 90% cost-share for those practices (versus the 50% to 75% cost-share typical for most EQIP practices).¹⁹ NRCS could use the authority to provide higher cost-share payments for combinations of soil health practices applicable in each state. Paying higher cost-share to some farmers will mean less money for other contracts, so we suggest this authority be reserved for high-value practices that farmers have been reluctant to try for financial reasons.

- **Grazing Management.** The 2018 Farm Bill earmarks 50% of EQIP funds for livestock practices. In allocating EQIP funds at the state level, NRCS could focus more of the livestock funding for restoring cropland to grassland and management intensive rotational grazing that will boost soil health on grazing lands, rather than on expensive manure lagoons and other structures that support feedlots and large livestock barns but have little impact on soil health.

John Kelley, USDA NRCS



Jeremy Singer, USDA ARS

State & Regional Partnerships: RCPP

The Regional Conservation Partnership Program (RCPP) was created in the 2014 Farm Bill to consolidate several regional programs that had funded United States Department of Agriculture (USDA) work in the Chesapeake Bay, Great Lakes, and other regions.

Under the program, funded at \$300 million per year by the 2018 Farm Bill, USDA earmarks funds through partnership agreements to pay farmers for implementing designated practices that will address a priority natural resource concern in a region or watershed.

Congress made changes to the RCPP in the 2018 Farm Bill in an effort to streamline the program for USDA, partners, and participants. USDA issued an Interim Final Rule²⁰ in February, 2020, and USDA could make further changes when it issues a final rule. The legislative changes should make the RCPP a more useful tool and one that should be more widely used at the regional, state, and local levels to address soil health and other natural resource problems.

RCPP agreements are generally *not* structured to provide direct funding for staff or other costs to conservation organizations or agencies, although they can help partners deliver advice to farmers. They are designed to help organizations achieve their conservation goals by funneling USDA funds to farmers to achieve conservation purposes in a targeted area. The RCPP can provide opportunities for organizations and agencies to leverage other private or public funds to address a critical natural resource problem in a watershed or area.

The multiple benefits that soil health systems provide in improving water quality, reducing soil erosion, storing carbon in the soil, reducing chemical input costs for farmers, and providing better habitat for fish and wildlife should make projects focused on soil health a great fit for RCPP funding.

USDA says it values innovation in RCPP projects. RCPP projects could address that by focusing on helping farmers put in place (and test) bundles of soil health practices that can accelerate the restoration of soil health (e.g., combining better tillage, cover crops, diverse crop rotations, and livestock practices).

Including soil health testing in every RCPP contract that involves soil health could provide data on the success of different combinations of practices, meeting the USDA priority for outcome-based RCPP proposals. By demonstrating success in increasing soil health, this approach could also help ensure farmers continue the practices long after the RCPP contracts expire.

Providing soil health education and incentives for soil health planning, with a priority for reaching historically underserved farmers, could address another RCPP national priority.

Half of the RCPP funds are awarded to applications that address conservation priorities in eight national Critical Conservation Areas (see map). However, to be eligible, RCPP projects for Critical Conservation Areas must address at least one of the designated “priority resource concerns” identified for the target region. Soil health solutions can address a wide variety of natural resource problems, but only one of the eight national Critical Conservation Areas (CCAs) includes “soil quality degradation” as a designated resource concern — the Colorado River Basin because of excess salts and other chemical concentrations. Every other CCA includes at least one priority resource concern that can be addressed by soil health practices, such as water quality degrada-



Lynda Richardson, NRCS



Ron Nichols, NRCS



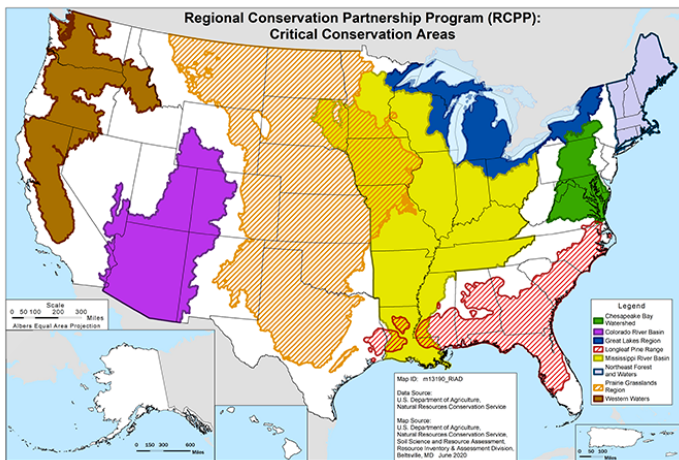
Conservation Innovation

The 2002 Farm Bill authorized the Conservation Innovation Grants (CIG) program, which was launched in 2004. Funding comes from the Environmental Quality Incentives Program. Congress gave USDA discretion to decide how much of its EQIP funding it would use for CIG. Historically, CIG has been used to develop promising new conservation approaches and technologies, and funding was rarely provided directly to farmers. Dubbed ‘CIG Classic’ by USDA, these grants are still offered at the national level, but some state NRCS offices use EQIP funds to award state-level CIG grants. USDA changes the conservation priorities for funding each year.

Congress expanded CIG in the 2018 Farm Bill, earmarking \$25 million per year for new on-farm innovation trials, which include soil health management systems.²² \$37.5 million was also earmarked annually for the development of innovative technologies that address state air quality issues. In 2020 USDA put out requests for proposals for up to \$15 million for national CIG Classic grants, and \$25 million for CIG on-farm trials including up to \$10 million for soil health demonstration trials, all to be awarded at the national level.

Unlike CIG Classic, the on-farm trials are to fund the implementation and evaluation of innovative approaches and systems that we already know provide a conservation benefit. Funding can be used to provide technical assistance, carry out evaluation, and provide incentives directly to producers to offset the risk of implementing the innovative approach. USDA awards 3-5 year grants through a national competitive process to businesses, non-profit organizations, non-federal government agencies, and public and private colleges and universities to carry out the on-farm trials.

State agencies or their partners can apply for a Conservation Innovation Grant to develop promising soil health approaches and technologies. Where soil health approaches and systems have proven to have a conservation benefit, states or partners can apply for an on-farm trial grant to test and evaluate the environmental and economic results of the approach or system. USDA’s Conservation Innovation Grant web site has information and grant announcements.²³



tion or insufficient water, but agency or organizational applicants will need to explain how soil health practices will address those resource concerns.

The other half of RCPP funds are awarded for applications that focus within a state or a small number of states. At the state level, RCPP applications should ensure they are addressing at least one natural resource priority concern in the watershed or area. Partners may also want to consult a state’s soil health plan, if there is one, or the NRCS soil health strategy for the state.

Where to Start

Start with a visit to the designated Regional Conservation Partnership Program coordinator at the USDA NRCS office in your state.²¹ That person can fill you in on state priorities, the application process, past award-ees, and perhaps even potential partners. Local conservation districts should be consulted as well, for input, a better understanding of locally important natural resource concerns, and as potential partners. Our Appendix has more information on the RCPP.



Rodale Institute

Continuous CRP

The Conservation Reserve Program was created in 1985 to pay farmers to take vulnerable land out of crop production and plant grasses, shrubs, or trees to conserve soil, protect water quality, and provide wildlife habitat.

The 2018 Farm Bill places in statute USDA's 'continuous signup' approach to the Conservation Reserve Program (CRP), under which landowners wishing to enroll eligible land in high value conservation practices like grass waterways, riparian buffers, windbreaks, and wetland restoration can enroll automatically at any time without waiting for a CRP General signup. The new law also instructs USDA to grow the enrollment of Continuous CRP to at least 8.6 million acres by 2023, and it reserves at least 40% of Continuous CRP acres for practices that address water quality (the CRP Clean Lakes, Estuaries, and Rivers initiative, or CLEAR).

USDA currently does not cap the number of acres it will enroll in Continuous CRP contracts in a state or locality. That gives agencies and organizations a great opportunity to promote the program to farmers and other landowners, helping them enroll in 10-15 year CRP contracts that the federal government will pay for.

State agencies, local conservation districts, and wildlife organizations have led successful outreach campaigns to enroll landowners in targeted areas in Continuous CRP, boosting the acres of wildlife habitat, protecting water quality in local streams and lakes, and restoring the health of soils by planting grassland mixes on often degraded or highly erodible soil.

These outreach efforts can be even more successful where the agencies or organizations can offer additional incentives for landowners to enroll. That could include payments for landowners to open their land to walk-in hunting, fishing, hiking or bird-watching, or to offset more of the cost of planting and establishing the vegetation than USDA will cover.

The payments could be linked to conservation objectives, like the use of a diverse seed mix that includes pollinator-friendly plants or mid-contract mowing or burning that will maintain grassland free of shrubs or trees.

Unfortunately, Congress and USDA capped the rental payments offered to landowners for Continuous CRP contracts at 90% of county average rental



Gary Wilson, NRCS

rates for the soil type, and USDA has taken other actions that further reduce the overall payments offered to landowners.²⁵ USDA will still pay a signup bonus of 32.5% of the first year's rental payment to farmers who enroll, as well as half of the upfront cost of planting the vegetation.

Despite the changes that have reduced overall payment offers to most farmers, the Continuous CRP remains an attractive option for potential partners. Agencies or organizations can focus limited staff and volunteer resources on outreach efforts, can increase or decrease their commitment to the initiative at will, and can carefully target efforts to a particular watershed or even particular lands needed to achieve conservation objectives. They can also add additional incentives as the need arises or funds become available.

The 10-15 year duration of CRP contracts makes this a long-term soil health strategy, but one that comes with substantial water quality, wildlife, and carbon storage co-benefits. When the Continuous CRP contract expires, landowners may be able to re-enroll in a new CRP contract. They could instead convert the land into a management intensive rotational grazing system, use the area to provide forage to supplement livestock grazing of adjoining croplands, or place the land back in crop production using methods that protect the restored soil.

Continuous CRP offers important advantages, but where state and local agencies or organizations have a stable source of matching funds and the ability to make longer term commitments, they should consider the Conservation Reserve Enhancement Program.



Dot Paul, USDA NRCS



Capitalize on CREP

USDA

The Conservation Reserve Enhancement Program (CREP) began in 1998 as a USDA initiative to combine Conservation Reserve Program (CRP) contracts with state and local funding to address conservation problems in targeted areas.

The program has been especially effective at helping landowners to install filter strips and buffer strips along streams and restore and protect wetlands, to address water quality problems in watersheds polluted by agricultural runoff. It has also helped restore grassland and other wildlife habitat in targeted landscapes.

CREP projects improve soil health, because they typically take cropland out of production and plant a combination of perennial grasses, forbs, shrubs, and/or trees. Eliminating tillage, eliminating most chemical fertilizer and pesticide applications, and establishing perennial vegetation should result in an increase in soil organic matter and the improvement of soil health. CREP projects often focus on locations and lands with highly erodible soil, like hillsides or riparian areas, which are vulnerable to erosion.

History of Success

For more than 20 years, Conservation Reserve Enhancement Program agreements have been a way for states to multiply the impact of state, local, and private funds to accomplish conservation objectives. Under CREP agreements between the USDA Farm Service Agency and states, USDA committed to fund a certain number of acres of Continuous Conservation Reserve Program contracts, which include annual rental payments for 10 to 15 years plus a share of the cost of establishing vegetative cover.

In return, the states and partners agreed to fund a portion of the overall project costs. That can include staff time to provide outreach and planning assistance to farmers, additional incentive payments, increased cost-share payments to landowners for particular seed mixes, payments to extend the contracts for additional years, conservation easements to prohibit the land from being converted back to cropland when the



USDA



CRP contract expires, and associated costs like monitoring easements long-term.

CREP agreements are limited to a particular watershed or area, designated conservation practices that address a resource problem (or problems), a set number of acres, and a number of years.

Successful CREP partnerships have helped clean up rivers like the Michigan, Minnesota, James (South Dakota), Illinois, and Ohio. CREP projects helped restore stream flows in rivers like the Upper Arkansas (Kansas), Platte (Nebraska) and Republican (Colorado), and helped protect trout streams from Washington state to West Virginia. CREP agreements have worked to reduce polluted farm runoff into the Chesapeake Bay, Florida Everglades, and Lake Erie.

The 2018 Farm Bill put many of the CREP provisions in statute for the first time.²⁶ Congress added some requirements for new CREP agreements, while allowing existing CREP agreements to continue as is. The new law provides more flexibility for USDA to provide higher payments under a CREP agreement — including rental payments higher than the 90% of average soil rental rate cap that applies to other Continuous CRP contracts.

CREP and Soil Health

The Conservation Reserve Program was designed to address three co-equal resource concerns: soil conservation, water quality, and wildlife habitat. Past CREP agreements have generally focused on providing water quality or wildlife benefits (or both); soil conservation benefits came primarily as a co-benefit.



In the future, CREP agreements could be focused on soil health, helping restore organic matter and soil health in seriously degraded soils.

For example, the loss of topsoil has been a longtime problem in the Piedmont region of

the Southeast, where some fields have lost virtually all of the 6" to 12" of their historic topsoil. Planted with a mix of grassland vegetation and properly managed for 10-15 years, a significant part of the organic matter and soil biology that was lost might be restored.

At the end of the CREP contract, the grassland could be placed in a well-managed rotational grazing system to protect and further improve the soil. The landowner could install the fencing and water systems needed for the system before or during the CREP contract. That would allow low-volume grazing as a management tool during the contract, and would facilitate transition to grazing after the contract expires. Under the 2018 Farm Bill, USDA could even help pay to install the fencing and water systems under an Environmental Quality Incentives Program or Conservation Stewardship Program contract during the last year of the CREP contract.²⁷

As an alternative, at contract's end the land could be converted back to cropland using a combination of soil health practices like no till, cover crops, conservation crop rotations, and organic or low chemical pest and nutrient management to maintain soil health.

Transition to organic would be also an attractive option for soil that is not highly erodible. The landowner could avoid using non-organic chemicals on the land for the last three years of the CREP contract, allowing the operation to be certified organic from the start of production.

See the appendix for more on CREP and soil health.

CRP Transition

When 10-15 year Conservation Reserve Program contracts expire, landowners must decide what to do with their land. In the past their decision has too often been to kill the grass and put the land back into conventional row crop production. The result is loss of many of the soil conservation, wildlife habitat, and water quality benefits that came from having perennial grasses.

As a result of the 2018 Farm Bill, there are now new options for landowners, and some of the old options have changed.

For landowners, agencies and organizations concerned about soil health, those changes are important. Agencies and organizations can educate landowners with expiring CRP contracts about the various options they have, and can help them develop conservation plans and apply for appropriate conservation programs. They might even be able to offer additional incentives to landowners willing to enroll in these programs.

Re-enrolling in another CRP contract may be an option for some. The 2018 Farm Bill requires that USDA hold a General CRP and Grassland CRP signup at least once a year, giving landowners with expiring CRP contracts an opportunity to apply for a new contract.²⁸ However, the statute now limits General CRP rental rates on re-enrollments to 85% of county average soil rental rates,²⁹ and an applicant may have to offer to accept an even lower rental rate to get a contract.

Bob Nichols, NRCS





A CRP Continuous Signup contract may also be an alternative, although most Continuous Signup practices will only cover part of a field, like a buffer strip along a stream, filter strip, windbreak, or wetland restoration.

A landowner with an expiring CRP contract has priority for enrolling in a Grassland CRP contract, and would get additional priority points if they have land at risk of conversion or development and/or land of ecological significance.³⁰ Grassland CRP contracts allow a landowner to hay or graze the land under an approved conservation plan, while getting an annual payment from USDA of up to 75% of the grazing value of the land plus up to 50% share of the cost of new practices like cross-fencing or planting pollinator-friendly species.³¹

Landowners who plan to use the land for grazing may be able to get financial help from USDA to pay for investments needed in fencing and water. Congress gave landowners the option to apply for a Conservation Stewardship Program or Environmental Quality Incentives Program contract in the last year of a CRP contract. That could be used to install fencing and water for a managed rotational grazing system on the land that is ready to go when the CRP contract expires.

The CRP Transition Incentive Program is designed for CRP contract holders who want to sell or rent the land to a beginning farmer or rancher or a socially disadvantaged farmer or rancher. The landowner can get two additional years of CRP rental payments, and the new owners or renters must put the land back into production using sustainable grazing or farming methods which should protect soil health. For a retiring farmer or a non-operating landowner, the program can be a way to ensure the land will be managed in a way that protects soil health.³²

SHIPP

The Soil Health and Income Protection Program (SHIPP) was included in the 2018 Farm Bill to give farmers an opportunity to take land out of crop production for 3-5 years and plant perennial vegetation to help restore soil health. The program is limited to 50,000 acres and to five states: Iowa, Minnesota, Montana, North Dakota and South Dakota.³³

Most farmers would receive an annual rental payment of half of what they would get through the general Conservation Reserve Program. Farmers must pay the full cost of the seed and planting, but they can use a low-cost perennial seed. A farmer can enroll no more than 15% of their land in the program. USDA opened the program for signup in March, 2020, and extended the enrollment deadline to November 20, 2020. The statute requires that SHIPP enrollment be completed by December 31, 2020.

Because of its limited size and scope, SHIPP represents a modest opportunity for state and local agencies and organizations to promote SHIPP contracts among landowners in the five Prairie Pothole states where it is available. The program allows haying or grazing outside of the nesting season, and farmers could use the program to help restore areas of degraded soil on their farm.

Should Congress extend the program and expand it to other states, SHIPP could provide more opportunity in the future. SHIPP is administered by the USDA Farm Service Agency, which runs the Conservation Reserve Program, so that agency would have information on the current status.



Lynn Betts, NRCS



Ron Nichols, USDA NRCS

Soil Health Research

The 2018 Farm Bill added soil health as a priority for the Agriculture and Food Research Initiative, the National Institute of Food and Agriculture's flagship competitive grants program.³⁴ The initiative was funded at \$425 million for FY 2020, and provides grants to colleges and universities for research, education, and/or extension work related to agriculture. Soil health was included under AFRI's bioenergy, natural resources, and environment area, one of six legislated priority subject areas.

The new law also added soil health as a priority for the research, education, and extension activities funded under the Organic Agriculture Research and Extension Initiative.³⁵ The initiative awards grant funds to colleges, universities, government agencies, non-profit research organizations and others for integrated research, education, and extension activities that address critical problems in organic agriculture. The Farm Bill also increased annual funding for the initiative to \$50 million by 2023 from \$20 million in 2019.

These programs were already addressing soil health, at least indirectly, because of the impacts healthy soils have on both agricultural production and natural resources. However, the specific inclusion of soil health language in the authorizing legislation, and the increase in funding for both of these grant programs should provide increased opportunities for colleges, universities, and other research scientists to leverage state and other funding to obtain federal research, education, and extension funds.

Crop Insurance

Most crop insurance sold in the United States is federally subsidized. Taxpayers pay for over 60% of the cost of insurance that pays a farmer when drought, flooding, or other natural disasters cause a substantial crop loss. The insurance can also cover the risk of a substantial drop in crop prices between planting and harvest. The policies are sold and serviced by private insurance companies, but they must meet strict federal standards to receive federal subsidies.

Soil health practices can provide more resilient yields, reducing the risk of a substantial crop loss. Unfortunately, federal crop insurance rules don't recognize the value of healthy soils, so farmers with healthy soils that lower the risk of a crop loss pay the same insurance premiums as farmers with unhealthy soils and higher risk of crop loss.

Only USDA or Congress could fix that – a recommendation we have made to both USDA and Congress -- but states can use the crop insurance system to reward farmers who adopt soil health practices that also deliver considerable public benefits. Iowa pioneered a \$5 per acre discount on crop insurance to reward farmers who plant cover crops.³⁶ The state pays for the discount which shows up on a separate line of the farmer's annual crop insurance bill. Illinois put in place its own version of the \$5 per acre discount for farmers planting cover crops in the fall of 2019.³⁷

The discount provides an easy way for states to reward farmers who adopt soil health practices like cover crops. Most row crop farmers buy crop insurance, and having the 'cover crop discount' line on every annual crop insurance invoice has also resulted in many more Iowa and Illinois farmers taking an interest in the practice.

The discount is managed through a pilot program with the USDA Risk Management Agency, which regulates federally subsidized crop insurance and sets the rules for coverage and prices.



NRCS

Water Quality Impacts

The impact of the nationwide loss of soil organic matter on water quality and flooding is largely unrecognized. A drop in soil organic matter from 4% to 2% in typical Midwest cropland soil means instead of having capacity to absorb a 3" rain, the soil could only absorb a 1.5" rain before becoming saturated. Once saturated, additional rainfall or snow-melt would run off, carrying fertilizer, soil, manure, and pesticides into nearby streams.

In a watershed the size of a typical Iowa county, that reduction in water-holding capacity of the soil could increase runoff by 38,000 acre feet of water, contributing to flooding of creeks and rivers.

Soil health practices like no till, cover crops, and rotational grazing generally improve water quality by reducing polluted runoff, even before considering the impacts of improving soil health and increasing soil organic matter over time.

The answer to how much reduction in polluted runoff can be achieved by a particular practice on a farm or field is always 'it depends'. It depends on the soils, climate, farming system, how the practice is implemented, the weather, and even the method of measurement.

However, a review of the science by Iowa State University researchers provided benchmark numbers for the long-term reductions in nitrogen and phosphorus that could be expected from implementing the soil health practices discussed in this report on Iowa soils (chart at right).

Many states are struggling to reduce polluted runoff from agricultural land to meet water quality goals



for rivers contributing pollution to the Gulf of Mexico, Chesapeake Bay, Great Lakes and other waters.

Individually, and especially in combination, soil health practices can sharply reduce the polluted runoff from agricultural lands.

In combination, soil health practices can regenerate healthy topsoil, providing long-term benefits in reducing polluted runoff and reducing flood flows. Healthy soils can also reduce input costs for

farmers and ranchers, providing economic benefits that will help farmers maintain soil health systems well into the future.

By restoring the health of our soils, we can restore and protect the health of our rivers, lakes, and wetlands.

Estimated Reductions in Nitrogen and Phosphorus Runoff³⁸

Practice	N Reduction	P Reduction
Reduced Tillage	3%	33%
No Till	10%	90%
Cover Crops	30%	29%
Diverse Rotation	42%	?
Buffers (no tile)	90%	58%
Pasture or CRP	85%	60-75%

Notes

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¹⁸ Sec. 2302 and 2303, Agriculture Improvement Act of 2018.

¹⁹ Sec. 2304(b)(2), Agriculture Improvement Act of 2018.

²⁰ *Regional Conservation Partnership Program Interim Rule*, 85 FedReg 8131.

²¹ To find your NRCS state office, visit www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/states/

²² Sec. 2307, Agriculture Improvement Act of 2018.

²³ For more on CIG, visit www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/

²⁴ Sec. 2201(c)(3), Agriculture Improvement Act of 2018.

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³² More on the Conservation Reserve Program Transition Incentives Program at www.fsa.usda.gov/programs-and-services/conservation-programs/transition-incentives/index

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Ray Weil, University of Maryland



Appendices

- i. Regional Conservation Partnership Program fact sheet
- ii. Conservation Reserve Enhancement Program fact sheet



USDA ARS



Regional Conservation Partnership Program

New Opportunities for Targeted Conservation

The Regional Conservation Partnership Program (RCPP) was created in the 2014 Farm Bill to consolidate several regional programs that had funded United States Department of Agriculture (USDA) work in the Chesapeake Bay, Great Lakes, and other regions.

Under the program, USDA earmarks funds through partnership agreements to pay farmers for implementing designated practices designed to address a priority natural resource concern in a region or watershed.

The program proved successful in some regions and states, but an unwieldy administrative structure reduced its effectiveness.

Congress made changes to the RCPP in the 2018 Farm Bill in an effort to address some of the problems. USDA issued an Interim Final Rule in February, 2020 to implement the changes made by Congress, and USDA could make further changes if it issues a final rule. The legislative changes should make the RCPP a more useful tool and one which should be more widely used at the regional, state, and local levels.

Expanded Purpose, Practices, Partners

The 2018 Farm Bill makes modest changes to the overall purposes of the program, including aligning RCPP projects with other national, state, and local programs, and adding protection of drinking water sources and groundwater. The new law also adds authority for RCPP projects to use practices authorized under the Conservation Reserve Program (CRP) and Watershed Protection and Flood Prevention Act (PL 566), to the programs already included – the Agricultural Conservation Easement Program (ACEP), Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), and Healthy Forests Reserve Program (HFRP).

However, in explaining its Interim Final Rule, USDA suggested it would limit its use of CRP authority for

In Summary:

In the 2018 Farm Bill, Congress:

- **Expanded the purpose of the program, and the list of eligible practices.**
- **Provided dedicated funding for RCPP projects, and increased the share awarded by NRCS at the state level.**
- **Streamlined RCPP administration.**
- **Provided a new RCPP alternative funding/grant option that can expand the program's ability to fund infrastructure investments benefitting multiple farmers.**

Taken together, the changes should make the RCPP a more useful tool to address soil health and other targeted natural resource problems at the regional scale and within states. It should also allow for expanded use of the program at the state level.

land rental contracts to short-term contracts to replace income lost during a transition to a new production system, rather than 10- or 15-year contracts typical for CRP contracts.

Other legislative changes ensure that acequias, conservation districts, land trusts, foundations, and other non-profit organizations continue to be eligible to be partners in an RCPP project, along with the state and local agencies, Indian tribes, farm organizations, cooperatives, colleges, and other entities named in the 2014 legislation.

In its Interim Final Rule, USDA included as eligible certain publicly owned agricultural land, which could allow RCPP projects to assist farmers who rent school trust land, wildlife management areas, or other publicly owned agricultural land.

USDA rules provide for various easement options (from an easement held by USDA to one held by a partner entity), different kinds of land (wetlands, grassland, farmland, and other ag land), and different levels of funding paid by USDA depending on the holder and type of easement.

Ron Nichols, NRCS



Dedicated Funding

The 2018 Farm Bill provides \$300 million per year for the RCPP for FY 2019 through FY 2023. That represents an increase over the resources spent under the 2014 Farm Bill.

Congress also changed the way RCPP funds are allocated. Congress increased to 50% (from 35%) the share of funds for Critical Conservation Area (CCA) projects, awarded at the national level for regional conservation initiatives.

USDA recently adjusted the CCA boundaries, maintaining the Chesapeake Bay, Great Lakes, Mississippi River Basin, Longleaf Pine, Prairie Grasslands, and Colorado River Basin CCAs. USDA combined the Columbia River Basin and California Bay Delta areas into an expanded Western Waters CCA, and added a Northeast Forests and Waters CCA (see map at right).

Congress allocated the other half of the funds for state and multi-state initiatives. Congress eliminated a national/multi-state funding pool which had received 40% of the funding. But instead of allocating RCPP funds to each state for state conservationists to award, USDA decided the national office would award state initiative funds, so some states may get no RCPP funds. Alaska, Hawaii, and New Jersey are now the only three states with no land in any of the Critical Conservation Areas.

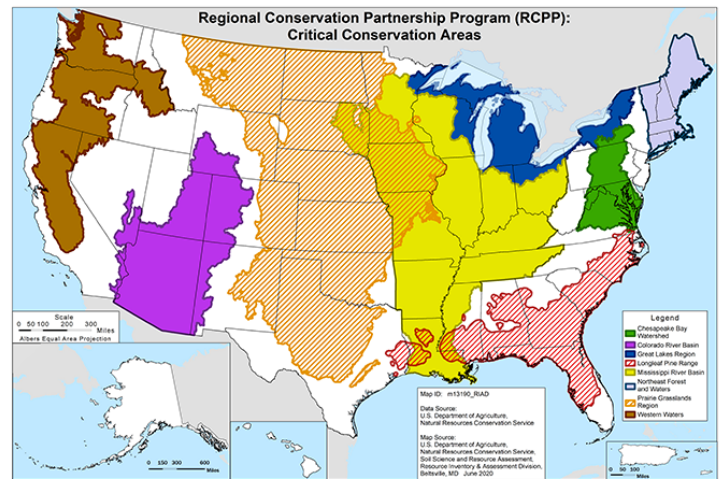
Streamlined Administration

The new Farm Bill should streamline administration of the program for USDA, farmers, and partner organizations.

Under the former RCPP, a farmer could end up with different contracts covering his or her easement (ACEP or HFRP), conservation practice (EQIP), or whole-farm

conservation system (CSP). Congress ensured the program will now operate with RCPP contracts so a single contract could cover the range of approved activities on a farm.

The new law instructs the Secretary of Agriculture to develop a “simplified competitive process” and “simplified application” for awarding RCPP partnership agreements. Most RCPP projects are for 5 years, and USDA can now renew a successful partner agreement for up to 5 more years using an expedited non-competitive process.



Partner Agreements

Although the 2018 Farm Bill does not specify a minimum contribution by partners, USDA has said it hopes to get at least a dollar-for-dollar match of RCPP dollars, and applications are judged in part on how much match they include. Other *federal* program dollars can be used as part of the match as long as they directly relate to the objective, but other *USDA* funds cannot be used as part of the match. The new law clarifies that partner organization contributions can be in the form of cash or in-kind support like staffing. It also requires USDA to announce how much of the funds awarded to an RCPP project will be used by USDA to provide technical assistance to farmers.

The 2018 Farm Bill does not allow RCPP funds to be used for the administrative expenses of partner organizations, including under alternative funding arrangement or grant agreements, although administrative expenses can count as partner match.

The 2018 Farm Bill requires USDA to provide semi-annual reports to project partners on contracts it has awarded to farmers, and an annual report on how USDA has used funds reserved by USDA to provide technical assistance (both have been issues in past RCPP projects).

For any RCPP project, the most USDA will provide (in financial and technical assistance) is \$10 million, and the minimum is \$250,000. At least 70% of the USDA funds must be for financial assistance to producers, and no more than 30% can be for USDA and partner technical assistance. Where a partner will spend part of the technical assistance, a supplemental agreement with USDA will be created to govern those expenditures.

Alternative Funding Agreements

Under most RCPP projects, project partners don't receive or hold RCPP funds. The partners provide out-



Ron Nichols, NRCS

outreach, financial and technical assistance, including helping farmers apply for contracts. RCPP contracts are generally between USDA and farmers, and payments from USDA go directly to farmers.

However, the 2018 Farm Bill allows USDA to award up to 15 “alternative funding arrangement or grant” partnership agreements per year, which allow RCPP funds to be paid to partners rather than farmers. These new agreements could allow partner agencies or organi-

zations to carry out infrastructure investments like irrigation projects that benefit multiple farmers, provide performance-based payments to farmers, or implement watershed plans.

The first funding announcement under this option was issued in March, 2020. USDA said it would consider proposals for infrastructure investments that serve multiple landowners, watershed or habitat restoration

plans, or pay-for-performance or environmental market projects. USDA officials say they are looking for projects that cannot be effectively done through the regular (‘classic’) RCPP.

Conservation Outcomes

The legislation requires that partners identify the conservation benefits of a project, designate a timeline and interim milestones, and assess the conservation benefits and other outcomes achieved. That should require partners to assess and report on how the RCPP project addresses the resource concerns targeted, not just report on the number of contracts and acres. The new law requires that USDA provide guidance to partners in how to carry out those assessments,

The new law lets USDA prioritize projects that deliver a high percentage of applied conservation, and that implement projects consistent with existing watershed, habitat, or other area restoration plans – for example, state wildlife plans or watershed management plans.

Selection Criteria

In selecting RCPP projects, USDA’s August, 2020 announcement says it will look at projects that tell a compelling story of *impact on the targeted resource* (25% of criteria). USDA is looking at the level of *partner contri-*

butions, and for contributions that are value-added and amplify USDA funding (25%).

Innovation is important, including why the project could not already be done through other programs like CRP or EQIP (20%). Partnerships will need to show they have the *capacity to manage the project* and assess and report natural resource outcomes (30%). Each annual funding announcement includes specific criteria for awarding agreements.

Opportunities for State & Local Partners

The 2018 Farm Bill streamlined the Regional Conservation Partnership Program, provides dedicated funding, and provides that more of the funds will be targeted at state priorities and for eight regional initiatives. The changes should result in a program that is easier for partner organizations to apply for and use.

RCPP agreements are generally *not* structured to provide direct funding for staff or other costs to conservation organizations or agencies, although they can help partners deliver advice to farmers. They are designed to help organizations achieve their conservation goals by funneling USDA funds to farmers to achieve conservation purposes in a targeted area. The RCPP can provide opportunities for organizations and agencies to leverage other private or public funds to address a critical natural resource problem in a watershed or area.



NRCS

Partner organizations that are approved Technical Service Providers may also be able to obtain USDA funding to provide, for example, conservation planning to farmers. The farmer would contract with the organization to provide the planning or other service, and USDA would reimburse the farmer for his or her payment for the service.

Soil Health & the RCPP

The multiple benefits that soil health systems provide in improving water quality, reducing soil erosion, storing carbon in the soil, reducing chemical inputs, reducing

input costs for farmers, and providing better habitat for fish and wildlife should make projects focused on soil health a great fit for RCPP funding.

USDA says it values innovation in RCPP projects. RCPP projects could address that by focusing on helping farmers put in place (and test) bundles of soil health practices that can accelerate the restoration of soil health (e.g., combining better tillage, cover crops, diverse crop rotations, and livestock practices).

Including soil health testing in every RCPP contract could provide data on the success of different combinations of practices, meeting the priority for outcome-based RCPP proposals. By demonstrating success in increasing soil health, this approach could also help ensure farmers continue the practices long after the RCPP contracts expire.

Providing soil health education and incentives for soil health planning, with a priority for reaching historically underserved farmers, could address another RCPP priority.

However, to be eligible, RCPP projects for the eight Critical Conservation Areas must address at least one of the designated “priority resource concerns” identified for the target area. Soil health solutions can address a wide variety of natural resource problems, but only one of the eight national Critical Conservation Areas (CCAs) includes “soil quality degradation” as a designated resource concern — the Colorado River Basin because of excess salts and other chemical concentrations. Every other CCA includes at least one priority resource concern that can be addressed by soil health practices, but applicants will need to explain how soil health practices will address those resource concerns.

At the state level, RCPP applications will need to ensure they are addressing at least one natural resource priority concern in the watershed or area. Partners may

want to consult a state’s soil health plan, if there is one, or the NRCS soil health strategy for the state.

Where to Start

Start with a visit to the designated Regional Conservation Partnership Program coordinator at the USDA NRCS office in your state. That person can fill you in on state priorities, the application process, past award-ees, and perhaps even potential partners. Local conservation districts should be consulted as well, for input, a better understanding of locally important natural resource concerns, and as potential partners.

Start early. Applications must be submitted through the RCPP online portal system, and it will take time to obtain access to the system. RCPP projects often include multiple partners obtaining commitments for funding from various sources, which can take time.

USDA has helpful online guides which provide more details on the application process, scoring criteria, and other requirements. Visit www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/rcpp/

Gary Wilson, NRCS



Izaak Walton League of America

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The League’s Agriculture Program works to support and improve federal Farm Bill conservation programs that help farmers and ranchers adopt conservation systems. We work to leverage those programs at the state and local level to deliver conservation benefits where they will do the most good.

We engage business owners, outdoor enthusiasts, and League members to support state and local efforts to restore and protect rivers, lakes, and wetlands.

Follow our work and make a difference in your community by signing up for our *Soil Matters* email updates, available free at www.iwla.org/agriculture.

Izaak Walton League of America
707 Conservation Lane, Suite 222
Gaithersburg, MD 20878
Agriculture @ iwla.org
(301) 548-0150





Conservation Reserve Enhancement Program

Powerful Tool for Soil, Water, and Wildlife

The Conservation Reserve Enhancement Program (CREP) began in 1998 as a US Department of Agriculture (USDA) initiative to leverage the Conservation Reserve Program with state and local funding to address conservation problems in targeted areas.

The program has been especially effective at (1) installing buffer strips along streams and restoring and protecting wetlands to address water quality problems in watersheds polluted by agricultural runoff, and (2) restoring grassland and other wildlife habitat in targeted landscapes.

CREP projects also improve soil health, because they typically take cropland out of production and plant a combination of perennial grasses, forbs, shrubs, and/or trees. Eliminating tillage, eliminating most chemical fertilizer and pesticide applications, and establishing perennial vegetation should result in an increase in soil organic matter and the improvement of soil health. CREP projects often focus on locations with highly erodible soil, like hillsides or riparian areas, which are vulnerable to erosion.

History of Success

For more than 20 years, Conservation Reserve Enhancement Program agreements have been a way for states to multiply the impact of state, local, and private funds to accomplish conservation objectives. Under CREP agreements between the USDA Farm Service Agency and states, USDA committed to fund a certain number of acres of Conservation Reserve Program contracts, which include annual rental payments for up to 15 years plus a share of the cost of establishing vegetative cover.

In return, the states and partners agreed to fund a portion of the overall project costs. That can include staff time to provide outreach and planning assistance to

In Summary:

In the 2018 Farm Bill, Congress:

- **Placed the Conservation Reserve Enhancement Program in Statute.**
- **Required new CREP agreements to provide quantifiable environmental goals.**
- **Put limits on the payments USDA could provide to landowners under Conservation Reserve Program contracts, but gave USDA flexibility to waive some of those limits under CREP agreements.**
- **Gave more flexibility for haying and grazing under most CRP contracts.**

The Conservation Reserve Enhancement Program remains an important, if under-utilized tool for states and other partners to leverage the benefits of the Conservation Reserve Program to achieve conservation goals. It could also serve as a new tool to restore the health of degraded soils.

farmers, additional incentive payments, increased cost-share payments to landowners for particular seed mixes, payments to extend the contracts for additional years, conservation easements to prohibit the land from being converted back to cropland when the CRP contract expires, and associated costs like monitoring the easements long-term. CREP agreements are limited to a particular watershed or area, designated conservation practices that address a resource problem (or problems), a set number of acres, and a number of years.

Successful CREP partnerships have helped clean up rivers like the Michigan, Minnesota, James (South Dakota), Illinois, and Ohio rivers. CREP projects have helped restore stream flows in rivers like the Upper Arkansas (Kansas), Platte (Nebraska) and Republican (Colorado) rivers, and helped protect trout streams

from Washington state to West Virginia. CREP agreements have worked to reduce polluted farm runoff into the Chesapeake Bay, Florida Everglades, and Lake Erie.



In May, 2020, there were 927,140 acres of CREP contracts in 32 states. That represented just over 4% of all CRP acres, and just under 12% of the 7.8 million acres of CRP enrolled through USDA's 'continuous signup' process at the time.

CREP has been particularly helpful in enrolling land in states with relatively higher land rental rates like Pennsylvania, Ohio, and Kentucky that have had fewer acres accepted into General CRP contracts. CREP agreements have also provided flexibility, allowing states to identify practices that will address local conservation goals and to craft incentives that fit the state's ability to provide cash or in-kind help.

Benefits for Landowners

Under a CREP agreement, farmers and other landowners don't have to wait for the annual CRP general signup, 'bid' for a contract, and then wait to see if they are selected — the process to obtain a general Conservation Reserve Program (CRP) contract. Instead, under CREP agreements farmers and other landowners with eligible land can enroll and be automatically accepted. CREP contracts are enrolled under USDA's continuous signup CRP process.

Under current CREP agreements, landowners can also receive higher federal rental payments, a Signup Incentive Payment (SIP), a Practice Incentive Payment (PIP), and sometimes higher cost-share payments than under a standard CRP contract. Under current CREP agreements, federal rental payments are typically 120% to 140% of county average soil rental rates for the predominant type of soil on the land. USDA also typically pays 50% of the cost of the planting or installation, a one-time PIP of up to 40% of the installation cost, a SIP of \$75-\$150 per acre, and sometimes a payment for management activities like mowing or burning taken

partway through the contract to manage vegetation.

Under CREP, landowners may also be eligible for state-funded payments which vary between CREP agreements. They can include a sign-up bonus, additional cost-share funds, additional annual rental payment, or payments for allowing walk-in hunting. States and partners have also offered contract extensions to continue rental payments after the federal CREP contract expires. In other locations, the state has offered to pay for

a conservation easement to ensure the land is not converted back to cropland and never developed.

The payments offset lost income and expenses for landowners who participate, but they are not overly generous. CREP contracts average less than 25 acres per farm, and just \$4,124 in rent per farm per

year. The 2018 Farm Bill substantially reduced the payments USDA can make for Conservation Reserve Program contracts (see below). Landowners are also locked into the same annual rental payment for 10 to 15 years, much longer than a typical farmland lease.

Leveraging CREP for Soil Health

The Conservation Reserve Program was designed to address three co-equal resource concerns: soil conservation, water quality, and wildlife habitat. Past CREP agreements have generally focused on providing water quality or wildlife benefits (or both); soil conservation benefits came primarily as a co-benefit.

In the future, CREP agreements could be focused on soil health, helping restore organic matter and soil health in seriously degraded soils. For example, the loss of topsoil has been a longtime problem in the Piedmont region of the Southeast, where some farms have lost all of the 6" to 12" of their historic topsoil. Planted with a mix of grassland vegetation and properly managed for 10-15 years, a significant part of the organic matter and soil biology that was lost could be restored.

At the end of the CREP contract, the grassland could be placed in a well-managed rotational grazing system to protect and further improve the soil. The landowner could install the fencing and water systems needed before or during the CREP contract. That would allow low-volume grazing as a management tool during the contract, and would facilitate transition to grazing after the contract expires. Under the 2018 Farm Bill, USDA



USDA



Lynn Betts, NRCS

could even pay cost-share to install the fencing and water systems under an Environmental Quality Incentives Program or Conservation Stewardship Program contract during the last year of the CRP contract.

As an alternative, at contract's end the land could be converted to back to cropland using a combination of soil health practices like no till, cover crops, conservation crop rotations, and organic or low chemical pest and nutrient management to maintain soil health. Transition to organic would be an attractive option for soil that is not highly erodible, because the landowner could avoid using non-organic chemicals on the land for the last three years of the CREP contract, allowing the operation to be certified organic from the start of production.

The 2018 Farm Bill

The 2018 Farm Bill placed substantial parts of the Conservation Reserve Enhancement Program in statute for the first time. The new law protects existing CREP agreements, but allows USDA and the CREP partners to agree to modify those existing agreements. New CREP agreements will be required to provide quantifiable environmental goals, identify appropriate conservation practices, include the payments to be offered landowners, and meet other new requirements.

The new law provides that state and local governments, Indian tribes, and non-governmental organizations can all be CREP partners.

Where the majority of partner funds come from non-governmental organizations, partners in new CREP agreements will need to provide at least 30% of total project costs. Where a state, tribe, or local government provides a majority of the partner funds, the level of match will be negotiated between USDA and the partners. For existing CREP agreements,

partners are typically providing 20% to 40% of the total project costs. Matching funds can come from cash, in-kind contributions, or technical assistance.

The 2018 Farm Bill put in place caps on CRP rental payments, including a cap of 85-90% of the county average soil rental rate for the predominant soil type on the land (calculated by the National Agricultural Statistics Service). The 90% cap applies to continuous signup CRP contracts, although Congress gave USDA authority to waive the cap under CREP agreements. Congress also allowed for an adjustment of the cap, including for the productivity of the land. However, in a 2018 administrative decision, USDA announced it would only adjust rental rates *downward* based on a soil productivity factor, and would no longer adjust them *upwards*.

The new statute allows USDA to adjust the rental rates for specific practices, for contracts in well-head protection areas, and based on soil productivity, and those adjustments could presumably be included in any new or revised CREP agreement. However,

USDA has announced it will no longer provide higher rental rates for high-value conservation practices like buffer strips and windbreaks under its continuous signup CRP, and it isn't yet clear whether that policy will apply to new CREP agreements.

The 2018 Farm Bill limits one-time Practice Incentive Payments (PIPs) to 50% of the cost of installing a particular practice, although in implementing the program USDA has said it intends to limit PIPs to just 5%. The new Farm Bill specifies that Signup Incentive Payments will be paid based on 32.5% of the first annual rental payment, which USDA is offering.

USDA has said it will generally not pay any cost-share for mid-contract management activities like burning grasslands or managing unwanted shrubs or trees, although under the 2018 Farm Bill USDA is required to make cost-share payments to encourage the management of riparian buffers for contracts that fall under CREP agreements.

The new statute also gives USDA more flexibility to allow haying and grazing on CRP lands, where it is done outside the primary bird nesting season.



Wisconsin DNR

Assessing Watersheds

The Izaak Walton League of America's *Save Our Streams* program trains volunteers to monitor and assess the health of local streams. The program could help CREP project partners assess the impacts of CREP initiatives at a watershed scale. Contact the League's Save Our Streams staff in our Gaithersburg headquarters for more information.

Overall, the changes made by Congress and the decisions made by USDA could substantially reduce the overall payments farmers and other landowners can expect to receive under a new CREP agreement. The CREP process provides some flexibility for states or other partners to negotiate better deals for landowners who apply, but that flexibility has limits.

Where to Start

First, a word of caution. Since September, 2016, the acres enrolled in CREP contracts nationwide has declined by more than 20%. The Conference Report from the 2018 Farm Bill seemed clear: “The Managers encourage USDA to continue the enrollment of acres in CREP in all regions of the country. The Managers incentivize more enrollment of riparian buffers, including forested riparian buffers. ...” But USDA does not appear to be making CREP a priority.

In 2017, Kentucky asked USDA to extend its CREP agreement. USDA turned the request down and notified landowners that they would not have an opportunity to renew their contracts as they expired. USDA had asked Kentucky to increase the share of project costs coming from the state. Illinois has been trying for over two years to re-open enrollment in a CREP project that was put on hold when state funds became unavailable. Officials from several other states have expressed frustra-



CREP buffers protect Virginia streams from grazing cattle.

tion with an inability to get approval for extensions or minor changes to CREP agreements.

We suggest you start by contacting your USDA Farm Service Agency state executive director, who can fill you in on the process for establishing a Conservation Reserve Enhancement Program and the potential for one in your state. You can see a list of CREPs active in 26 states and get more information on the Farm Service Agency web site under Conservation Reserve Program.

The Conservation Reserve Enhancement Program has tremendous potential to leverage state, local, and other funds to rebuild soil health, restore water quality, and provide habitat for wildlife. Capitalizing on that potential and focusing it to improve soil health will require creative thinking, one or more sources of state or local matching funds, and a commitment from the US Department of Agriculture to make CREP agreements a priority.

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707 Conservation Lane, Suite 222
Gaithersburg, MD 20878
Agriculture @ iwla.org
(301) 548-0150



