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WESTERN WATER CONSERVATION AND DROUGHT MITIGATION ON PRIVATE WORKING LANDS

POLICY OPPORTUNITIES IN THE FARM BILL AND BEYOND



SUMMARY

The western United States continues to face extended and increasingly severe drought conditions that threaten municipal and agricultural water supplies, energy production, wildlife and aquatic habitat and overall water quality and ecosystem health. The Colorado River is critical to the southwestern U.S. and to the national economy, providing water to over 40 million people and to almost 5 million acres of farmland.

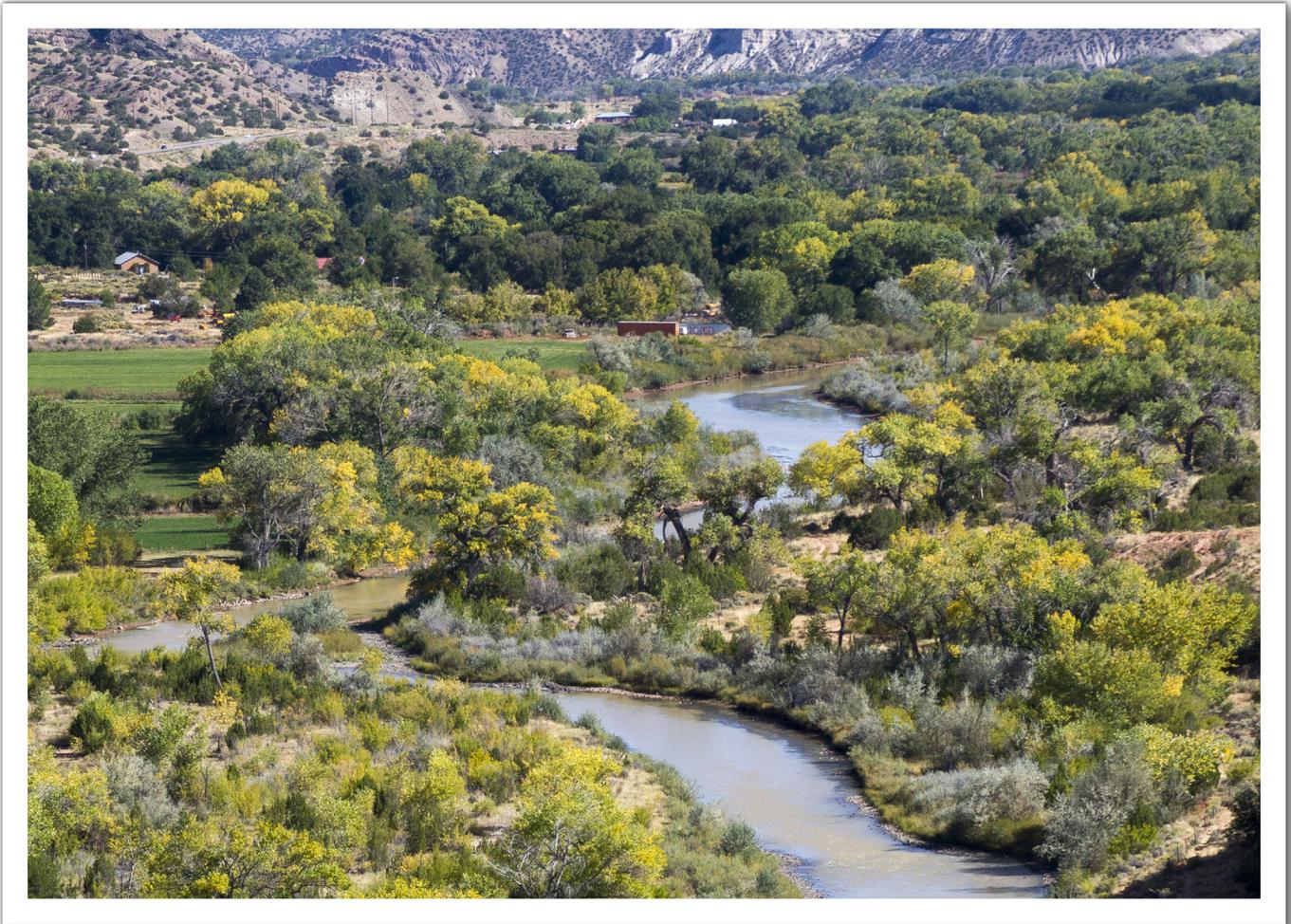
Over-appropriation of the river and reduced water supplies within the system have resulted in critical conditions and the urgent need for large-scale, coordinated actions, to promote conservation among the millions of water users within the Colorado River Basin. In response to continuously diminishing water supplies in Lake Powell and Lake Mead on the Colorado River, the federal government is taking measures to curtail water delivery to western states.

Although western water is largely managed under state laws, private landowners play a critical role in efforts to conserve limited water and steward large, ecologically and economically functional working landscapes. While agriculture represents a significant portion of water usage in the West, efforts to conserve water or reduce consumptive use of water for food production must be balanced with potential accompanying negative impacts to ecosystem health, local and national food security, and rural communities.

After all, it is these working landscapes that are the cornerstones of human communities and the natural systems we all depend on, and once they are lost, there is no getting back the services they once provided.

In this report, the Western Landowners Alliance (WLA) examines amendments to farm bill conservation programs under the 2018 Farm Bill along with other relevant federal programs that may be used to address western water challenges, with the goal of preventing the need for further federal restrictions on water allocations within the Colorado River Basin and other western watersheds. Based on these findings, WLA also provides recommendations for amendments to the next farm bill and other state and federal policies to:

- Expand farm bill conservation programs' focus on water conservation and western drought mitigation;
- Empower community-based leaders to play a larger role in addressing water shortages and innovating in agricultural water conservation;
- Improve coordination among state and federal agencies to leverage collective capacity and resources;
- Address challenges to farm bill program delivery to improve landowners access to programs that support land and water stewardship.



INTRODUCTION

The western United States continues to face extended and increasingly severe drought conditions that threaten municipal and agricultural water supplies, energy production, wildlife and aquatic habitat, recreational opportunities, and overall water and environmental quality. As of September 6, 2022, the U.S. Drought Monitor reported that 37% of the U.S. was experiencing drought conditions, affecting 114 million people and 225 million acres of crops across 42 states. In response to continuously diminishing water supplies in Lake Powell and Lake Mead on the Colorado River, the federal government has begun taking measures to curtail water delivery to western states. Congress has recognized that current drought conditions pose a critical threat to western water supplies and has taken several recent actions to address drought resilience and promote water conservation in federal water management operations, as well as on private farmlands, ranches and forests.

Although western water is largely managed under state laws, the federal government and private landowners play a critical role in large-scale efforts to conserve limited water resources

through the implementation of conservation practices. Federal agencies, such as the U.S. Bureau of Reclamation (BOR), have authority over the management of major federal storage projects, including Lake Powell and Lake Mead. Additionally, several programs – largely authorized under the federal farm bill Conservation Title and administered by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) – provide technical and financial assistance to private landowners to plan and implement water conservation practices on their lands. Congress has recognized that drought has become the single largest cause of U.S. farm production losses, and has directed “the development of creative solutions to conserve water while maintaining productive use of farmland.”

Through the Agriculture Improvement Act of 2018 (2018 Farm Bill), Congress prioritized water conservation and drought mitigation as areas of focus to be addressed through reauthorized Conservation Title programs, including the Environmental Quality Incentives Program (EQIP) and its subprograms; the Conservation Stewardship Program (CSP); the Conservation Reserve Program (CRP) and its subprograms; the Regional Conservation Partnership Program (RCPP); and the Watershed and Flood Prevention Operations (WFPO) program. Additionally, the Inflation Reduction Act of 2022 (IRA) extends authorization and funding of several farm bill conservation programs and provides funding for additional western drought measures.

This report examines amendments to farm bill conservation programs under the 2018 Farm Bill that may be used to effectively address western water conservation with the goal of preventing the need for further federal restrictions on water allocations within the Colorado River Basin and other western watersheds. Although a number of promising water conservation amendments were included in the bill, it is unclear how effectively the new provisions are being implemented by USDA and NRCS. The upcoming 2023 Farm Bill presents an opportunity to further improve and refine relevant farm bill conservation programs to conserve diminishing western water supplies.



COLORADO RIVER DROUGHT CONTINGENCY PLANS

The Colorado River is critical to the southwestern U.S. and to the national economy, providing water to over 40 million people and to almost 5 million acres of farmland. Over-appropriation of the river and reduced water supplies within the system have resulted in critical conditions and the urgent need for large-scale, coordinated actions, to promote conservation among the millions of water users within the Colorado River Basin. Allocation of water within the Colorado River Basin is primarily governed by the Colorado River Compact of 1922 (Compact), a Congressionally-approved agreement among the seven Basin states which established the Upper Basin (Colorado, New Mexico, Utah and Wyoming) and the Lower Basin (Arizona, California and Nevada). The Compact provided that each Basin was to be allocated 7.5 million acre-feet of water annually. A 1944 treaty obligated an annual delivery of an additional 1.5 million acre-feet to Mexico from the system. In 1922, the parties to the Compact incorrectly assumed that water supplies in the Colorado River would average 16.4 million acre-feet per year. From 1906 to 2020, actual annual flows in the Colorado River averaged 13.9 million acre-feet per year. Since 2000, long-term drought conditions have reduced flows to an average of just 12.5 million acre-feet per year.

Facing mandatory BOR water delivery cuts from Lake Powell and Lake Mead, the seven Colorado River Basin states finalized drought contingency plans (DCPs) in March 2019 for the Upper and Lower Basins. The DCPs, which outline coordinated strategies among the states for Colorado River reservoir operations during drought and water supply shortages, were subsequently approved by Congress in April 2019.

The Upper Basin DCP focuses on the volume and management of Lake Powell to ensure that its surface maintains a minimum elevation of 3,525 feet (the minimum level required for hydropower generation) and calls for the establishment of an Upper Basin DCP Demand Management Program, which would pay private water rights holders for temporary reductions in water use. Despite Upper Basin DCP efforts, in 2022 Lake Powell fell to its lowest level in over 50 years. In May 2022, BOR invoked emergency authority to protect hydropower generation at Lake Powell by diverting approximately 500,000 acre-feet from the Flaming Gorge Reservoir to Lake Powell, and by retaining 480,000 acre-feet in Powell that would have otherwise been released into the Lower Basin.

The Lower Basin DCP requires curtailed water deliveries to Lower Basin states when the surface of Lake Mead lowers to predetermined “trigger” levels. Despite efforts through the Lower Basin DCP, water supplies at Lake Mead continue to diminish. Recent BOR studies indicate that the surface of Lake Mead will likely continue to lower significantly. On August 16, 2021, BOR announced that total Colorado River system storage had depleted to 40% capacity and implemented Tier 1 delivery curtailments in the Lower Basin. On August 16, 2022, BOR announced that surface levels of Lake Mead require additional Tier 2 water restrictions, which will take effect in January 2023. Under the terms of the Lower Basin DCP, Tier 1 and 2 restrictions represent a curtailment of 21% for Arizona, 8% for Nevada and 7% for Mexico. As of September 6, 2022, the U.S. Drought Monitor reported that Lake Mead and Lake Powell are 28% full and 24% full, respectively.

In the Fiscal Year 2022 Senate Committee on Appropriations Report accompanying the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, the Committee stated that it is “particularly concerned about the severe and prolonged drought in the West and applauds the passage of the Colorado River Drought Contingency Plans...[and] expects NRCS to prioritize support for implementation of Drought Contingency Plans, agreements or programs that would conserve surface or groundwater, improve drought resiliency and address current and anticipated conservation needs and severe drought-related resource concerns.”

FEDERAL FARM BILL

The federal farm bill, typically reauthorized every five years, is an omnibus law that addresses nationwide issues surrounding food, nutrition, agricultural policies, forestry, and natural resource conservation. Since the passage of the first farm bill in the 1930s, Congress has enacted 18 subsequent farm bills; the most recent farm bill, the 2018 Farm Bill, is comprised of 12 separate titles.

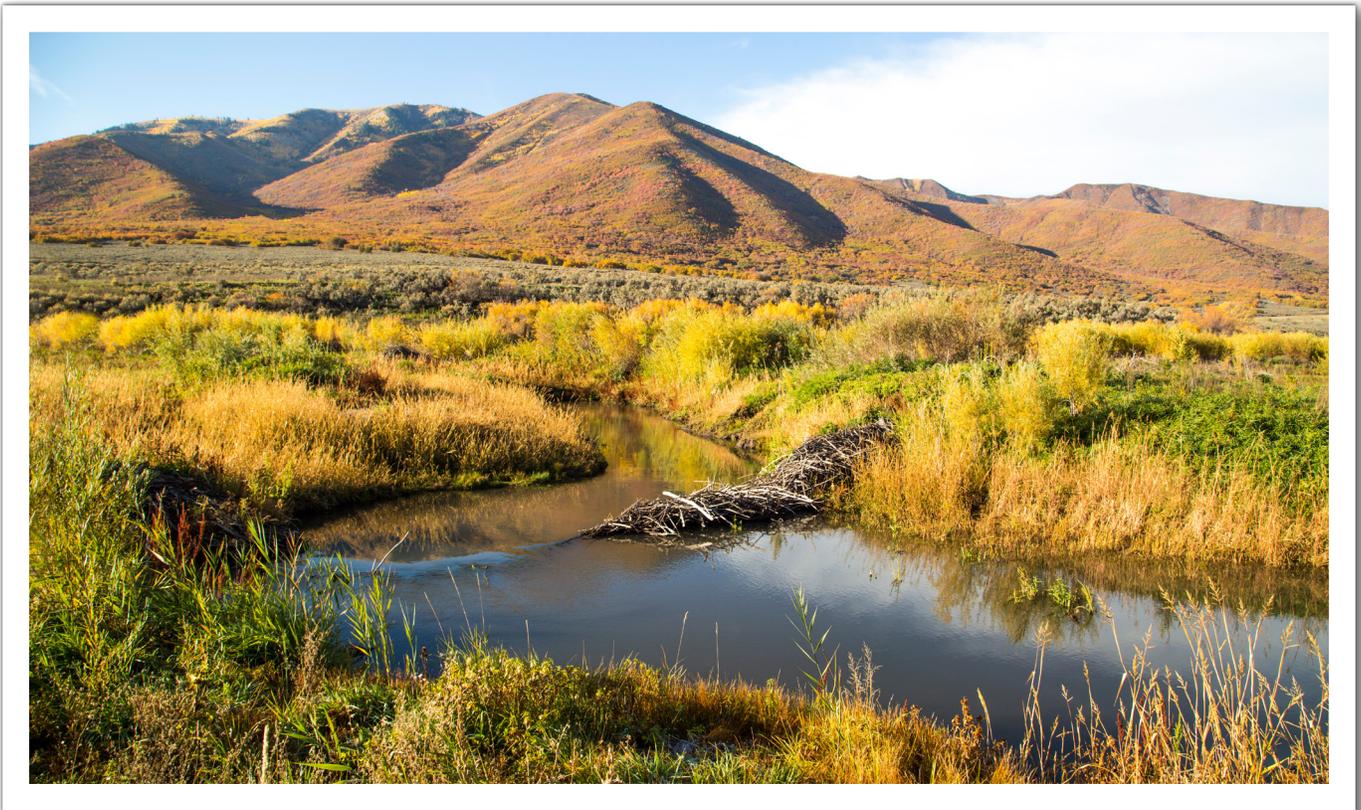
The Conservation Title (Title II) was first added to the farm bill as part of the Food Security Act of 1985 and encourages environmental stewardship on private working lands through a number of programs that provide technical and financial assistance to landowners for the implementation of conservation practices, development of innovative conservation innovations and technologies, and for the retirement of environmentally sensitive lands from production. Participation in all farm bill conservation programs is voluntary. The programs are administered by the USDA, primarily through NRCS, as well as through the Farm Service Agency (FSA). Although eligibility for participation in most conservation programs is broad, many programs require a competitive selection process for acceptance.

The 2018 Farm Bill amended several farm bill conservation programs by adding language expressly intended to promote water conservation, efficient water management practices, and drought mitigation in the western U.S., particularly within the Colorado River Basin. In addition to program-specific language, the 2018 Farm Bill requires that 10% of mandatory conservation program funding be dedicated to source water protection. The USDA is directed to “encourage practices that relate to water quality and water quantity that protect source water for drinking water (including protecting against public health threats) while also benefiting agricultural producers.” NRCS is authorized to offer producers increased incentives and higher payment rates (up to 90% cost-share) for the implementation of such practices through farm bill conservation programs.

INFLATION REDUCTION ACT OF 2022

The Inflation Reduction Act of 2022 (IRA) was enacted in August 2022. Among the IRA’s primary goals is to address climate change, with a specific focus on reducing greenhouse gas emissions and addressing the ongoing drought in western states. The IRA provides billions of dollars in new funding for farm bill conservation programs, specifically EQIP (\$8.45 billion), CSP (\$3.35 billion), ACEP (\$1.4 billion), and RCPP (\$4.95 billion), through 2026. The IRA also extends authorization for the four programs – as well as for CRP – until 2031. It is still unclear how these new farm bill program provisions included in the IRA will affect the programs’ baseline funding and potential amendments in the next farm bill cycle.

Additionally, the IRA includes \$4 billion in funding for drought relief and mitigation in the 17 reclamation states, with priority given to Colorado River Basin activities. The \$4 billion in funding for drought relief is set aside for grants, contracts or financial assistance agreements to conduct: (i) compensation for a temporary or multi-year voluntary reduction in diversion of water or consumptive water use; (ii) voluntary system conservation projects that achieve verifiable reductions in use of or demand for water supplies or that provide environmental benefits in the Lower Basin or Upper Basin of the Colorado River; and (iii) ecosystem and habitat restoration projects to address issues directly caused by drought in a river basin or inland water body.



FEDERAL FARM BILL PROGRAMS ADDRESSING WATER CONSERVATION

Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program (EQIP) was first established in 1996, and provides “flexible technical and financial assistance” to private landowners and agricultural producers to address targeted environmental and natural resource issues – including water conservation measures – on their lands while keeping their lands in production. EQIP assistance is available to agricultural producers and owners of non-industrial private forestland, as well as tribal governments. Eligible lands under EQIP include cropland, rangeland, pastureland, non-industrial private forestland and other farm or ranch lands.

EQIP participants work directly with NRCS to develop conservation plans and implement various conservation practices in their operations. Landowners are eligible for reimbursement from USDA through a contracted cost-share agreement, which typically covers up to 75% of costs associated with planning, implementation, management and maintenance of approved practices.

EQIP is a competitive program; eligible landowners may submit applications for EQIP funding which are then ranked by NRCS state offices based on designated criteria specific to each state.

Approved conservation practices under EQIP generally include activities that address water and air quality, soil health and erosion, wildlife habitat and ground and surface water conservation.

In evaluating EQIP applications, NRCS is directed to establish ranking pools to address specific resource concerns by geographic area or agricultural operation type. Applications are ranked through the consideration of national, state, and local priority resource concerns identified by NRCS. General criteria NRCS evaluates in the EQIP project selection process include: (i) cost-effectiveness of proposed conservation practices; (ii) magnitude of expected conservation benefits; (iii) effectiveness of the project addressing designated resource concerns; (iv) use of conservation practices that provide long-term conservation enhancements; and (v) compliance with federal, state, tribal, and local laws and regulations.

USDA EQIP regulations express that NRCS may give priority to EQIP project applications that include water conservation or irrigation-related practices that: (i) result in a reduction of water use in the agricultural operation; or (ii) include an agreement by the applicant not to use any associated water savings to bring new land under irrigation production unless the producer is participating in a watershed-wide project that will effectively conserve water.

EQIP funding is available nationwide. In FY2021, the EQIP program provided \$1.26 billion in funds through 34,054 contracts, covering 11.6 million acres.

EQIP – 2018 Farm Bill

The 2018 Farm Bill reauthorized EQIP through FY2023 and funded the program at the following levels: \$1.75 billion for FY2019; \$1.75 billion for FY2020; \$1.8 billion for FY2021; \$1.85 billion for FY2022; and \$2.025 for FY2023. The IRA reauthorized EQIP through 2031 and provided \$8.45 billion in additional funding for the program at the following levels: \$250 million for FY2023; \$1.75 billion for FY2024; \$3 billion for FY2025; and \$3.45 billion for FY2026.

The 2018 Farm Bill also amended EQIP to address water conservation issues and by expanded EQIP eligibility to water management entities (WMEs) that service private agricultural producers. Under Section 2304(e), USDA may enter into a EQIP contract for water conservation or irrigation efficiency practices with “a State, irrigation district, groundwater management district, acequia, land-grant mercedes, or similar entity under a streamlined contracting process to implement water conservation or irrigation practices under a watershed-wide project that will effectively conserve water, provide fish and wildlife habitat, or provide for drought-related environmental mitigation, as determined by the Secretary.” This provision was intended to address a widely held concern among private landowners, particularly in the West, that participation in EQIP had been overly cumbersome (financially, technically, and otherwise) for many individual landowners and that water conservation measures can be more effectively implemented at the watershed level.

Eligible water conservation practices expressly listed under the new EQIP provisions for WMEs include water conservation scheduling; water distribution efficiency; soil moisture monitoring; irrigation-related structural or other measures that conserve surface water or groundwater, including managed aquifer recovery practices; a transition to water-conserving crops; water-conserving crop rotations; or deficit irrigation. The 2018 EQIP amendments also expand eligible lands for WME contracts to include not only the producer's land, but also land that is adjacent to the producer's land, as well as land that is under the control of the WME.

The 2018 Farm Bill also introduced language to EQIP that increases cost-share payments to eligible landowners – up to 90% reimbursement – for costs associated with “high-priority” conservation practices focusing on water quality and/or water quantity. Each state may designate up to 10 high-priority practices to be eligible for increased payments. Designated practices must: (i) address specific causes of impairment relating to excessive nutrients in groundwater or surface water; (ii) address the conservation of water to advance drought mitigation; (iii) meet other environmental priority and other priority resource concerns identified in habitat or other area restoration plans; or (iv) be geographically targeted to address a natural resource concern in a specific watershed.

EQIP-WaterSMART Initiative

NRCS and BOR have established the EQIP WaterSMART Initiative (EQIP-WSI), wherein the agencies work to ensure that activities using EQIP funds to address water and drought issues are coordinated with BOR investments made through the WaterSMART program. WaterSMART supports state, local and tribal water managers with the planning and financial assistance for implementation of projects to increase water supply, such as modernization of existing water storage and delivery infrastructure and other drought resilience measures.

Through EQIP-WSI, NRCS and BOR investments are coordinated toward priority areas proposed by NRCS State Conservationists. Projects are selected by NRCS through a competitive process. Common activities funded through EQIP-WSI include irrigation water management, irrigation water conveyance, structures for water control, cover crops and sprinkler irrigation systems. Assistance under EQIP-WSI in FY2021 totaled 159 contracts in western states, covering over 23,374 acres of working lands, and providing over \$11.6 million in assistance to landowners.

EQIP Conservation Innovation Grants (CIG)

The Conservation Innovation Grant (CIG) program, first authorized in 2002, is a subprogram under EQIP that awards grants for the development and implementation of new tools and technologies to address natural resource conservation on private agricultural lands. CIG funding

opportunities are announced each year and grants are awarded through a nationwide competitive grants process. CIG projects must involve EQIP-eligible lands and landowners, but eligibility for CIG grants extends to individuals, as well as non-governmental organizations and state, local and tribal governments. CIG grantees match federal investments on a one-to-one basis.

EQIP CIG On-Farm Conservation Innovation Trials

The 2018 Farm Bill directs USDA to use \$25 million of EQIP funding annually (increased to \$50 million under the IRA) to conduct on-farm conservation innovation trials on private lands to test “new or innovative conservation approaches” including precision agriculture technologies; enhanced nutrient management plans, nutrient recovery systems, and fertilization systems; soil health management systems; water management systems; resource conserving crop rotations; cover crops; and irrigation systems.

Funding for trials is directed to program partners, who then provide payments and technical assistance to producers to offset risks of adopting new conservation practices. The 2018 Farm Bill authorizes the USDA to enter into agreements to provide payments – including compensation for foregone income – to producers completing conservation innovation trials on their land.

EQIP Conservation Incentive Contract (CIC) Program

The 2018 Farm Bill established a new Conservation Incentive Contract (CIC) program under EQIP, which focuses on the implementation of conservation practices to address specific priority resource concerns within designated watersheds. The CIC program is open to agricultural producers, subsistence landowners, non-industrial private forest landowners and tribes. Eligible lands under CIC include cropland, rangeland, pastureland, non-industrial private forestland, and other farm or ranch lands.

CIC contracts last from five to 10 years. Landowners may receive payments for implementation of conservation practices (paid after certification of practice), as well annual payments (which include management practices). Prior to the 2022 nationwide rollout of the program, Arizona, California, Colorado and Oregon were selected as CIC pilot states to address pressing issues with drought. In Oregon, producers and state NRCS officials reported success in tailoring CIC funds to meet drought and watershed health resource concerns, including a dedicated Klamath Basin funding pool.

Conservation Stewardship Program (CSP)

The Conservation Stewardship Program (CSP), established in 2008, provides financial and technical assistance to eligible landowners for the implementation of approved conservation

activities on their lands. Like EQIP, CSP is a competitive program in which participants are selected by NRCS under designated criteria. CSP differs from EQIP in that CSP focuses on conservation across the entire operation of the subject land, and provides participants with annual payments for meeting the stewardship thresholds that address specific priority natural resource concerns. In 2021, CSP provided over \$513.6 million in financial assistance to new participants, covering over 9.8 million acres.

The 2018 Farm Bill changed CSP from an acreage-based program (previously limited to 10 million acres, annually) to a dollar-based program with annual funding of \$700 million in FY2019, increasing to \$1 billion in FY2023. The IRA extended CSP authorization through 2031 and provided an additional \$3.25 billion in CSP funding through FY2023. Notably, the 2018 Farm Bill also extended eligibility to include public lands associated with an operation. This provision is critical to western producers where operations frequently include both private land and allotment on public lands.

Conservation Reserve Program (CRP)

The Conservation Reserve Program (CRP), originally authorized in 1985, provides private landowners with annual rental payments for voluntarily removing environmentally sensitive lands from production for a specified period. CRP is administered by the FSA; NRCS oversees CRP land eligibility determinations, conservation planning and implementations on the ground. Through CRP, participating landowners receive annual rental payments, typically over a 10-15 year period, to replace crops with resource conserving flora on highly erodible and environmentally sensitive lands. Rental rates are based on the productivity of soils within each county and the average dryland cash rent.

CRP enrollment is divided into two categories: general CRP and continuous CRP. General CRP contracts are awarded on a competitive basis, using an Environmental Benefits Index (EBI); proposed applications with the highest score are accepted to participate in the program. General CRP applications are limited to annual enrollment periods. Time periods to apply for general CRP enrollment are limited. Continuous CRP contracts are utilized for special CRP subprograms and initiatives and allow for the continuous enrollment of environmentally sensitive lands devoted to specific designated conservation practices. Continuous CRP enrollment is not subject to a competitive selection process.

CRP is an acreage-based program. The 2018 Farm Bill capped CRP enrollment at the following levels: 24.5 million acres in FY2020; 25 million acres in FY2021; 25.5 million acres in FY2022; and 27 million acres in FY2023. Increases in acreage enrollment are partially offset by reduced rental rates. As of May 2022, there were 22.1 million acres enrolled in CRP, with an estimated \$2 billion dedicated to 2022 CRP funding.

CRP Conservation Reserve Enhancement Program (CREP)

The Conservation Reserve Enhancement Program (CREP) is a continuous CRP program that was first established in 1997 but codified in the 2018 Farm Bill. CREP authorizes USDA to enter into agreements with states and NGOs to target designated project areas with continuous CRP enrollment contracts. Farmers and ranchers are paid an annual rental rate, along with other federal and non-federal incentives, as specified in the CREP agreement. CREP agreements are limited to specific geographic regions and to lands where specific conservation practices can address high priority natural resource issues. Annual rental payments for CREP contracts are typically higher than those for general CRP contracts. Lands can only be enrolled in CREP if the state or eligible NGO has a CREP agreement with USDA.

The 2018 Farm Bill expressly addresses drought and water conservation agreements under CREP by authorizing USDA to: (i) enroll other agricultural land on which identified resource concerns can be addressed if enrollment of such land is critical to accomplishing the purposes of the agreement; (ii) permit dryland agricultural uses with the adoption of best management practices on the land if the agreement involves the significant long-term reduction of consumptive water use, and if dryland production is compatible with the agreement; and (iii) calculate annual rental payments consistent with existing administrative practice for similar drought and water agreements to ensure regional consistency in those rates.

CRP Clean Lakes, Estuaries, and Rivers (CLEAR30) Initiative

The 2018 Farm Bill established the Clean Lakes, Estuaries, and Rivers (CLEAR30) Initiative as a continuous CRP. CLEAR30 is intended to address water quality issues – specifically the reduction of nutrient and sediment loading and harmful algal blooms – by enrolling lands into 30-year contracts. Participants receive annual payments for maintaining their land in accordance with an approved conservation plan. The initiative, which was initially limited to the Chesapeake Bay region, was expanded nationwide in April 2022. As of May 2022, the CLEAR30 initiative had enrolled 23,212 acres.

Grassland CRP

The Grassland CRP (GCRP) is a CRP subprogram which emphasizes support for grazing operations and grasslands. GCRP is functionally similar to general and continuous CRP in that producers enter into long-term contracts (10 or 15 years) and receive annual per-acre rental payments in exchange for maintaining enrolled land according to an approved conservation plan and prohibiting land from conversion or development. GCRP differs from general and continuous CRP in that producers may keep land in agricultural production (e.g., haying and/or grazing) while following an approved conservation plan.

Along with reauthorization to include a floor of 2 million acres enrolled nationwide, the 2018 Farm Bill included several changes to the program which improved its utility in western grasslands. USDA was authorized to prioritize enrolling lands of “ecological significance” including land that may contribute to the conservation and recovery of at-risk, threatened or endangered species under the Endangered Species Act, and land that supports wildlife migration and habitat connectivity. In GCRP signup 203 (2021), the USDA made use of these provisions by establishing two National Grassland Priority Zones in the “Greater Yellowstone Wildlife Corridor Priority Zone” and the “Dust Bowl Priority Zone.” Landowners enrolling in these zones received additional offer ranking points and increased per acre rental rates. These priority zones were subsequently expanded in GCRP signup 204 (2022).

While there were no explicit water conservation provisions tied to GCRP in the 2018 Farm Bill, the program’s focus on promoting grassland ecosystem health and resilience through long-term contracts with producers makes it a potential vehicle for expanded investments in drought resilience in the West.

Regional Conservation Partnership Program (RCPP)

The Regional Conservation Partnership Program (RCPP), established in 2014, addresses on-farm, watershed, and regional natural resources concerns through coordination between NRCS and non-federal partners. RCPP provides funding and technical assistance for projects that address priority natural resource issues within a region or in one of eight designated critical conservation areas (CCAs). Unlike other farm bill conservation programs, farmers and ranchers do not apply directly to NRCS for RCPP funding. Rather, RCPP projects are proposed by a lead project partner, who works with private landowners within the approved RCPP area. Eligible lead partners under RCPP include agricultural or silvicultural producer associations, farmer cooperatives or other groups of producers, state or local governments, tribal governments, municipal water treatment entities, water and irrigation districts, conservation-driven NGOs and institutions of higher learning. If a proposed RCPP project is approved by NRCS, farmers and ranchers are then allowed to apply to NRCS for participation in the project. Program funds may be used by lead partners to provide direct assistance to producers to implement conservation practices on their farms. RCPP funds may also be used by lead partners for technical assistance, including resource assessment, conservation practice survey and design, conservation planning and resource monitoring.

The 2018 Farm Bill reauthorized RCPP and made several amendments to the program. First, RCPP was amended to be a stand-alone program, no longer tied to other conservation programs (e.g., EQIP, CSP, CRP, Watershed Act), which now includes RCPP-specific contracts with partners and utilizes its own designated funds (rather than a portion of funds designated for other conservation programs). RCPP funding was increased to \$300 million annually for FY2019

through FY2023, a \$200 million increase from previous levels. Amendments to RCPP under the 2018 Farm Bill also reallocated funding under the program – 50% of RCPP funding is now designated to state and multi-state projects, while the other 50% is designated to projects in CCAs.

Watershed Protection and Flood Prevention Act, Watershed and Flood Operations (WFPO) Program

The Watershed Protection and Flood Prevention Act (Watershed Act), first authorized in 1954, focuses on providing technical and financial assistance to public entities for planning and implementing authorized projects that protect watersheds, mitigate flooding, improve water quality, reduce soil erosion, enhance fish and wildlife habitat and promote hydropower production. Project sponsors utilize the Watershed and Flood Prevention Operations (WFPO) section of the program. Project sponsors work with NRCS to develop a watershed plan. Once a watershed plan has been approved, project sponsors work with landowners to install conservation measures and outline areas in which conservation goals may be achieved.

WFPO projects are intended to be developed only “when land or water resource issues in a watershed cannot be adequately addressed by individuals or groups making use of other USDA conservation programs. Projects should not be developed for the purpose of providing higher cost-sharing rates than those available through other USDA conservation programs.” Authorized project purposes under WFPO include: flood prevention and flood damage reduction; watershed protection, including land treatment practices installed to conserve and develop water quality and quantity; public recreation, including any practice that creates or improves a water resource or surrounding area; fish and wildlife habitat management and improvements; agricultural water management, including groundwater recharge measures and projects to improve irrigation efficiency; agricultural water supply measures; and water conservation and quality improvements.

The 2018 Farm Bill establishes permanent funding for WFPO in the amount of \$50 million annually, in addition to funds already designated by Congress; the program had historically received discretionary funding through the annual appropriations process. Additionally, the 2018 Farm Bill allows NRCS to waive WFPO’s watershed planning requirements where “unnecessary or duplicative,” including where environmental or cultural resource compliance activities have been completed by another agency.



FARM BILL PROGRAM IMPLEMENTATION ISSUES

Despite the myriad of provisions, programs and initiatives included in the 2018 Farm Bill intended to promote water conservation and drought mitigation, western water supplies continue to suffer. Western states face the prospect of additional cuts to Colorado River conveyances under terms of the Colorado River DCPs. A number of water conservation provisions included in the 2018 Farm Bill are in need of further development, clarification and input from relevant stakeholders.

On August 1, 2019, a bipartisan group of 11 western U.S. Senators sent a letter to Secretary of Agriculture Sonny Perdue (Senators' Letter), requesting that USDA immediately implement western drought provisions that were included in the 2018 Farm Bill "and use them in a coordinated and flexible manner to establish a western drought initiative to address the water supply challenges in the West and sustain our agricultural economy." The Senators' Letter emphasizes the need for immediate and effective implementation of various new water conservation authorities under the 2018 Farm Bill, including provisions in EQIP, RCPP and CREP.

USDA reports demonstrated issues with the competitive application processes for EQIP and CSP contracts. Between 2010 and 2020, just 31% of eligible landowners that applied for EQIP and

only 42% of landowners that applied for CSP were awarded contracts. In 2010, USDA awarded EQIP contracts to 36,499 of 98,030 applicants (37%). In 2020, the number of EQIP applicants increased to 125,341, while only 33,701 (27%) were awarded contracts under the program. In 2021, USDA received 113,893 applications for EQIP contracts and funded 34,054 (30%). Notably, 21,116 applications were determined to be valid but did not receive EQIP funding. In 2010, USDA awarded CSP contracts to 20,567 of 38,501 applicants (53%). In 2020, 12,142 of 34,572 (35%) applications for CSP funding were approved for funding. 6,682 of 27,110 applications for CSP contracts (25%) were approved. Despite lower participation and approval rates, overall acreage enrolled in CSP has generally increased throughout the West

Other reports indicate that USDA program implementation suffers generally from funding and staffing shortages, lack of consistent national guidance to inform decisions at the NRCS State Conservationist level, lack of agency expertise with various state water law issues, and general lack of awareness and understanding among eligible landowners of the opportunities available to them under farm bill conservation programs. Insufficient coordination among USDA agencies and across departments further limits the success of program delivery. This is particularly true where responsibilities for conservation planning and/or technical assistance and program enrollment and delivery are split between different agencies.

Community-Based Organizations (CBOs), such as place-based groups or producer-led groups hold significant promise in helping to deliver durable, voluntary and collaborative solutions to western communities struggling with drought. These groups could also improve conservation program delivery by providing producers with a trusted single point of entry into the process. However, these groups often struggle to secure predictable and adequate funding. They are often functionally unable to utilize farm bill conservation programs and other federal funds due to prohibitive non-federal match requirements, and the complexity of program enrollment and implementation. RCPP is cited as an especially cumbersome program for these organizations to use. For example, numerous CBOs reported passing on potentially successful landscape-scale RCPP projects as they would come at too great of a financial loss to the organization.

Another potentially significant impediment to implementation of water conservation measures as part of federal programs is state water law. States have largely retained their primary authority over the management and allocation of water resources. State water laws vary, but western state water laws are largely based on the legal doctrine of prior appropriation which ensures that limited water supplies are delivered to the user who was the first to establish their right. Under the doctrine, water rights holders must put their allocation of water to a “beneficial use.” Failure to put water to a beneficial use for a certain amount of time (prescribed by state law) will result in a water rights holder losing the unused portion of their right under the doctrine of abandonment or through state forfeiture laws. This rule of “use it or lose it” poses a significant risk to water rights holders, as many states do not recognize water conservation (i.e., non-use of the water) as a valid “beneficial use.” Some western states have passed legislation to expressly recognize

water conservation measures as beneficial uses, to be quantified as part of a user's larger water right. Other states have expressly exempted water conservation measures from abandonment and/or forfeiture under state law. The complexity of western state water law and the inherent risks to water rights holders of losing a portion of their rights to forfeiture and/or abandonment under state laws presents a significant issue that must be addressed for federal water conservation measures to work on watershed and regional scales.



ANALYSIS AND RECOMMENDATIONS

Long-term extreme drought continues to threaten watersheds throughout the West – particularly the Colorado River Basin, which has already been subjected to reduced water allocations from BOR under terms of the Upper and Lower Basin DCPs. In recognition of the importance of federal measures to incentivize water conservation on private working lands, Congress amended several conservation programs in the 2018 Farm Bill to broaden and strengthen water conservation and drought mitigation provisions. Implementation of these provisions has not yet been fully effective, but the upcoming farm bill cycle (presumably in 2023) presents opportunities to refine and improve farm bill programs, to address worsening drought conditions throughout the West, and to avoid further federal intervention in interstate water allocation. Water conservation and drought mitigation under farm bill conservation programs could be improved

through additional legislation, regulations, policies, and/or guidance documents that:

- Encourage and facilitate effective coordination and collaboration between federal Departments (e.g., USDA and DOI) and agencies (e.g., NRCS, FSA, and BOR), as well as with state and tribal authorities, in the implementation of water conservation efforts. The EQIP-WSI Initiative may provide a model for how agencies within DOI and USDA can work together with private landowners to ensure that conservation efforts are coordinated and working in concert to ensure the greatest water conservation results at a watershed scale;
- Direct USDA/NRCS to develop rules, regulations and/or agency guidance outlining nationwide standards for new water conservation provisions in farm bill programs, including for new EQIP provisions providing eligibility (and streamlined application processes) to WMEs and definitions of watershed-scale projects;
- Direct USDA/NRCS to develop rules, regulations and/or agency guidance to give the highest priority to conservation practices that address western water conservation and drought mitigation, and that result in actual and quantifiable savings of system water and identify best practices and innovative water conservation technologies for utilization in conservation program projects;
- Continue to expand farm bill conservation programs' focus on water conservation and western drought mitigation, including establishing new CRP continuous programs, CIG grants, CIC contracts, and other initiatives and pilot programs;
- Develop a CRP sub-program focused on water conservation similar to GCRP to pay producers annually to reduce water consumption through a range of practices or improvements (e.g., switching to less water intensive crops, implementing partial fallowing). This program would compensate producers for lost income opportunity as a result of implementing water conservation measures and would allow continued agricultural production in line with an approved management plan.
- Empower CBOs and other locally-led conservation organizations to lead in local and regional water conservation efforts and address funding barriers posed by non-federal match requirements and program complexity. One avenue to accomplish this would be to reserve a portion of RCPP funds allocated to projects in critical conservation areas for the purpose of ensuring participation of CBOs and entities working with historically underserved farmers and ranchers;
- In coordination with state water planning efforts, explore opportunities to support the establishment of community-developed water plans and water sharing agreements through RCPP and BOR WaterSMART grants;
- Ensure that USDA/NRCS receive adequate funds for program implementation (including necessary staffing and technical assistance capacity) from dedicated sources and determine

how new funds for western drought provided in the IRA and other recent federal legislation can be most effectively utilized to complement water conservation efforts through farm bill programs;

- Codify opportunities to leverage USDA, state, and other federal conservation programs against one another while avoiding clear situations of “double-dipping”. For example, landowners receiving baseline payments for long-term conservation efforts through CRP contracts could then also utilize EQIP, BOR and/or state funds for cost-share and technical assistance on water infrastructure improvements or watershed health projects;
- Empower community leaders to match opportunity with need. Explore how to fund and support jointly-funded resource coordinator positions housed in CBOs to conduct outreach and work with interested landowners to identify state and federal funding opportunities across agencies and departments;
- Incentivize landowners to apply for, and participate in, farm bill programs through adequate financial and technical assistance, practical and streamlined application and planning processes, and effective legal protections of real property and water rights;
- Direct USDA/NRCS to consult with state water authorities and CBOs to identify opportunities to develop state legislation that would protect private water rights from potential abandonment and/or forfeiture due to conservation measures. Explore how to qualify enrollment in a qualified state or federal soil and water conservation program as a “beneficial use” under state law. State agricultural property tax laws and regulations include similar provisions allowing for participation in qualified conservation program (e.g., CRP) to qualify under an agricultural tax assessment;
- Ensure that landowners are informed of and educated on conservation assistance opportunities available through farm bill conservation programs through NRCS, as well as through CBOs; and
- Direct USDA/NRCS to consult with private landowners and CBOs to better understand impediments to landowner participation in conservation programs, as well as to identify farm bill conservation programs that are underutilized and/or underfunded. For example, NRCS currently participates in annual meetings with land trust partners to discuss implementation of the Agricultural Conservation Easement Program. This cooperative approach to improving program delivery should be expanded to cover implementation of water conservation programs with WMEs, states, CBOs, producers and relevant federal agency staff.

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