Testimony of Dr. Sara Porterfield
Western Water Policy Advisor, Trout Unlimited

Senate Agriculture, Nutrition, & Forestry Committee
Subcommittee on Conservation, Climate, Forestry, & Natural Resources

Hearing on Conservation in the Farm Bill:
Making Conservation Programs Work for Farmers and Ranchers

April 20, 2023

Thank you, Chairman Bennet, Ranking Member Marshall, and members of the Subcommittee, for inviting me to testify today on behalf of Trout Unlimited (TU) and its over 300,000 members and supporters nationwide. My name is Dr. Sara Porterfield, and I am the Western Water Policy Advisor for TU.

TU's mission is to bring together diverse interests to care for and recover rivers and streams so our children can experience the joy of wild and native trout and salmon. In pursuit of this mission across the West, TU has worked with ranchers, farmers, Tribes, federal, state, and local agencies, local contractors, businesses, and many other partners to restore streams while also sustaining working lands and vibrant communities.

Today I am speaking from TU's experience as a partner with farmers and ranchers throughout the country on projects implemented under Conservation Title programs. The 2018 Farm Bill's Conservation Title authorizes conservation programs to address natural resource concerns on private, working lands. The Conservation Title provides a great deal of opportunity to meet the twenty-first-century needs of agriculture and conservation. These programs provide an important and much sought-after resource for producers to simultaneously improve their operations and benefit water quality, wetlands and streams, fish and wildlife habitat, and other natural systems. In sum, the Conservation Title's programs have contributed invaluable investments into agricultural and environmental health across the nation. With farmers and ranchers on the front lines of the climate crisis, these programs have never been more important for helping producers adapt to the threat of droughts, floods, and other extreme weather events while building resilience into the future.

The need for conservation program support is urgent. The landmark funding from the Inflation Reduction Act (IRA) is critical to helping producer operations and agricultural ecosystems adapt to changing conditions and contribute to viable solutions for addressing climate change going forward. We hope investments at the scale of the IRA will continue after its ten-year authorization window. But for now, the IRA investment in conservation programs along with the regular Conservation Title funding provide much needed opportunities to build resiliencies that have become essential for producers' operations, the agricultural economy, and the health of the environment on which these both depend. Conservation programs are the key vehicles through which these investments will be deployed. It is, therefore, imperative that the programs are implemented to the fullest extent to achieve their intended goals of helping promote agricultural

productivity while simultaneously addressing natural resource concerns and, in the case of the IRA investments, reducing greenhouse gas emissions and sequestering carbon across the agricultural sector.

However, these conservation programs are not yet fulfilling their true potential because they are too often mired in bureaucratic inertia and laden with red tape. Producers' biggest complaint about the Conservation Title—after too little funding—is how long and complex the process is to access the programs. To meet the urgent needs of drought in the West and flooding in the East, the next Farm Bill must include legislative changes that help these important programs effectively and efficiently bring funding to the ground to improve producers' operations, improve ecological health, and build resilience in the face of climate change. The Farm Bill is, after all, for farmers, and without a healthy environment we won't have the robust agricultural economy and culture that is such an integral part of this country.

Climate change has brought on heightened uncertainty, and this country's producers and the agricultural economy are more vulnerable than ever before. We need to optimize conservation programs to make sure Farm Bill funding reaches the ground and operates to help working lands become more resilient to the extreme weather events thrown at them. In the West, climate change is manifesting as deep and longstanding drought, a fact recognized by a bipartisan group of Senators in a 2019 letter to then-Secretary of Agriculture Sonny Perdue.[1] Despite the exceptionally wet winter much of the West has experienced—and is continuing to experience—the crisis is not over. Total storage in the Colorado River Basin is at only about 30% full, and experts estimate it would take six or more years of the kind of weather we saw this winter to refill the basin's storage reservoirs.[2] Across the West, the more than two-decade drought has wreaked ecological havoc, with high stream temperatures deteriorating aquatic health.[3] For agricultural producers, prolonged drought has forced farmers and ranchers to make difficult choices for their operations in the face of severe cuts to their annual water allocations, with some farmers planting a smaller percentage of their average crop or reducing livestock herd sizes.[4]

The effects of climate change and drought extend far beyond agricultural operations. In my home state, Colorado's farmers and ranchers are stewards of their lands, which also supports one of Colorado's major economic drivers—recreation and tourism. Hunting, fishing, and river-based recreation create 131,000 jobs and bring $6.3 billion in salaries and wages into Colorado.[5] The Farm Bill Conservation Title's investments in Colorado's ranches and farms—and the fish and wildlife habitat they support—contributes to rural economic vitality and has a broad ripple effect on Colorado's whole economy.

---

[1] Michael Bennet, Martha McSally, Jeffrey Merkley, Cory Gardner, Diane Feinstein, Ron Wyden, Jerry Moran, Krysten Sinema, Tom Udall, Kamala Harris, Martin Heinrich, Letter to Secretary of Agriculture Sonny Perdue, August 1, 2019, p. 1

[2] Shannon Mullane, "Colorado River Basin Reservoirs Still Face Grim Outlook Despite Healthy Snowpack," *The Colorado Sun*, 4 April 2023.

[3] "Emergency Fishing Closures July 2022," Colorado River Headwaters Chapter, Trout Unlimited; Carisa Scott and Evan Kreugel, "Colorado River Crisis: Water Temperatures Cost Commercial Anglers," *KDVR*, 24 August 2022.

[4] Nina Kravinsky, "Drought is Forcing Farmers in Colorado to Make Tough Choices," *NPR*, 6 November 2021.

[5] Business for Water Stewardship, *Economic Contributions of Water Related Recreation in Colorado*, 2019.

With the specter of climate change looming over agricultural operations and ecosystem health, I offer suggestions for clarification or changes in the next Farm Bill that will improve the speed and effectiveness with which conservation programs can be implemented to accelerate the benefits to farmers, ranchers, and ecosystem health.

Conservation Assistance Capacity

Perhaps the most important, overarching issue that affects agencies' ability to effectively deliver conservation programs is insufficient field staff to meet producer demand for conservation technical assistance. I have consistently heard from TU staff and partners that the lack of agency staff in the field hampers the implementation of conservation programs and is a major deterrent for partners and producers in bringing potential projects to agency staff. In the Upper San Juan River Basin in southwestern Colorado, for example, TU and partners have brought a proposal to the local NRCS office for $8 million worth of projects needed to help improve producer operations and watershed health in the region. NRCS staff have expressed excitement and interest in developing a Regional Conservation Partnership Programs (RCPP) to address this need but have acknowledged they do not have the staff to undertake such a project. This lack of capacity is preventing good ideas from coming to fruition despite the intended aims of conservation programs and is inhibiting farmers and ranchers from implementing needed changes to their operations to adapt to climate change and drought. The NRCS and FSA need resources to hire qualified staff in the field for these programs to function as intended.

In addition to increasing staff support, partners need the flexibility to hire consultants who can provide much-needed capacity for technical assistance such as engineering work. Currently, private businesses, NGOs, Tribes, individuals, and public agencies can be certified as a Technical Service Provider (TSP) who can provide assistance as a stand-in for NRCS staff. However, TSP certification disincentivizes these entities from participating due to significantly under-market limits on the rates TSPs can charge for their services. Such limitations deter participation, hindering what could be a valuable tool for expanding agency capacity. The next Farm Bill should direct funding to increased agency staff capacity at the local field level and make changes to facilitate partners' ability to provide technical assistance to ensure conservation programs meet their intended goals and fulfill their mission of helping farmers and ranchers get conservation benefits to the ground.

Regional Conservation Partnership Program (RCPP)

The 2014 Farm Bill established the Regional Conservation Partnership Program (RCPP) to better coordinate NRCS activities with partners, like TU, who are able to expand and add value to on-farm, watershed, and regional conservation work. An RCPP project must show impact on a natural resource priority, include innovative conservation approaches or demonstrate conservation impact, provide a one-to-one match from non-USDA funds, and demonstrate that partners have the experience and capacity to manage the five-year contract. RCPP conservation activities can also include easement options and land rentals. Proposals may be submitted to either a Critical Conservation Area (CCA) or State/Multi-State funding pool. RCPP is an

important and valued program for implementing conservation benefits at scale, and since its inception has achieved tremendous improvements both for streams and agriculture. Since RCPP began, TU has put more than $32.7 million to work on the ground with partners to improve fish passage, restore riparian habitat, and improve water quality while investing in producers' operations across the country.

RCPP is widely viewed as administratively burdensome and laden with red tape that makes it difficult, if not impossible, for partners and producers to get program funding to the ground in efficient and effective ways. NRCS has recognized such issues exist, most recently through holding in-person and virtual listening sessions last month to gather input from stakeholders on the challenges they've experienced with the program.

Challenges experienced by partners and producers include, but are not limited to:

- Multi-layered contracting requirements that take, on average, 2 years for an RCPP agreement to be fully executed after the award selection is made.
- The portal used to manage RCPPs is unwieldy and duplicative and requires NRCS staff, rather than partners, to input data, causing unnecessary delays and opportunities for mistakes.
- Contracting the amount and delivery of Technical Assistance (TA) is unnecessarily complex and requires a burdensome and time-consuming amount of tracking and reporting for partners, thereby reducing the amount of TA partners can dedicate to producers.
- The award ceiling of $10 million is too low and successful projects are limited by the funding provided per project. If producer interest is greater than the funding allocated to a project, there is no way to increase the award amount. In addition, the 50% required match funding is difficult for partners to obtain and is often the limiting factor to the scale of projects.

TU is currently experiencing firsthand the burdensome contracting process with its Gunnison River Watershed Drought Resiliency and Restoration Project, awarded in September 2021 and not yet under contract more than a year and a half later. This RCPP-AFA (Alternative Funding Arrangement) project is designed to address the effects of drought in the West, including insufficient water, inadequate habitat, water quality degradation, and soil quality degradation as outlined in the NRCS's resource concerns for the Colorado River Basin Critical Conservation Area. TU and partners will meet these goals by increasing ecological and agricultural resiliency to drought by restoring wetlands and riparian areas while improving irrigation water management on at least five working ranches in three distinct tributaries to the Gunnison River. This RCPP-AFA will address numerous water use and environmental needs in unique landscapes and stand as an example of scalable, collaborative conservation work that improves drought resiliency for agricultural producers and the environment.

As of today, TU is waiting for the execution of the Supplemental Agreement for Technical Assistance—the second of three layers of required contracting for AFA projects—eighteen months after announcement of the funding award for this project addressing urgent needs in the Gunnison River Basin. This process has involved many rounds of communication with state and national NRCS staff and long wait periods, compounded by the fact that partners cannot enter

information and materials into the portal themselves but instead must rely on NRCS staff to gather information from partners and then enter it themselves, thereby increasing the NRCS staff time involved as well as the potential for errors.

This drawn-out contracting process has caused delays in project implementation. TU had originally planned to start construction in the fall of 2022 but will not be able to begin project implementation until fall 2023 at the earliest. The Supplemental Agreement TU is currently waiting for is necessary to move forward with engineering designs for the planned irrigation diversions and water control structures. It is imperative to have these in hand by mid-summer at the latest to be able to hit the narrow window for construction between the beginning of August after the irrigation season when the fields are dry enough to access and before winter begins at these higher elevations in October or November. Such delays not only keep producers waiting for the planned benefits to their operations, but also prevent realization of drought resilience benefits for producers and ecosystems in a watershed that has been hit hard by the twenty-plus year drought in the Colorado River Basin.

In contrast, two months after NRCS announced TU's Gunnison RCPP-AFA selection the agency announced selection of TU's application for a Conservation Innovation Grant (CIG) under the On-Farm Trials program in an overlapping geography in Colorado in November 2021. The Regional LoRa Networks to Improve High Elevation Flood Irrigation Water Management CIG project will deploy the use of new technology to maintain the benefits provided by flood irrigation practices while improving irrigation efficiency in landscapes where more common system upgrades like sprinklers are not practical. Contracting for the CIG was completed and executed in February 2022, just three months after application selection, and on-the-ground project implementation began last spring in time for the 2022 irrigation season and this project is now well underway. The CIG program's far more streamlined grant contracting process, as seen in these examples, provides a model for improving the RCPP contracting process, thereby getting funding to the ground and providing climate resilience and operations improvements for producers far more efficiently.

The next Farm Bill must reduce RCPP's administrative burdens by modernizing federal contracting authority and streamlining the application, contracting, and reporting process. This can be done through three primary changes:

1. **Changing the contracting vehicle from a partnership agreement to a grant agreement**, paralleling the successful CIG and CIG On-Farm Trials programs that use grant agreements, as seen in the above example.
2. **Eliminating the requirement for a supplemental agreement for the partner's provision of technical assistance**. Under the grant agreement the partner will contract directly with the producer and no separate technical assistance agreement is required between NRCS and the partner.
3. **Authorizing partners, under the grant agreement, to work with producers** to achieve conservation benefits, restore habitat, or preserve working lands through a conservation easement, thus eliminating the need for a separate and time-consuming contract between NRCS and producer.

Producers across the country are at the frontlines of climate change, and are feeling the effects of droughts, floods, and other impacts more acutely than most in the country. RCPP is intended to help farmers and ranchers invest in, prepare for, and respond to these challenges by getting these investments to producers' bottom lines in ways that create conservation benefits and improve operations. The changes to this program in the next Farm Bill laid out here will mobilize partners' technical assistance capacities and bring them directly to producers. This will remove two of the biggest bottlenecks—lack of technical assistance and the red tape associated with producers' contracting with the NRCS—and make conservation programs work for farmers and ranchers to address the crises facing them now. We cannot let administrative burdens and bureaucratic delays continue to hamper the response to the challenges facing producers today and that will continue to grow more urgent.

Watershed and Flood Prevention Operations Program (WFPO)

Flooding, drought, and erosion cause significant damages to U.S. rivers and streams, leading to loss of life, declines in agricultural production, damage to property, and harm to fish, birds, and other wildlife. The NRCS's Watershed and Flood Prevention Operations (WFPO) program has been a valuable tool for states and local organizations in addressing damages to watersheds by providing technical assistance and funding to plan and install measures to prevent erosion and flood damage; repairing high hazard dams built by NRCS; and conserving, developing, and using land and water resources.

In recent years, more and more communities have been turning to the WFPO program to implement time-sensitive solutions to address natural disaster impacts of drought and flooding. In Colorado, for example, many partners came together to plan and implement one of Colorado's most ambitious river restoration projects: the Colorado River Connectivity Channel. The Connectivity Channel is a WFPO project and the linchpin connecting intense efforts to create a fully functioning stream channel around Windy Gap Reservoir in Grand County, Colorado. The Channel will not only reconnect aquatic habitat currently severed by the on-channel Windy Gap Reservoir; it is expected to improve the river's resiliency in the face of drought and increased water diversions that supply a growing Front Range population. The project's ecological importance is equaled only by its precedent-setting value. The Connectivity Channel has brought together entities that, for more than a decade, fought relentlessly over transmountain water diversions and their impacts on the headwaters of the Colorado River. These entities have come together, raising millions of dollars, to restore the river while allowing it to continue to supply water to the thousands of people in Colorado who depend on it. Support from the excellent Colorado state NRCS staff was invaluable to moving this project to construction and realizing the water supply and ecosystem benefits. The support of Colorado's Senator Bennet was also key to maintaining the project's momentum. Many other WFPO projects can tell a similar story of multi-stakeholder planning and support for projects that meet important water infrastructure modernization needs while providing multiple public benefits to increase watershed resilience to drought or reduce flood risk.

Similar to other conservation programs, partners and producers experience challenges when using the WFPO program due to bureaucratic hurdles. The Connectivity Channel illustrates two

common barriers to timely implementation: major delays in the approval of a project's required Watershed Plan and the program requirement to monetize environmental benefits.

The Connectivity Channel experienced major delays in the approval process for its Watershed Plan, a process that ultimately took three years out of this project's five-year window for completion. Project managers experienced multiple rounds of reviews from NRCS's national office due to a reclassification of the project type partway through the process and they were told they needed multiple groups of people to review the plan. While project managers were able to begin the project engineering process with matching funds, the Watershed Plan process threatened to delay construction to the point that it would run past the project's allowed timeframe and threatened vital match funds due to the delays. Ultimately, the delays necessitated TU's pursuit of a one-year extension to complete the project. These delays also significantly increased construction costs for the project.

The WFPO program requires that the Watershed Plan come up with a dollar amount to assign to the benefit for habitat improvement and water quality, a requirement that nearly derailed the Watershed Plan for the Connectivity Channel project. The project's consultants hired to do the Watershed Plan, who had deep experience in completing other Watershed Plans, reported that they had never been through such intense scrutiny and rounds of feedback as when having to assign a dollar value to the benefits of the habitat improvements.

Changes to the WFPO program in the next Farm Bill must ensure the program benefits producers, communities, and the environment and provides a response to the challenges of a changing climate. This can be accomplished through two primary changes:

1. **Streamlining program administration** by eliminating the requirement to monetize environmental benefits, thereby modernizing the program to fund projects that use natural infrastructure, and by moving final decision-making over the Watershed Plan review process to the applicable State Conservationist's office rather than the NRCS national office.
2. **Prioritizing projects that provide multiple benefits** to watershed and fisheries health, rural communities, and agricultural producers. Projects that provide multiple, public benefits generate positive long-term economic and non-economic outcomes for taxpayers. These benefits include improvements in fish or wildlife habitat; reduction of drought or flood risk; improvements in water quality; water conservation, improvements to instream flow or fish passage; or off-channel renewable energy production.

Additional changes should include a recognition of the increased material and labor costs by raising the allowable federal contribution to projects from $25 million to $50 million. In just the last two years alone, materials used in irrigation piping projects have increased in cost by an average of 60%. Further, the next Farm Bill should authorize consolidated planning of one or more sub-watersheds. WFPO's statutory limitation to watersheds less than 250,000 acres has historically disadvantaged western interests seeking assistance under the law. Consolidated planning should be authorized so that one or more sub-watersheds of 250,000 acres each may be planned together at the discretion of the local organization sponsoring a proposed project. Together, these changes will help WFPO program funding to the ground in an expeditious

manner that will benefit producers, the environment, and communities that depend on our nation's waterways.

Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program (EQIP) is one of the largest and most ubiquitous Conservation Title programs. EQIP provides technical and financial assistance to agricultural producers to help plan and implement conservation practices that address natural resource concerns identified for the relevant area. EQIP assistance is provided through contracts, most often administered through NRCS offices. Any active producers or ranchers on eligible lands can apply for EQIP funding. Importantly, EQIP funds pay the partial cost, or a payment rate, for conservation practices relevant to improving the identified resource concern.

The 2018 Farm Bill made multi-producer irrigation infrastructure projects eligible for EQIP funding for the first time. Based on this statutory change, the NRCS created a definition of "water management entities" (WMEs) that are eligible applicants for EQIP funding that includes entities like groundwater management districts, acequias, land-grant mercedes, or other similar entities that have jurisdiction or responsibilities related to water delivery to eligible lands. This change was designed to increase the pace and scale of drought response in the Rio Grande, Colorado River Basin, and other drought-affected watersheds to make producers' operations more resilient to climate change and support agricultural economies in the West.

While this provision in the 2018 Farm Bill was designed to aid western producers, it would not alter or detract from the EQIP funding available to and that supports farmers in other parts of the country. Each state receives an EQIP allocation of funding, and the 2018 Farm Bill specifically directed that the new WME project eligibility would not alter the already-existing state EQIP allocations. Therefore, states outside of the West in the Midwest, East, and South whose producers do not rely as heavily on shared, multi-producer irrigation systems would not have their EQIP allocation changed, meaning none of the states outside the West would see their EQIP money put toward WME projects or shifted to states where WME projects would be eligible for EQIP funding. In addition, each State Conservationist in western states still determines the portion of EQIP funding to be dedicated to WME-eligible projects, or if there are higher producer or conservation priorities that merit prioritization in that state's funding allocation. The EQIP state allocation allows the program to address resource concerns across the country without disadvantaging one region or changing where funding and resources have historically supported producers and their needs.

Under previous Farm Bills, western irrigation infrastructure shared among producers was ineligible for EQIP funding. Small to mid-sized water management organizations like acequias, land-grant mercedes, canal, or mutual ditch companies are often overlooked by available funding (e.g., they are not prioritized for Reclamation funding as they do not have Reclamation infrastructure, nor are they individual producers who have been historically eligible for EQIP). Acequias and land-grant mercedes, in particular, are likely to be comprised of historically underserved producers. They represent a category of "water management entities" that have a need for the increased availability of funding from programs like EQIP to undertake projects that

allow individual producers to respond to and prepare for climate change and drought. To ensure that projects are right-sized for these kinds of entities, NRCS regulations implemented a per-project limit for WME projects in light of the fact that larger, more expensive projects are likely a better fit for other programs (e.g., WFPO) and agencies (e.g., the Bureau of Reclamation).[6]

Within the 2018 Farm Bill, the statutory direction is codified at 16 U.S.C. Section 3839aa-2(h). Subsection (2)(h)(2)(A) authorizes the Secretary to enter into a contract with a WME "to implement… 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." In addition, subsection (2)(h)(3)(A) directs that the "Secretary shall give priority to applications in which . . . there is a reduction in water use in the operation on that land [the eligible lands associated with the WME]" (emphasis provided). This mandatory prioritization underscores the 2018 Farm Bill's effort to create drought-response tools for the West.

Unfortunately, since WMEs became eligible for EQIP funding, NRCS has not provided clear guidance on the types of projects that meet the statutory criteria for eligible projects. In addition, the NRCS has not provided guidance or clarity on how EQIP applications could be ranked in terms of funding priority. The next Farm Bill should include direct language requiring NRCS to publish, within 1 year of authorization, a suite of conservation practice standards that address diminished water quantity in the face of drought, meets the environmental sideboards, and are practices that ensure WME funding eligibility, including the small to mid-sized organizations that are regularly underserved or overlooked.

These changes would require the NRCS to publish two separate lists of existing qualifying Conservation Practice Standards (CPS):

(1) One list of qualifying CPS for irrigation efficiency projects, such as irrigation ditch lining (428), irrigation pipeline (430), micro-irrigation system (441), irrigation system (443), and irrigation water management (449); and,

(2) another list of qualifying CPS for the statutorily required public benefits of fish and wildlife habitat improvement, environmental drought mitigation, or reduced consumptive water use, such as conservation crop rotation (328), stream habitat improvement and management (395), aquatic organism passage (396), wetland restoration (657), or restoration of rare or declining natural communities (643).

The directive would then require that an eligible WME project would have one or more CPS from each list. In other words, an eligible WME project would be required to implement at least one CPS from list (1), above, relating to irrigation infrastructure or irrigation water management and would also be required to implement at least one CPS from list (2), above, relating to water conservation, fish passage, improving stream or wetland habitat, or otherwise providing environmental drought mitigation. Project proponents can design the project to fit their specific needs and priorities by selecting the qualifying CPS appropriate to their system modernization

[6] §1466.6, "Program requirements," 84 Fed. Reg. at 69284.

goals. This allows EQIP to work for farmers and ranchers by providing the flexibility for producers to think creatively about how they can best to implement practices to maximize their operation's resilience to climate change and drought.

Conservation Reserve Enhancement Program (CREP)

Farmers and ranchers across the country need conservation programs to operate at scale to address the challenges they face in response to climate change. In the West, this means that producers require these programs to help them meet the challenges of increasing, long-term drought that threatens their livelihoods and the agricultural economy of the region. In order to meet these needs, conservation programs must allow partners and producers to act in creative and flexible ways to maintain the viability of their operations and the economic and cultural values agriculture brings to the region. The Conservation Reserve Enhancement Program (CREP) provides an existing avenue for scaling western responses to climate change and prolonged drought and has been successfully applied across the region to respond to water scarcity brought on by declining groundwater and surface water levels. [7]

The Conservation Reserve Program (CRP) operates CREP, which is administered by the Farm Service Agency (FSA). CREP projects target resource concerns at the state, regional, and national level by providing an annual rental rate, combined with other incentives, to producers who participate voluntarily and retire environmentally sensitive land and plant appropriate vegetative cover, per the terms of the CREP agreement. The program leverages a combination of federal and non-federal funding to address resource concerns and support conservation outcomes.

In recent years, CREP has demonstrated a successful track record of helping producers on the Great Plains and in the West respond to climate change, drought, and water scarcity by decreasing groundwater use and thereby increasing groundwater levels.[8] Projects including the Colorado Republican River, Kansas Upper Arkansas River, Nebraska Platte-Republican Resources Area, Colorado Rio Grande, and Idaho Eastern Snake Plain Aquifer CREPs have successfully participated in CREP in a manner that has also allowed them to reduce the amount of water for irrigation use.[9] Participating farmers contribute to reaching these goals by

[7] Recent evaluations of the Idaho Eastern Snake Plain Aquifer and the Nebraska Platte-Republican Resources Area CREPs have proven these projects successful in meeting their goals. Idaho's report cites the Snake Plain CREP as a popular, "consistent water saving option" that "is valued as one of the water saving options for the landowner to help offset economic hardships to mandatory reductions" (p. 5). Nebraska's 2017 evaluation reported 44,061.77 acre-feet of consumptive use savings. See: Idaho Soil & Water Conservation Commission, *Idaho's Conservation Reserve Enhancement Program Eastern Snake Plain Aquifer FY 2018 CREP Annual Performance Report*, 2018; Nebraska Department of Natural Resources, *2017 State of Nebraska Platte-Republican Resources Area Conservation Reserve Enhancement Program Annual Report*, December 2017.

[8] Randall Grant Monger, "Explaining Participation in the Colorado Republican River and Nebraska Platte-Republican Resources Area Conservation Reserve Enhancement Program," paper presented at the Agricultural and Applied Economics Association Annual Meeting, Boston, MA, 31 Jul.-2 Aug. 2016, p. 3, note 1.

[9] USDA FSA, "Fact Sheet: Conservation Reserve Enhancement Program—Colorado Republican River," June 2019; USDA FSA, "Fact Sheet: Conservation Reserve Enhancement Program—Kansas Upper Arkansas River," January 2017; USDA FSA, "Fact Sheet: Conservation Reserve Enhancement Program Nebraska Platte-Republican River

permanently retiring the enrolled land from agricultural production. These projects provide rental payments to farmers who enroll their land, thereby granting these producers a reliable source of income and protection from risk while participating in multi-benefit conservation projects.[10] These projects have shown that CREP projects can be used effectively to meet regional water conservation goals while also fitting within the land conservation purposes of the CREP.[11]

To optimize the potential for these CREPs to be successful in meeting the needs of farmers and ranchers going forward, the next Farm Bill must increase the land rental rates to be on par with the rates paid for irrigated lands. Producers need to be fairly compensated when enrolling acres in CREP and retiring both land and irrigation water rights. This is not just a western issue because CREP payments for producers in the Republican River basin—which ultimately flows into the Missouri and then Mississippi rivers—and who live across the three states of Colorado, Nebraska, and Kansas, are not compensating producers for forbearing use of land and water and the concomitant loss of production value.

In addition, current CREPs require fully removing land from production, permanently retiring it from agricultural use, and converting it to cover vegetation.[12] Permanently retiring land is generally appropriate and successful for many projects, but an effective response to drought may require some flexibility and creativity in how producers in western states conserve water and implement conservation programs. In particular, allowing agricultural land to have some production value even if not irrigated may be critical to creating the economic resilience needed to maintain viable agricultural activities consistent with conservation purposes while also incentivizing retirement of sensitive, unproductive lands. With this flexibility under key circumstances, the CREPs can help avoid larger economic disruption of rural, agricultural communities that are being forced to adapt to drought conditions accelerated by climate change.[13]

Resources Area," September 2011; USDA FSA, "Fact Sheet: Conservation Reserve Enhancement Program Idaho Eastern Snake River Plain Aquifer," February 2017.

[10] Ibid.

[11] While these two CREPs have focused primarily on decreasing groundwater use for irrigation and thereby increasing groundwater levels, both the Colorado Republican River and Nebraska Platte-Republican Resources Area CREPs list decreasing surface water use as a goal alongside a reduction in groundwater use. USDA FSA, "Fact Sheet: Conservation Reserve Enhancement Program—Colorado Republican River," June 2019; USDA FSA, "Fact Sheet: Conservation Reserve Enhancement Program—Kansas Upper Arkansas River," January 2017; USDA FSA, "Fact Sheet: Conservation Reserve Enhancement Program Nebraska Platte-Republican River Resources Area," September 2011; USDA FSA, "Fact Sheet: Conservation Reserve Enhancement Program Idaho Eastern Snake River Plain Aquifer," February 2017.

[12] Ibid.

[13] For examples of agriculture's "induced multiplier effect"—or the economic activity within a community including retail, restaurants, healthcare, etc., generated by agriculture—in Pinal and Yuma counties, Arizona, see: Ashley Kerna Bickel, Dari Duval, and George Frisvold, *Contribution of On-Farm Agriculture and Agribusiness to the Pinal County Economy: Economic Contribution Analyses for 2016*, The Department of Agricultural and Resource Economics, The University of Arizona, December 2018, p. 7, 35-39; *A Case Study in Efficiency – Agriculture and Water Use in the Yuma, Arizona Area*, Yuma County Agriculture Water Coalition, February 2015, p. 55-56. For the economic effects of a hypothetical reduction of 300,000 AF of irrigation water (and subsequent fallowing of fields) in Pinal County, see: Ashley Kerna Bickel, Dari Duval, and George Frisvold, *Contribution of On-Farm Agriculture and Agribusiness to the Pinal County Economy: Economic Contribution Analyses for 2016*, The Department of Agricultural and Resource Economics, The University of Arizona, December 2018, p. 10-11, 41-50.

Emergency Watershed Protection (EWP) Program

The Emergency Watershed Protection (EWP) Program is an emergency response program that provides support for recovery efforts to fires, droughts, floods, and other natural disasters. In the West, the program has been used to respond to the effects of floods and fires, including the 2013 floods along Colorado's Front Range and the 2018 Dollar Ridge Fire in Utah's Strawberry River watershed.[14] As the multi-agency report Managing Infrastructure in the Stream Environment, authored by BOR, NRCS, and USFS under the Advisory Committee on Water Information Subcommittee, lays out, much of the infrastructure built in the early- to mid-twentieth century is at odds with riparian and watershed health and is reaching the end of its lifespan. This presents a chance to replace existing infrastructure in a way that incorporates ecosystem rehabilitation. Particularly when natural disasters create the need for infrastructure repair and replacement, there is "an opportunity to both increase infrastructure resiliency and rehabilitate stream ecosystems" at the same time with the multiple benefits of improved health and safety for communities, the increased ability of ecosystems to absorb and respond to future natural disasters, and improved watershed health.[15]

Climate change has increased the volatility and frequency of extreme weather events and the EWP Program can help respond to these disasters and build climate resilience for future events. While it is important to prepare for and respond to drought, flooding, as we have seen in California this year, is an equally important natural hazard for which we need to prepare. Changes to the EWP program would require the restoration of hydrologic function of the watershed to the maximum extent possible. This also lessens flood risk in the future, protecting aquatic habitats and the human communities in watersheds at risk for flooding. Currently, such hydrologic restoration is in agency regulations, though it has not yet been implemented.[16] Therefore, the next Farm Bill should include statutory direction to implement this restoration work. In addition, the flood easement program should be bolstered to allow for the restoration of hydrologic function, rather than solely the narrow protection of land in the floodplain, under this program.

Conclusion

The recommendations provided in this testimony are not an exhaustive list of ways to help address drought and climate change for farmers and ranchers. The Conservation Title already provides funding for other practices that recognize the conservation value of activities that could be maximized to build greater resilience for agricultural producers going forward. Practices like switching to less water-intensive forage crops, applying soil-stabilizing, drought-resilient cover

[14] Colorado Watershed Protection Program; "Introduction and Planning Process," *Dollar Ridge Restoration Plan Draft Environmental Assessment*, Utah Reclamation, Mitigation, & Conservation Commission, February 2023, p. 1.
[15] "Introduction," *Managing Infrastructure in the Stream Environment*, Advisory Committee on Water Information Subcommittee on Sedimentation Environment and Infrastructure Working Group, September 2017, p. 1.
[16] Our suggestion, to adopt the multi-agency document and associated technical literature as the current standard to which to re-build infrastructure with EWP funding aligns with the EWP definition of eligible practices to "restore the hydraulic capacity to the natural environment to the maximum extent practical" 7 CFR 624.6(c)(3) (eligible practices) and is an appropriate and necessary step making EWP a more effective program.

crops on fallowed fields, no-till farming, and other practices should not be overlooked when considering ways to better promote effective, efficient agricultural and ecosystem health in increasingly water scarce environments.

Finally, in the interest of optimizing or synergizing existing conservation programs to address the current challenges confronting producers, it remains important to find ways to utilize Drought Mitigation Funding under IRA (Reclamation) or through the Bipartisan Infrastructure Law (BIL) in conjunction with Conservation Title programs to optimize the programs' intended outcomes. Drought is a widespread and vexing problem that requires using all the tools in the toolbox to find equitable and effective solutions. It also necessitates a diversity of programs and resources; conservation programs are an important piece of this puzzle, but it will require a coordinated, comprehensive approach from multiple agencies, affected state and local entities, and the diversity of stakeholders to fully take advantage of the opportunities to address current and future challenges in drought-affected watersheds.

TU's experience as a partner with farmers and ranchers on conservation program projects in the West and across the country has given our organization a unique perspective on how these programs can be improved for farmers, ranchers, and the environment. It is imperative that the next Farm Bill improve the delivery of these important programs and their benefits to confront the climate crisis and support the country's agricultural producers.

TU appreciates the attention given by this Committee to Conservation Title programs and western water issues. I thank you again for the opportunity to testify today.