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Oversight Hearing
"Status and Management of Drought in the Western United States"

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Chairman Kelly, Ranking Member Hyde-Smith, and Members of the Subcommittee:

Thank you for this opportunity to share our observations on the catastrophic drought conditions across the American West. The Family Farm Alliance (Alliance) is a grassroots organization of family farmers, ranchers, irrigation districts, and allied industries in 16 Western states. We are committed to the fundamental proposition that Western irrigated agriculture must be preserved and protected for a host of economic, sociological, environmental and national security reasons – many of which are often overlooked in the context of other national policy decisions. The American food consumer nationwide has access to fruits, vegetables, nuts, grains and beef throughout the year largely because of Western irrigated agriculture and the projects that provide water to these farmers and ranchers.

This testimony focuses on this year's drought – an unprecedented disaster for many farmers and ranchers, their families and rural communities across the West. Irrigated farms in the federal Klamath Project faced the worst year in the Project's 116-year history, with essentially no stored water from the Klamath River system. Many areas served by the federal Central Valley Project in California received zero supplies. The Colorado River Basin is in its 21st year of drought and its reservoirs will end up at their lowest levels since they were initially filled. Watersheds in the American Southwest are parched, and wildland firefighters continue to work toward containment goals on 63 large fires and complexes that have burned more than 3.1 million acres in the Western United States.

The current drought crisis underscores some key concerns:

1. Water infrastructure is needed to protect future water supply reliability. A national coalition of over 220 organizations this year urged Congress to include Western water infrastructure provisions in any potential infrastructure or economic recovery package. Your Committee has clearly heard and acted on our coalition's request.

2. Water management in the West is becoming too inflexible. Water users served by Western federal water projects – including but not limited to – California's Central Valley Project, the Klamath Project, and the Columbia River Basin - are facing "regulatory droughts" as well. We need a new way of looking at how we manage environmental demands for our limited water resources. We need a broader view of how water is used, one that considers state water laws, population growth, food production and habitat needs.

3. Fierce Western wildfire disasters are becoming an annual occurrence. This underscores the importance of improving on-the-ground management and restoration actions that can lead to improved forest health, which benefits every Western watershed's water supply capability.

4. Now is the time for collaboration, not confrontation. Now more than ever, ag producers, tribes and conservation groups need to come together to provide locally driven solutions. If we don't, the public policies and resource management strategies that we need to maintain a viable and sustainable rural West will be impossible to achieve.

More details on these recommendations – particularly relative to Colorado River Basin policy considerations and federal operations concerns on the Central Valley Project (CA) and the Klamath Irrigation Project (CA/OR) – are included near the end of this testimony.

There are things that Congress and this subcommittee can do to alleviate this disaster and better prepare and manage for future droughts. Federal investments in improving and building new water supply infrastructure - partnering with the Western states and non-federal water users - can help prevent or reduce the impacts of future droughts. Moving away from knee-jerk single species management to collaborative watershed-based approaches that respect all uses will help prepare Western water stakeholders for a more predictable and secure future. We need to act, and act now to accomplish these tasks.

THE WESTERN U.S. DROUGHT CRISIS

At a time when Western farmers and ranchers are typically harvesting the bounty of a long growing season, crushing drought conditions have left millions of acres of productive farm and ranch land without water, crops or livestock. Many of our farmers and ranchers were hit hard by this year's drought. When you look at the U.S. Drought Monitor for September 30, 64 percent of the High Plains and 93% of the remainder of the West are categorized as being under some degree of drought. For some states, including Arizona, California, and New Mexico, that figure was nearly 100 percent during the past summer. According to the U.S. Drought Monitor, for the water year ending at the end of September, the 2021-22 period will go down as one of the driest in portions of California and Nevada. The warm and dry conditions, especially in September, have been the catalyst for degradation over the High Plains region that has remained dry.

Fall ushered in wetter weather in some areas of the Western U.S., but overall, the region continues to reel from the unprecedented drought of 2021. Even with the rain, some rangeland and pastures in the Dakotas and Wyoming continue to feel the effects from drought that appears to have peaked

earlier in the year. The situation is dire with very little feed, especially in the northern tier states of the Dakotas, Montana, Washington and Oregon, as well as Nebraska, Wyoming and Utah. Arizona and Nevada conditions are worse than normal, and California is experiencing its worst drought in recent memory.

The following is a summary of how the drought is impacting farmers and ranchers across the West, beginning with an update of the crisis facing my community in the Klamath Basin.

1. Klamath River Basin

Farmers served by the Klamath Irrigation Project along the California-Oregon border faced historically low water allocations this year. The Klamath Project was authorized in 1905 under the 1902 Reclamation Act, which encouraged settlement and irrigated agriculture to feed a hungry nation. The Project was a resounding success, built out to its current 200,000 acres by the early 1940s, producing food and supporting strong rural communities.

For Klamath Project irrigators, this year was "déjà vu all over again" as the poor hydrology and single species agency management of fish protected by the federal ESA left agricultural lands with little to no water.

A similar situation occurred in 2001, and the resulting impacts to local rural communities and national wildlife refuges were immediate and far-reaching. Even with a later release of a small percentage of needed water over a 30-day period in July and August 2001, thousands of acres of valuable productive farmland were left without irrigation water. The wildlife benefits provided by those farms – particularly the food provided for area waterfowl – were also lost with the water. The National Academy of Sciences National Research Council later concluded that there was insufficient scientific evidence used by federal fisheries agencies in 2001 to support changing the preceding historical water operations of the Klamath Project.

I have neighbors and friends who will no longer farm, victims of attrition caused by 20 years of court-directed mismanagement that has done little to improve ESA-listed fish populations. Last May, the Bureau of Reclamation (Reclamation) announced that no water would be diverted at the Klamath Project's A Canal for irrigation in 2021. The first water delivery from the A Canal was in 1907. This is the first year in the canal's history that it delivered zero water.

Although there is enough water in Upper Klamath Lake to supply all irrigation needs, current federal agency management of the Klamath Project is driven by allocation to fish species protected by the ESA. In past years of similar drought conditions, there have been full irrigation deliveries. This year, regulation under the ESA resulted in essentially all water originally developed for irrigation being retained in Upper Klamath Lake or released downstream for salmon in California. Water users are extremely upset with what the federal government is doing to them, and with good reason. Taking water from Project irrigators for ESA species is a failed experiment in the Basin that has produced virtually no benefit for the species.

There are critical legal issues that need to get fixed. Farmers and irrigation districts have strong objections to the re-allocation of stored water their farms have depended on for generations. We must also get away from the paradigm of federal agencies regulating the Klamath Project and other Western federal water projects for ESA species management without accountability to produce results simply because they have a federal nexus. This federal nexus at the Klamath Project results in Project farmers and ranchers being looked to for reallocating water without adequate scientific basis in an attempt to cure and mitigate whatever factors may be affecting fish populations. That is not fair, and it has not worked for farms or fish.

This past summer, local farmers and ranchers needed financial resources to try to hold their farming operations together in an attempt to avoid an absolutely catastrophic meltdown. They needed that help immediately. Local water users did not ask to be in this cycle of crises but this year they faced a terrible fate that made it essential to receive this disaster funding support. Fortunately, Congress – working with the Departments of the Interior and Agriculture – provided $33 million in disaster relief to the Basin this year. Oregon's U.S. Senators Jeff Merkley (D-OR), Ron Wyden (D-OR), Diane Feinstein (D-CA) and Jose Padilla (D-CA), along with Representatives Cliff Bentz (R-OR) and Doug LaMalfa (R-CA), led efforts to secure drought relief funds that will be delivered to help irrigators and tribes in the Klamath Basin who are suffering through this historic, severe drought.

This was also a very bad year for salmon fishermen, tribal and non-tribal. There may have been disagreements with those communities about the cause of the low salmon returns, but those people are not at fault. We were pleased to see that Congress has been receptive to their information and needs as well.

2. Southern and Central Oregon

In Oregon's Rogue River Valley, farmers experienced a shortened season due to water shortage. The Talent Irrigation District was forced to shut off irrigation water in the middle of the summer, well before crops were ready for harvest at local vineyards and orchards. This was bad news for local orchardists, who typically just begin to pick their fruit in August. The last time the system was this low was in 1961. With the water turned off for good, irrigated pastureland and hay fields introduced new fire hazards into an area that was nearly razed when the Almeda Fire tore through Talent just over one year ago.

Ongoing dry years and extreme drought, along with ESA requirements for the Oregon spotted frog, has created a perfect storm of water shortages in the Deschutes and Crooked River Basins in Central Oregon. Conditions in the region have been so dry for so long that a 100+% snowpack last winter and spring was not enough to resolve ongoing dry conditions. The region was so dry that much of the snowmelt runoff did not reach the reservoirs or tributaries, but was instead absorbed into the dry soil.

North Unit Irrigation District (NUID) relies on stored water from Wickiup Reservoir to service nearly 60,000 acres of Central Oregon farmlands, of which nearly 40% sat idle due to water

shortages. Today, Wickiup Reservoir sits at 2% of capacity. Some NUID farmers were allotted as little as 0.50 acre-feet per acre and ran out of water on August 20.

NUID farmers are predominately known for producing forage and various grass seed crops, in addition to a variety of vegetable seed crops. NUID farmers grow approximately 55% of the U.S. domestic and 45% of the global market carrot variety seed. If you eat a carrot today, it likely originated from an NUID farmer. NUID is critical to supporting an extensive network of agriculturally related jobs and the Central Oregon economy. Without help, NUID and its farmers have little hope of remaining productive economic drivers of the regional economy, as they have been for decades.

3. California

Further south, neighboring California is in a critically dry year, much like 2015. The California Department of Water Resources has marked 2021 as the third-driest water year (measured from October to March) on record for the state. The dry conditions can also be seen in the state's water supply, with the department reporting that many of California's major reservoirs are at less than 30 percent of overall capacity.

The sparse timing of rain that has occurred this season has contributed to especially poor growth of the annual grasses that are needed for livestock feed. The amount of forage on rangelands is low, with producers in Ventura County having to ship whole herds of cattle out of the county because there was almost no forage. About 2 million acres of California's irrigated farmland had its water supply cut by 95 percent. Another million acres lost 80 percent of its water supply this year. Much of the remaining farmland saw cuts of 25 percent or more.

The Friant Division of the Central Valley Project (CVP) was designed and is operated as a conjunctive use project to convey surface water for direct beneficial uses, such as irrigation and municipal supplies, and to recharge groundwater basins in the southern San Joaquin Valley (the Valley). The ability to move significant water through the Friant Division's canals in wetter years to store in groundwater recharge basins is critically important for the project to work as intended, and these operations sustain the primary source of drinking water for nearly all cities, towns, and rural communities on the Valley's East side, many of which are considered disadvantaged communities.

Over the past 30 years, increasingly stringent federal and state environmental regulations have redirected water away from the Valley in an attempt to aid struggling fish populations dependent on the Sacramento-San Joaquin River Delta (Delta). As water exports through the Delta declined, many San Joaquin Valley water users relied heavily on pumping groundwater supplies to maintain economic viability for their communities. The resulting groundwater overdraft damaged the Friant-Kern Canal, as well as the Delta-Mendota Canal and the California Aqueduct, through subsidence and compromised their ability to deliver water in the Valley and Southern California.

The southern third of the Friant-Kern Canal has lost 60% of its design capacity, which translates to 100,000 – 300,000 acre-feet of water per year that cannot flow to farms and communities. Additionally, by reducing the canal's ability to deliver water to aquifers in the south Valley, the conveyance constriction also worsens existing water supply and water quality problems in dozens of rural and disadvantaged communities who rely entirely on groundwater as their only source of drinking water. While these losses are recoverable if the canal is repaired, time is of the essence, and current drought conditions do not bode well for such challenges.

During extreme drought years like 2021, subsidence and the effects of groundwater overdraft intensify in the San Joaquin Valley. One reason for that stems from the historic water rights that the Federal government obtained to supply the Friant Division with water, combined with how it operates the dams in Northern California and the pumps that export water south through the Delta. Part of those agreements allow for the historical water rights holders on the San Joaquin River to call on their reserved rights to some of the river's flow when Delta exports do not meet their demand. This has happened twice in Friant Division history – in 2014 and 2015 – and as operations of the water project continue to be more and more stringent, the risk of it happening more frequently gets greater and greater each year. The consequences of this could be disastrous for the Valley.

Not only would such a "call" on Friant water supplies reduce the irrigation and municipal supplies for contractors in the Friant Division, it would also increase the rate of land elevation subsidence, reduce water supplies, and worsen water quality conditions for the Valley's most vulnerable communities, and squander the past investments Friant water users have made in restoring fisheries and habitat along the river.

Of particular concern is the impact of reduced surface water supplies to the more than 1 million Californians who live in the 55 disadvantaged and severely disadvantaged communities in the Friant service area, many of them already dealing with unsafe drinking water or experiencing their wells going dry during 2014 and 2015. Both of these problems will inevitably be exacerbated with fewer surface flows infiltrating the valley's groundwater aquifers.

CVP and State Water Project (SWP) operations in the future should be governed by decisions that consider the "whole field" of possible impacts. Unfortunately, the projects are operated to rob Peter in order to pay Paul. In a painful year, we must share the pain equally. Instead, agriculture bears a disproportionate burden of the California water shortage curtailments.

California is the No. 1 farm state in the nation producing tens of thousands of agricultural jobs with wages at all income levels covering all 58 counties. When farms aren't growing food for people, it affects jobs, personal income, and the quality of life in these rural areas of the state. In addition, farm-related jobs contribute hundreds of millions of dollars annually to state and local tax revenue which provide services local communities value, like police, firefighters and teachers. With the uncertainty over water, some Central Valley farmers destroyed their crops ahead of the summer season in order for their operations to survive. It's impacting jobs and will likely soon impact grocery shelves and food prices.

Meanwhile, despite an appeal by Gov. Gavin Newsom for all Californians to voluntarily cut water use by 15%, Southern California has trailed in conservation efforts and water usage actually slightly increased in Los Angeles and San Diego, according to figures released by the State Water Resources Control Board. On average, Californians reduced water use by just 1.8% statewide during July as compared to the same month last year. Across much of Southern California, however, water use dropped by just 0.1% overall, and rose by 0.7% in Los Angeles and 1.3% in San Diego. Meanwhile, California farmers and ranchers– many of whom had their CVP surface water supplies completely curtailed this year – saw their hopes for critical water infrastructure scrapped by the California Legislature.

4. Colorado River Basin

Most of the flow of the Colorado River originates in the upper portions of the Colorado River Basin in the Rocky Mountains. The Upper Basin experienced an exceptionally dry spring in 2021, with April to July runoff into Lake Powell totaling just 26% of average despite near-average snowfall last winter. The projected water year 2021 unregulated inflow into Lake Powell—the amount that would have flowed to Lake Mead without the benefit of storage behind Glen Canyon Dam—is approximately 32% of average. Total Colorado River system storage today is 40% of capacity. Plans that have been developed over the past two decades lay out detailed operational rules for Lakes Powell and Mead. In July 2021, drought operations to protect Lake Powell were implemented under the Upper Basin Drought Response Operations Agreement, which projects releasing up to an additional 181,000 acre-feet of water from upstream initial units of the Colorado River Storage Project (CRSP) to Lake Powell.

a. Shortage Declaration

As the historic Colorado River drought continues, low runoff conditions in the Colorado River Basin have prompted Reclamation to reduce downstream releases from Glen Canyon Dam and Hoover Dam in 2022 due to declining reservoir levels. In the Lower Basin the reductions represent the first-ever "shortage" declaration—demonstrating the severity of the drought and low reservoir conditions. The declaration means that in January 2022 the agency will reduce water deliveries to the Lower Colorado River Basin states of Arizona and Nevada and to the Country of Mexico.

Under the 2007 Colorado River Interim Guidelines and the 1944 Water Treaty with Mexico, Lake Mead will operate under shortage status for the entirety of calendar year 2022. This includes required reductions and contributions for each individual state forming the lower basin. These requirements include about 18 percent of Arizona's annual apportionment, 7 percent of Nevada's annual apportionment and 5 percent of Mexico's annual apportionment. The cuts will be the largest to date on the river, and will hardest hit farmers who receive water from the Central Arizona Project (CAP), who are preparing for their supplies to be entirely shut off in 2023. The reductions will force growers in Pinal County to leave some fields dry and unplanted, while the state is providing funds to help local irrigation districts drill wells to pump more groundwater.

b. Impacts to Water Users

One of the farmers who stands to see his CAP water deliveries reduced is Dan Thelander, who served on the Family Farm Alliance board of directors for three years. He farms cotton, alfalfa and other crops in the desert of Pinal County, Arizona. Earlier this year, he told CNN that he had to lay off employees, cut down on purchases of seeds, fertilizer and tractors, and overall, just scale down and operate a smaller farm. Meanwhile, local water managers are looking for infrastructure funding to move groundwater to locations that are not served by groundwater now.

In addition, reports came in from northern Arizona that ranchers on the Coconino Plateau have been hauling water for cattle and wildlife because dirt stock tanks are completely dry. One of our ranchers in Central Arizona has had his cattle permit issued by the U.S. Forest Service (USFS) reduced by 50%. He has now been forced into a situation of having to sell about 40% of his breeding herd and had to feed some of the rest on his deeded land.

The Dolores Project, located in southwestern Colorado in the "Four Corners" region, experienced the fourth worst runoff ever. Water supplies were between 5 and 10 percent of normal, but with only a 34% supply from last year, there was no carryover water this year. The Dolores Project Municipal and Industrial (M&I) commitments were prioritized and were met. Senior rights that predate the Project had a 50% allocation until the July monsoon season allowed a late season increase to about 65%.

The Ute Mountain Ute Tribe (UMUT) Farm and Ranch Enterprise only received about 2,500 AF of their normal 23,300 AF allotment. Farm operations were limited to only 900 acres of the overall 7,600-acre enterprise, with partial season irrigation focusing on export dairy alfalfa hay and providing enough corn to keep the mill and markets supplied. Dolores Project "Full Service" irrigators only received about 1.5 inch of delivered water per allocated acre. Those water users set up joint pooling arrangements and irrigated only about 10% of the total 29,000 acres for a partial season.

Downstream fisheries that share Dolores Project shortages also saw reduced releases. There was no water available to lease and groundwater supplies were also limited. Full impacts to the fisheries likely will not be known until next year's surveys conducted by the Colorado Parks and Wildlife Department.

Local farmers and the Dolores Water Conservancy District (DWCD) faced tough financial times. Some farmers risked dry land farming, while others just fallowed and hoped that perennial crops make it through to next year without replanting. Continued lack of water supply since 2000 has generated serious financial challenges for both producers and organizations. UMUT & DWCD approached Reclamation with a formal request for help under UMUT Project contracts and Reclamation Drought Emergency Authority.

Farmers and ranchers served by the nearby Mancos Water Conservancy District faced a zero percent allotment from Jackson Gulch Reservoir. Poor hydrology was witnessed in other parts of Colorado this year.

Senior water rights holders on the Colorado River will fare better. While not directly affected by the shortage reductions next year, the Imperial Irrigation District (IID) is actively monitoring the ongoing drought conditions and forecasted reservoir elevations as the district looks to protect the Imperial Valley's sole water supply. Since late 2003, IID has generated over 6.2 million acre-feet of conserved water for transfer or storage to further water supply resiliency in both California and the Lower Basin. IID's ongoing implementation of the Quantification Settlement Agreement, the nation's largest agriculture-to-urban water conservation and transfer program, will generate nearly 500,000 acre-feet of additional conservation in 2021.

c. Impacts to Power Users

In the Upper Basin behind Glen Canyon Dam, historically low water levels caused the closure of some launch ramps on Lake Powell, where water storage is at the lowest since it filled in 1980. The pool is dropping towards the level where power generation will cease. The Colorado River Energy Distributors Association (CREDA) is a non-profit organization representing consumer-owned electric systems that purchase federal hydropower and resources of the CRSP.

On Sept. 22, Reclamation released an updated projection of Colorado River system conditions and reservoir levels that indicates higher chances than ever before that Lake Powell and Lake Mead may reach critically low elevations. In fact, the Reclamation forecast projects that there is a 25-35% chance that Lake Powell could fall below minimum power pool by 2023. When the Glen Canyon Dam hydropower resource is unavailable, the CRSP system is left with just 10-15% of its generating capacity. That is an unsustainable, untenable position for the CRSP customers, as well as the federal agencies who manage the CRSP generation and transmission facilities.

The Western Area Power Administration (WAPA) is in the process of implementing a rate increase to CRSP customers to ensure the viability of the Colorado River Basin Fund, a critically important source of funding for many Colorado River activities. Not only will the CRSP customers experience an estimated 15% rate increase effective December 1 of this year, but they will also take on the risk of securing purchased/replacement power when CRSP hydropower is unavailable due to drought or operational decisions, causing even higher rate increases in the coming months.

CREDA has been working closely with Reclamation and Western Area Power Administration (WAPA) to mitigate the impacts of this rate increase. The federal agencies have already taken important steps to defer and reduce maintenance expenses, although those actions are accompanied by safety and reliability concerns. As outlined in correspondence sent to your Subcommittee this week, CREDA is urging Congress to assist the federal CRSP agencies and customers by passing federal legislation that would make available non-reimbursable appropriations to Reclamation and WAPA to fund operation, maintenance, and replacement activities. This funding is necessary to stabilize the Basin Fund for important non-power programs to ensure that the CRSP remains

resilient and reliable to the electric grid and the 5 million customers that rely on this important carbon-free resource.

Drought conditions and falling reservoir levels are also impacting hydropower production at Hoover, Parker and Davis Dams downstream of Lake Powell. Like CREDA's members, customers of these projects are facing double digit percentage rate increases due to reduced generation and high costs for replacement power. Without assistance, these increased power costs will compound the significant drought impacts on communities already hard hit by the pandemic and farms struggling to survive in the face of water curtailments and COVID related disruptions.

5. Rio Grande

The "Great River" is one of North America's longest rivers and a major water source for millions of people and thousands of square miles of farmland in Colorado, New Mexico, Texas and Mexico. Flows were reduced this year because of below-average snowpack in the mountains along the northern border of the state that feed the river. Spring precipitation was been minimal, and reservoirs early on were at a fraction of their capacity and shrinking. The Pecos River that delivers water to parts of eastern New Mexico and West Texas was in a similar situation.

The Elephant Butte Irrigation District (EBID) board of directors on April 14 learned that Elephant Butte Reservoir inflow had "plummeted" and that EBID and its agricultural producers should continue to plan for a critically short year, with an allotment of just four inches of water per acre or less. In 2013, a previous difficult water year, EBID learned that it was better to operate based on demand. This time around, EBID was equipped with high tech software that aided in the entire surface water management and delivery process. By bulking up farm deliveries and running them fast, EBID was able to minimize the fill and dry cycle in the canals, greatly improving delivery efficiency. Fortunately, farmers cooperated by getting water orders submitted in a timely manner. EBID staff withstood the pressure and delivered and tracked the 4-inch allotment to all who placed an order within the 30-day timeframe. However, even though heavy summer monsoon storms were reported continuously since late spring, farmers and ranchers in southeast New Mexico are not declaring victory from drought yet.

6. Idaho

Idaho also faced challenges related to drought conditions. Water supplies were particularly stressed in the Wood River and Big Lost River Basins in central Idaho, and the Portneuf basin in southeastern Idaho. These basins have very little to no storage capacity to offset the drought conditions. In the Wood River basin, the Director of the Idaho Department of Water Resource (IDWR)initiated administrative proceedings to curtail junior priority surface and ground water rights. These proceedings cost water users significant time and money – and resulted in many farmers having to forego irrigation during much of the 2021 season.

For the first time in Idaho's history, IDWR commenced administrative proceedings in the Portneuf Basin in southeastern Idaho in order to satisfy senior priority water rights along the Snake River.

As drought conditions persist, water rights administration is being pushed further into tributary basins that have historically avoided such measures. These actions disrupted farming and ranching operations throughout the State.

Other Idaho river basins like the Boise, Payette and Upper Snake River had carryover storage from 2020 to survive much of the devastating impacts of the 2021 drought. Many water users were forced to shut off early (mid-September instead of mid-October). Going into the off season, water users have only a fraction of their normal carryover. If drought conditions persist, the 2022 irrigation season could be catastrophic.

7. Northern Cascades and Yakima Basin

The Yakima River Basin (Washington State) supports a $4.5 billion-dollar agricultural economy and historically produced significant salmon and steelhead runs. The high elevation snow in 2021 helped get the Yakima Basin through the 2021 year. However, there was very little low elevation snow to keep Yakima River tributaries flowing at the surface; many of which would have gone dry during the 2021 summer without supplementation.

The YBIP has provided the Yakima River Basin with the state and federal funding partnerships to allow basin irrigation districts, including the Sunnyside Valley Irrigation District, the Roza Irrigation District, the Yakima Tieton Irrigation District, the Kittitas Reclamation District and others to work aggressively on a climate resiliency strategy to modernize their water delivery systems to conserve water to the benefit of both fish and farmers. Modernization of these important irrigation water delivery systems is providing the means to ensure reliable and consistent irrigation water delivery to basin farmers. And, the YBIP has embraced a new drought emergency water storage project at Kachess Reservoir, as well as new fish passage, habitat and headwaters restoration projects in the Basin.

Thanks to the YBIP partnerships, the Kittitas Reclamation District has been able to establish a more normative summer flow regime in the Yakima River tributaries. The Kittitas Reclamation District is also working to increase their canal capacity to carry cool storage water to streams for fish while at the same time making more consistent irrigation water deliveries to agricultural lands. This resiliency strategy is an integral part of the YBIP collaboration that is working toward increasing salmon and steelhead population abundance and productivity and at the same time provide for a consistent supply to the farms.

8. Great Plains Region

According to the U.S. Drought Monitor, heavy rain clipped some eastern sections of the High Plains, but many areas remain dry, or nearly so. A surge of heat in advance of a cold front, peaking on September 18, resulted in unusually high temperatures, followed by cooler conditions. Still, drought conditions in many parts of the High Plains have modestly improved in recent weeks. Due to that beneficial rain, the “exceptional drought” designation was removed from central North

Dakota. A few other areas also noted drought improvements, as moisture generally increased for newly planted winter wheat—and some pastureland has begun to respond.

As your witness from North Dakota will likely report, livestock producers are being hit especially hard in this drought. As the region-wide drought and tight water supplies continue to shrink the amount of hay grown this year, it's hurting the farmers who grow it — and the ranchers and dairy operators who depend on the crop to feed their livestock, according to the *Capital Press*. Nationwide, alfalfa hay production is expected to be down 12% this year on 16.1 million acres, a decline of 107,000 acres compared to 2020. Production of other hay is expected to be down 4% on 35.4 million acres, a decline of 594,000 acres. Ranchers are fearing it will be difficult to meet expected long-term demand hikes with commensurate supply, as reported in the September 15 edition of *SLATE Magazine*.

9. <u>Energy Production Impacts</u>

In addition to the hydropower impacts in the Colorado River Basin discussed above, the extreme and exceptional drought conditions in California and states in the Pacific Northwest are impacting the region which is home to the majority of U.S. hydropower capacity. The U.S. Energy Information Administration's latest Short-Term Energy Outlook (STEO) forecasts that electricity generation from U.S. hydropower plants will be 14% lower in 2021 than it was in 2020. The latest STEO expects hydropower generation in the Northwest electricity region, which includes the Columbia River Basin and parts of other Rocky Mountain states, to be 12% less than in 2020. Hydropower generation in the California electricity region is expected to be 49% lower in 2021 than in 2020. Last month, four temporary mobile emergency power generating units totaling 120 megawatts were deployed by the Department of Water Resources to support California's energy grid in times of extreme stress on the grid.

10. <u>Western Drought Summary Conclusion</u>

Western farmers and ranchers have faced a brutal growing season in 2021 as drought conditions drastically reduced water deliveries. Many were forced to make difficult decisions about the future of their operations. Cattle ranches and dairy farms liquidated their herds as they ran short of feed and water. Some farmers were forced to tear out certain crops to plant less water-intensive ones. Others let their fields lie fallow.

There are many other impacts that crop up when once-reliable surface water supplies are no longer available. Most importantly, no water for a farmer means no crops, no food, and a very limited ability to take care of his/her family. Farmers have mortgage payments, property taxes, irrigation district assessments and equipment payments. Many producers have production contracts that they have worked years to achieve and retain. If producers cannot deliver on those contracts, those contracts are lost.

We're losing farm workers, who are not only great employees but are long-time, valued members of our rural communities. The impacts of shutting down agriculture further causes harm to ag

supply businesses. The drought also hits businesses on Main Street in the rural West.

We're seeing devastating impacts to the environment. In some agricultural areas, the wildlife – particularly the waterfowl - that rely on the canal system, ditch banks, and irrigated fields are simply not there anymore. Dust storms – coupled with the horrific air quality we are seeing from our burning forests – pose health risks to farmers, workers and the general public.

When surface water supplies diminish or disappear, farmers turn to groundwater, if they have access to it. In some areas, canal water is a prime source of clean recharge for shallow domestic wells. That's not happening this year where the canals have been left bone dry. Increased groundwater pumping to replace lost surface water will continue to draw down groundwater levels. Thousands of domestic wells in the San Joaquin Valley, the Klamath Basin, and elsewhere dried up this summer. Many households continue to rely on bottled water to drink. Rural residents who don't even farm are having to stay with family and friends to shower and wash clothes.

It is clear that water users in nearly every region of the West are scrambling, looking for creative ways to stretch scant water supplies. In mountain watershed areas from the Sierra Nevada to the Rocky Mountains, the driest of conditions have prevailed. Forecasting has been an incredible challenge, and much of what runoff there has been, has been consumed by dry upstream soils. These severe drought conditions, coupled with the arid nature of many parts of the West, made for a trying, shortened water year. And for many water managers, like Rusty Jardine, the district manager of Truckee-Carson Irrigation District in Nevada, these trying times may not end soon.

"My greater concern isn't for now," said Mr. Jardine, who is a member of the Family Farm Alliance Advisory Committee. "I am worrying more about next year."

IMPORTANCE OF WESTERN AGRICULTURE AND WATER INFRASTRUCTURE

Water is the lifeblood of the American West. Without reliable water, every sector of our economy would suffer – from agriculture, to manufacturing, to high-tech. Food cannot be grown, businesses cannot operate, and homes and schools cannot be built or operate without water. Critical water infrastructure must be maintained and modernized to ensure the delivery and safety of water today and for future generations. As Congress discusses the development of a potential infrastructure legislative package, it is of paramount importance that development, maintenance and rehabilitation of Western water infrastructure is a high priority.

Water managers throughout the West are actively investing in new water supply options, embracing new technology, and looking to use water as efficiently as possible. Thanks in large part to these efforts, water usage in the U.S. for agricultural, industrial and municipal uses has declined since the mid-1980's while at the same time populations, crop production, and demands for water have increased. Local water managers are looking to their federal and state governmental partners to ensure that this impressive track record of water innovation can continue and even be improved.

Western irrigated agriculture is a significant contributor to the national economy. The Family Farm Alliance in 2015 published "The Economic Importance of Western Irrigated Agriculture" (prepared by the Pacific Northwest Project), a white paper specifically drafted for policy makers seeking to better understand the direct economic impact of Western irrigated agriculture and to acknowledge the growing chorus of voices bringing attention to food security and irrigated agriculture as a national economic issue.

For the 17 Western states studied in the 2015 report, the total household income impacts from irrigated agriculture, associated service industries, and food processing sectors was $172 billion annually. Irrigated farming and ranching is a huge economic driver in the West, particularly in rural communities. Further, the fact that Americans spend less of their disposable income on food than any other nation in the world ensures a vibrant, consumer-driven economy. However, this economic force would virtually disappear, along with the rural American communities dependent on farming and ranching, if the aging water infrastructure that supports it crumbles or once-reliable water supplies are threatened. Given the magnitude of the food security issue to the nation's economic and social wellbeing, policy makers must prioritize protection of our water supply infrastructure.

KEY CHALLENGES

The key challenges Western irrigators face in times of drought include competition for scarce water supplies, insufficient or aging water infrastructure, growing populations, endangered species, increasing weather variability/climate change, and energy development. Across the West, several key water policy challenges stand out.

1. Water Infrastructure (Both Existing and New) Is Needed to Protect Future Water Supply Reliability

It is critical that our country continues to invest in the aging Western water infrastructure necessary to meet current and future demands for water. Our existing water infrastructure in the West is getting older and is in desperate need of expensive rehabilitation and improvement. Most of the federally backed water infrastructure projects that continue to benefit large cities, rural communities and small farms in the West were built over 50 years ago. Some are much older. In fact, some Reclamation projects, including the Klamath Project, Nevada's Newlands Project, and others originally authorized by the Reclamation Act of 1902 are now more than 100 years old. Derby Dam, Reclamation's first structure in the Newlands Project, was built in 1905. Elephant Butte Dam in New Mexico - at one time the largest and highest structure in the United States – was authorized in 1906 and completed in 1916.

As hydrological conditions in the West continue to change and populations expand, failure to address water security has become increasingly critical. Failing to improve our aging water infrastructure and to develop new sources of usable water supply will inevitably result in additional conflict as pressure grows to 'solve' growing urban and environmental water demands. Moving water away from Western irrigated agriculture to meet these growing needs will surely contribute

to the decline of rural communities dependent on farming, as well as negatively impact our Nation's food security.

While some critics of new water storage projects focus on perceived negative impacts associated with new facility construction (e.g. loss of habitat, disruption of "natural" stream flow patterns, and potential evaporative losses), these perceived impacts must also be compared to the wide range of multi-purpose benefits that storage projects can provide. Properly designed and constructed surface storage projects provide additional water management flexibility to better meet downstream urban, industrial and agricultural water needs, improve flood control, generate clean hydropower, provide recreation opportunities, and create additional instream flows that can benefit downstream fish and wildlife species.

In addition to prioritizing new groundwater and surface water storage development, we believe that investments in improving water conservation, water recycling, watershed management, conveyance, desalination, and water transfers are all needed for a diversified, resilient, and successful water management portfolio.

We are not alone on this platform. A national coalition of over 220 agricultural organizations and urban and rural water districts led by the Family Farm Alliance, Association of California Water Agencies, National Water Resources Association and Western Growers Association urged President Joe Biden and congressional leadership earlier this year to address aging Western water infrastructure in any potential infrastructure or economic recovery package. The coalition includes organizations from 15 states that collectively represent $120 billion in agricultural production, nearly one-third of all agricultural production in the country, and tens of millions of urban and rural water users. In separate letters to President Biden and congressional leaders, the coalition emphasized that existing Western water infrastructure is in desperate need of rehabilitation and improvement.

2. Water management in the West is becoming increasingly inflexible.

We need a new way of looking at how we manage our limited water resources, one that includes a broader view of how water is used, along with consideration of population growth, food production and habitat needs. The goal should be to integrate food production and conservation practices into water management decision making and water use priorities, creating a more holistic view of water management for multiple uses. We must begin to plan now in order to hold intact current options. Planning must allow for flexibility and consider all needs, not just focus on meeting future needs from population growth.

a. Inflexible Implementation of Federal Environmental Laws

In many parts of the West, litigation stemming from citizen suit provisions of environmental laws including the ESA and Clean Water Act (CWA) is producing federal court decisions (or court approved "settlements") that direct federal agency "management" of state water resources. Congress should recognize that this type of litigation and resulting settlements can actually harm

the overall health and resilience of landscapes and watersheds by focusing on single species management under the ESA. We should seek solutions that reflect a philosophy that the best decisions on water issues take place at the state and local level. Finding ways to incentivize landowners to make the ESA work is far more preferable than what we have been seeing in recent years, where the ESA has been used by special interest environmental groups and federal agencies in court as a means of "protecting" only a single species (such as the Sacramento-San Joaquin River Delta smelt in California, coho salmon on the Klamath River, and spotted frogs in central Oregon) without regard for other impacts, including those on other non-listed species.

The negative environmental impacts and public health and safety impacts associated with moving water away from irrigated agriculture to single species protected by the ESA can be significant, as evidenced by what we are seeing in the Klamath Basin this year. The waterfowl, reptiles and amphibians that rely on canal system, ditch banks, and irrigated fields will simply not be there if there is no water in the canals or on the fields. There have been, and will continue to be dust storms in the Klamath Basin. Two national wildlife refuges important to the Pacific Flyway rely exclusively on the Klamath Project water infrastructure received only 10,000 acre-feet of water for those wetlands and habitats this year. There are also serious human health and safety concerns. There are 1,800 domestic wells in Oregon alone that are within the geographic area served by the A Canal. Ordinarily, canal water recharges those shallow domestic wells, but this year it will not. Meanwhile, the limited irrigation groundwater pumping continues to draw down groundwater levels. Local water managers and community leaders engaged in a grand experiment to find out how many domestic wells will go dry, and no one can even guess how many that will finally be.

Droughts occur routinely in the West; that is why Congress and the federal government, through Reclamation, made such important investments in water supply infrastructure over the past century. However, this infrastructure was never designed to meet the burgeoning demands of growing urban communities and environmental needs, while continuing to help farmers, ranchers and rural communities make it through periodic droughts. Unfortunately, droughts in the West are predicted to be deeper and longer than we have historically experienced in the 20th century, and these added demands for water will intensify the impacts of these droughts on already marginalized rural agricultural communities.

Water users served by Western federal water projects including but not limited to California's Central Valley Project, the Klamath Project, and the Columbia River Basin, are facing "regulatory droughts" as well. Surface water that was originally developed to supply farms and ranches has now been redirected to meet priorities driven by the implementation of federal environmental laws, such as the ESA. We need a new way of looking at how we manage our limited water resources. We need a broader view of how water is used, one that considers population growth, food production and fish and wildlife habitat needs.

We believe Congress should provide federal agencies with more flexibility under environmental laws and water management regulations to respond to drought conditions. And where such flexibility currently exists, Congress should demand that agencies use it promptly and with a minimum of bureaucratic delay. The Alliance also believes Congress should rein in the

environmental litigation "industry" that so often is the cause of inflexible federal decision making in water resource management.

Another effective way to prepare for and deal with Western drought is to use our existing water supply dams and reservoirs to maximize carryover storage while continuing to protect communities from floods. Congress has provided the Army Corps of Engineers with authorities to review and modify existing federal flood control manuals on both federal and private dams and reservoirs, some of which are decades old. With the advent of new technologies that can predict even more accurately the amount of runoff and the timing of that runoff from mountain snowpack, these control manuals are in dire need of modernization. The Alliance is supportive of these reviews and wants Congress to continue to be vigilant with the agencies to make sure our water infrastructure is managed more effectively to meet future needs in drought and flood.

b. Colorado River Recommendations

Current conditions on the Colorado River are clearly being shaped by the severe drought. Future hydrologic conditions are predicted to continue to be warmer, with more volatility in precipitation patterns and less snowpack. Decision makers, water users, and the general public are all actively engaged in dialogue about these conditions. Unfortunately, media coverage nearly every week this past summer has highlighted "emergency" and shortage conditions, often employing a "sky is falling" message that is creating a state of fear in some circles.

It's time to step back, take a deep breath, and recognize that these challenges – while certainly daunting – can be addressed in a thoughtful and deliberate manner. Professional water planners are used to dealing with long term planning horizons in watersheds across the American West, and the Colorado River is no exception. "Water time" is often measured in decades, not years, in the Upper Basin. The final construction phase of projects that were envisioned over 60 years ago – such as the Arkansas Valley Conduit in Colorado – are just now starting to appear on the horizon.

The 2018 Drought Contingency Plan (DCP) legislation signed into law by President Trump was designed to bridge the gap for Colorado River water users, prior to the expected finalization in 2026 of the "next set of Interim Guidelines" for coordinated operations of the two large reservoirs. The decision makers involved with negotiating the next Interim Guidelines will likely face the most difficult discussions since the Colorado Compact was agreed to nearly one hundred years ago. Those difficult decisions may come sooner rather than later if the current dire hydrology continues in the short term.

Informal negotiations are already being discussed in executive session boardrooms throughout the Basin, and public positions have been staked out by a variety of water providers, water interests, and individuals with varying degrees of expertise through media outlets and think tank-type conferences. Agricultural water users up and down the Colorado River are talking water, be it at their kitchen tables, or over the backs of their pickup trucks.

Upper Basin (Colorado/Utah/Wyoming/New Mexico) irrigators are not getting any help from Mother Nature this year, so the unprecedented poor water supply situation is certainly a topic of discussion. But farmers and ranchers are also concerned about growing pressure from outside interests who are pushing for a Demand Management (DM) program that is being sold as a necessary "fix" to prop up expanding municipalities on the Front Range. Rural tension is further strained by relentless "sky is falling" media coverage, suggesting that the now reduced water supply must be reserved and sent downstream to meet growing demands in the Lower Basin.

The Lower Basin (California/Nevada/Arizona) is facing supply shortages for the first time[1] since the Compact was negotiated in 1922. Environmental interests seem to be leading the charge in the media, where the message continues to (erroneously) suggest that 80% of the water use in the Colorado River goes to agriculture. That existing water use is often perceived by competing water demand interests as a simple "reservoir" that can easily be tapped as a solution to finite municipal and environmental water supplies. Lost in the discussion is the stark reality that urban areas – many of them located outside of the Colorado River Basin, but who rely on its water – continue to grow. The cities themselves seem unable or unwilling to even discuss this growth, stating they are using the same amount of water in meeting these increased demands. This scenario, in fact, hardens municipal demands that, once threatened by shortage due to drought, will need back up supplies.

Farmers and ranchers who rely upon Colorado River water to run their operations feel under siege and believe they are under-appreciated. The benefits their water use provides to the Western U.S. and to the nation as a whole are complicated and often taken for granted. They see, in essence, a zero-sum calculus where the benefits gained from any incremental loss of agricultural water are offset by the loss of the equally important benefits provided by the agricultural water use[2].

The Family Farm Alliance and its membership respects and participates in several Colorado River forums and processes, from the headwaters in the Rocky Mountains to the Mexican border. We trust that the foundation laid in past negotiations and operations will succeed in responding to the tough challenges presented by the current situation.

The Colorado River policy paper we developed in 2015 still resonates today[3]. The Alliance has always advocated that the best solutions are locally driven, built from the ground up. The success

[1] That is, if we ignore the Quantification Settlement Agreement (QSA) effort that reduced the use of unused Upper Basin water. The QSA came in response to California consistently using more than its annual Colorado River entitlement of 4.4 million acre-feet. Additionally, the water needs of six other Colorado River Basin states had grown, making the river's shared use increasingly crucial. In order to reduce its reliance on the river, California agreed to a water transfer of as much as 200,000 acre-feet a year from the water-rich Imperial Valley to coastal San Diego for up to 75 years. It became the largest agricultural to urban water transfer in the United States.

[2] Charles J. Greaves letter to Senator Michael Bennet, Re: Dolores River National Conservation Area, September 16, 2021.

[3] "Colorado River Basin Water Management: Principles & Recommendations", Family Farm Alliance, July 2015. 19pp.

of the Alliance has been based on our ability to deliver the message of the local water user to the water and environmental policy makers in Washington, D.C. The "ground up" approach we employ is foundational to our West-wide approach. In the Colorado River watershed, this approach originates at the project level with local waters and moves up the "ladder" through decision-makers at the sub-basin, state, and Lower/Upper Basins levels, before being addresses at the national level. Later this year, we will introduce a new treatise that builds on those principles and recommendations. It is intended provide further guidance to help equip today's decision-makers, like this subcommittee, with the perspectives that can drive balanced and fair solutions to our complex water problems.

c. Central Valley Project Reconsultation Recommendations

Our CVP water users in California were extremely disappointed to learn that Reclamation last week reinitiated consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service on the 2019 biological opinions (BiOps) related to the coordinated long-term operation of the CVP and SWP. In our view, this action is completely unnecessary and will only make matters for worse for the disadvantaged communities, families and farmworkers whose livelihoods depend on reliable water supplies.

The federal defendants and plaintiffs California Natural Resources Agency have shared a term sheet with Interim Operations through September 30, 2022. The parties have said the interim operations are not precedential for future consultations, but that the consultation will be more comprehensive. The water suppliers in California, including various contractors for the CVP and SWP, have not been included in the development of the interim operations plan for 2022, even though the operations will significantly affect their water supplies and both the economy and environment in the region. They believe the interim operations plan for the Sacramento River is an over-reaction to hyperbole surrounding winter-run chinook salmon numbers on the Sacramento River this year. Despite the hyperbole, the winter-run on the Sacramento River has been relatively strong in 2021, despite one of the driest and hottest years on record.

Agriculture in most of California has already received 0% of their surface water supplies in 2021 while some areas received slightly more than half their surface water supplies. The proposed interim operations plan prioritizes deliveries for M&I use and winter-run chinook salmon before any deliveries to farms and wildlife refuges. This suggests a strong likelihood that the rest of agriculture and wildlife refuges in the Central Valley will receive 0% of their surface water supplies in 2022 (i.e., Settlement Contracts, Exchange Contracts, Refuge Contracts). This will cripple the Central Valley and it defies the purposes and contracts for the CVP.

CVP water users have proposed critically important modifications to provisions in the interim operations plan relative to carryover storage goals for CVP reservoirs and temperatures in the Sacramento River. These proposed modifications – if not addressed – will significantly impact water supplies for farms and wildlife refuges. We also urge that Reclamation provide for more direct state coordination, with a focus on a sound curtailment process to protect storage releases from Lake Shasta and coordinated operations and accounting between the state and federal

projects. There also needs to be active and inclusive regional and local water suppliers as part of this planning process.

d. Klamath Project Operations Recommendations

Everyone in the West knows that we build dams and reservoirs to capture water during the wet time of year, when there are high flows, in order to have water available at the dry time of year, typically in mid- to late summer. In the Klamath Project, irrigation districts have paid for the construction and are paying to operate and maintain the infrastructure that provides that storage. But the government is requiring that irrigators not divert the stored water in the reservoir they paid to build and have directed the release of that stored water away from their farms in order to artificially hold the reservoir level high or to increase the amount of flow in the Klamath River. During the irrigation season, the Project provides much more flow in the Klamath River than would have occurred in nature, especially in this abnormally dry year, before the Project even existed.

For a brief window of time, Klamath Project irrigators were hopeful that the ESA would finally be applied in a modern and fair manner. Between October of 2020 and January of 2021, the Department of the Interior's Office of the Solicitor and Reclamation issued new analyses that updated the application of the ESA to the Klamath Project. The conclusions were consistent with contemporary understandings of ESA section 7 and with long-standing principles of water law.

The updated regulatory guidance for the Klamath Project was cheered by Project irrigators, but the joy quickly turned to disappointment when newly confirmed Secretary of the Interior Deb Haaland in April issued a memorandum withdrawing the updated legal guidance. While the Klamath Water Users Association (KWUA) was very disappointed with this move, they accept that it occurred and are committed to bringing about a judicial resolution of these same issues at the earliest possible time. There must be a resolution of these legal issues and, equally important, committed engagement from several major parties, including Interior, in order to bring stability to Klamath Basin communities.

For long-term stability, a basin-wide settlement agreement is needed that would address water management for irrigation and fish and provide a fair and legal treatment of the Klamath Project irrigators and their families. There are critical parties in the Basin that could help make this happen, and Klamath Basin interests need support for this effort from the state and federal governments and our local communities. It can be done; it has been done elsewhere.

KWUA continues to advocate for having a proper regulatory structure and prompt completion of ESA consultation based on a discernible application of the ESA as well as use of empirical evidence. Other parties are advocating for delay or continued pursuit of the current operations, possibly with minor tweaks. Decisionmakers are being briefed, but there is no sign of what will happen or when. KWUA has told those in federal policy making positions that the withdrawal of the 2020-2021 Solicitor memoranda and "re-assessment" does not mean that the approach that the agencies are using now is the correct approach.

There are important legal issues crying out for resolution. We also need a dose of common sense. The Project's stored water is the only knob that can be turned by Federal agencies, but this alone is not helping species. Federal decision-makers must commit to getting a better handle on the science behind what is happening to the fisheries in the Klamath Basin in order to support future actions that can actually help these fish. But they seem to be stuck on the same actions and science debunked in the 2001 NAS study. We can do better for farmers and fish in the Klamath Basin, and we need to do it now.

3. **Forests must be managed to promote watershed health.**

As the "endless summer" of 2021 came to an end, wildland firefighters continued to work toward containment goals on 63 large fires and complexes that have burned more than 3.1 million acres in the Western United States, according to the National Interagency Fire Center (NIFC). So far this year, 46,121fires in the West have charred more than 5.8 million acres, slightly lower than the 10-year average at this time of the year.

The number of acres burned by wildfire in the U.S. in 2020 broke a modern record, according to data published by the NIFC, as extreme heat and dryness fueled major conflagrations across many populated areas in the West. Wildfire burned over 10.3 million acres in 2020, breaking the calendar-year record of 10.1 million acres, set in 2015. From August through October, the most extreme conditions caused thousands of evacuations, homes and structures lost, and tragic fatalities of 11 people in Oregon and 34 people in California. Last year marks the third year that wildfire has burned more than 10 million acres in the U.S., according to fire center records going back to 1983. All three of those years have been since 2015.

Increasingly fierce Western wildfire disasters are becoming an annual occurrence and underscore the importance of improving on-the-ground management actions that can lead to improved forest health. Improving the condition of our nation's forested lands is of primary importance to water providers. National Forest lands are overwhelmingly the largest, single source of water in the U.S. and, in most regions of the West, contribute nearly all of the water that supplies our farms and cities. In addition, our already fragile water infrastructure can be severely damaged or rendered useless by fire and post-fire flooding and debris flows. The unhealthy state of our national forests, which were initially reserved specifically to protect water resources, has led to catastrophic wildfires that threaten the reliability, volume, and quality of water for tens of millions of Americans, along with the wildlife, recreational, and multi-purpose values of these lands.

The Family Farm Alliance believes a responsible level of continuous fuels reduction includes a combination of robust mechanical thinning and prescribed fire. This can be employed to significantly reduce evapotranspiration, tree stress, disease, and pest infestation, preserve health forest conditions, and protect species and habitats. Failure to employ this approach will continue the downward, accelerating spiral of fuel accumulation, drought, disease, and invasive insects. This will lead, inevitably, to additional high-intensity fire events in the future.

We believe active forest management and restoration can increase water yield, improve water

quality, provide for jobs, and reduce the cost of firefighting, while increasing forest resiliency. This can be done, in part, by increasing the productivity of national forests and grasslands; employing grazing as an effective forest and grassland management tool; increasing access to national forest system lands; expediting environmental reviews to support active management; and designing West-wide studies to quantify water yield.

It appears that there is growing recognition that improved funding and agency cooperation are needed to tackle this critical problem. However, even in the region I live in, it is still not clear how this policy recognition is translating to action taken in Western forests. Much of the recent media coverage on the fires raging in Northern California has featured commentary from politicians, environmental activists and academics who point to climate change as the driving factor behind the fires that have forced tens of thousands of Westerners to flee their homes.

Climate change concerns may certainly be shared by some rural Westerners who live in once-thriving timber dependent communities. However, there is also a growing frustration that forest management – or rather, the perceived lack of management by federal agencies, driven in part by environmental litigation – fails to get the attention it deserves in many media accounts of the current Western wildfire infernos.

Some of us who live in rural Western communities who have watched the condition of federal forests deteriorate in recent decades have a different perspective. We have witnessed how federal forest management actions have been hampered in recent decades, in part due to environmental lawsuits initiated by activist groups like the Sierra Club. We encourage the Committee to listen to the men and women on the ground regarding the urgency of implementing forest restoration and management. We are pleased that there appears to be growing recognition in Congress of the importance of active forest management. There are several bills that have been introduced this year, intended to facilitate responsible forest management.

One of those is the *Outdoor Restoration Partnership Act*, sponsored by Senator Michael Bennet (D-CO), and supported by the Family Farm Alliance. To date, Congress has failed to invest in our Western lands, undermining our economy and way of life. As a result, local governments are often left to foot the bill for conservation, restoration, and wildfire mitigation. Senator Bennet's bill would establish an Outdoor Restoration Fund to increase support for local collaborative efforts to restore forests and watersheds, reduce wildfire risk, clean up public lands, enhance wildlife habitat, remove invasive species, and expand outdoor access. It would empower local leaders by making $20 billion directly available to state and local governments, tribes, special districts, and non-profits to support restoration, resilience, and mitigation projects across public, private, and tribal lands. The bill would invest another $40 billion in targeted projects to restore wildlife.

Another bipartisan bill – introduced by Members of this Committee – would provide carbon credits to companies and other non-federal partners in exchange for thinning trees on fire-prone forests. *America's Revegetation and Carbon Sequestration Act*, co-sponsored by Senators John Barrasso (R-WY) and Joe Manchin (D-WV) would encourage more intensive forest management — and reforestation — through a variety of initiatives. The carbon credit idea would allow non-federal

entities to be awarded carbon credits through voluntary markets in exchange for money they provide the USFS for projects that increase carbon sequestration.

Another important piece of legislation is the *Resilient Federal Forests Act,* introduced by Rep. Bruce Westerman (R-AR). This bill – supported by 85 organizations, including the Family Farm Alliance - would help address the environmental and economic threats of catastrophic wildfires.

Each of these bills is important. We hope that efforts like these will build momentum towards larger forest management reforms in subsequent bipartisan legislation.

4. **<u>Now is the time for collaboration, not confrontation.</u>**

The Alliance has worked diligently in the creation of the Western Agriculture and Conservation Coalition (WACC), a collaborative effort to improve the environment, protect Western irrigated agriculture, and keep farmers and ranchers in business. Members of the WACC include Audubon, The Nature Conservancy, California Farm Bureau, Environmental Defense Fund, Public Lands Council, Western Growers Association, Wyoming Stockgrowers, and the California Agricultural Irrigation Association, to name a representative few. The WACC was formed in February 2012 to support the common interests of agriculture, conservation, and other interests tied to resources on behalf of a viable and sustainable rural West. No other national coalition combines industry and conservation interests to advocate for resource sustainability for all.

We believe that unless agricultural producers and conservation come together, the public policies and resource management strategies necessary to maintain a viable and sustainable rural West will be impossible to achieve. In the context of Western water, this means the WACC supports multi-stakeholder processes to address basin-scale water scarcity conflicts. To make such efforts successful, the WACC earlier this year sent a letter to Congress, urging support for investments in irrigation and municipal water infrastructure that provide important co-benefits of enhanced drought resilience and aquatic habitat.

The threats to a viable and sustainable rural West are numerous, complex, and varied. The Alliance and the farmers and organizations we work with are dedicated to the pragmatic implementation of actions that sustainably balance environmental protection and economic prosperity. The foundation for collaborative solutions will be driven from the constructive "center". These solutions steer away from the conflict that can ensue from the extremes of grassroots activism intended to resist any changes to existing environmental and natural resource laws, regulations, and policies. Similarly, they will not be driven purely by economics, unfettered by reasonable environmental protection.

SILVER LINING?

Perhaps the only silver lining is that this unprecedented drought crisis will hopefully draw public and political attention to Western agriculture's critical role to provide a quality food supply, boost the national economy, and continue the country's stature as the world's premier food basket. We

can only hope that this leads to necessary, reasonable policies that support farmers and investment in rural communities, including water infrastructure and increased water-storage capacity. The Family Farm Alliance and other Western agriculture and water organizations believe the drought underscores the urgent need to take immediate action to help better manage impacts to water resources from drought in the West.

Western irrigated agriculture has been dealing with changes in climate and hydrology for over a century. But the prognosis for water supplies in the future is not positive and will continue to negatively impact this important source of our Nation's food supply, the economic engine for most of our rural Western communities. Coupled with the growing demand for existing water supplies from burgeoning cities and the environment, irrigated agriculture is fast becoming a target for one thing – water. The Alliance believes we must look to several solutions in order to maintain food security for the nation and economic wellbeing of the Western landscape:

- Invest in Western water infrastructure – new water storage and improved conveyance facilities, groundwater recharge, water conservation, water management improvements, water reuse and desalination can all help alleviate the stress on our existing water supplies, especially for agriculture in the growing West;
- Invest in technology – we must manage our water supplies better – more efficiently and effectively use technology to improve the modeling and predicting weather patterns, snowpack, and runoff forecasting, as well as using technology to manage our water storage and distribution to improve efficiencies in utilizing our precious water resources; and,
- Improve regulatory processes at the federal level to expedite permitting and get projects to construction within a reasonable period of time at a reasonable cost, as well as create collaborative partnerships between federal, state and local entities interested in finding solutions to our water-climate problems through adaptive strategies that can work on the ground.

Congress has helped this past year by including Reclamation provisions in the *Consolidated Appropriations Act of 2020* (omnibus) last Congress. The creation of an aging infrastructure account in Treasury for loans to local water user entities will help fund and affordably finance improvements and rehabilitation of our aging federal facilities, some of which are over 100-years old. Broadening WaterSMART grants, authorizing a new collaborative program for snowpack monitoring and runoff forecasting, and improving the efficiency of authorities for the use of federally owned facilities for aquifer recharge will be extremely helpful in managing impacts to water resources from climate change in the West.

Without immediate attention, the Western water supply and delivery system will quickly prove inadequate to meet the needs of urban and rural users and the environment. As noted earlier in this testimony, a coalition of over 220 Western water, agricultural and urban organizations encouraged the federal government to invest in a diversified water management portfolio that enhances water supply and quality for urban and environmental uses while keeping water flowing to Western farms. Beyond financial support, the coalition also called on the federal government to

ensure the timely construction of water projects by improving the efficiency and timeliness of federal regulation and permitting processes.

Your Committee has clearly heard and acted on our coalition's request.

On behalf of the Family Farm Alliance and our coalition, I thank your committee for favorably reporting out the Western water elements found in Title VIII and IX of the Energy Infrastructure Act last July. Those provisions and your work represent an historic opportunity to help the American economy. Dollars provided now will stoke the economic engine that powers the people and products that are driving America's recovery by ensuring the short and long-term water future of the West. These infrastructure projects would also bring vital, near-term construction jobs. Nationwide, American workers and the economy will also benefit from the increased demand for equipment and materials that these water projects will require from American companies.

The package that the Senate passed represents roughly $8 billion in much needed resources. It includes substantial investments in repairing crumbing water infrastructure in the West; infrastructure that is often many decades older than the nation's highway system that is often talked about as in need of repair. The package includes funds for a substantial increase in water recycling and water desalination, large investments in habitat restoration throughout the West, and new storage and conveyance, including both natural and traditional infrastructure. The package both aligns with the solutions water managers across the Western United States have requested for years and provides a balanced package of tools that local and regional managers may select from to best resolve the water needs and challenges in their local communities.

Given decades of neglect on this topic, resources in addition to the roughly $8 billion could be allocated to this need. However, understanding the fiscal reality of the opportunity in front of us, the Family Farm Alliance and water users across the West supports the Western water components found in the *Infrastructure Investment and Jobs Act*. We believe every Western Member of Congress should also support these critical provisions.

BIDEN ADMINISTRATION DROUGHT RESPONSE

In response to the worsening drought conditions in the West, a rare "Joint Statement" was issued last April from U.S. Interior Secretary Deb Haaland and USDA Secretary Tom Vilsack. The Biden-Harris Administration later in the month announced the formation of an Interagency Working Group to address worsening drought conditions in the West and support farmers, Tribes, and communities impacted by ongoing water shortages. The Working Group is co-chaired by the Departments of the Interior and Agriculture to build upon existing resources to help coordinate across the federal government, working in partnership with state, local, and Tribal governments to address the needs of communities suffering from drought-related impacts. We are pleased to see the Administration place priority on the drought, and Interior and USDA have quickly identified immediate financial and technical assistance for impacted irrigators.

We hope the Working Group will solicit our input as it develops longer-term solutions. We

certainly respect the Administration's intent to develop measures to respond to climate change, build more resilient communities, and protect the natural environment. To be successful, the Working Group also needs to heed the recommendations in this testimony, developed with input from experienced and knowledgeable producers and water managers throughout the West.

SHORT-TERM NEEDS

We are near the end a serious unprecedented West-wide drought year. However, many of our members are concerned that future drought years lie ahead, possibly even as soon as next year. Preparing for this requires a level of reaction that is immediate and sustainable. We recommend a fast-track response capability from the USDA and Interior that enables a localized response by farmers and ranchers. Farmers and ranchers need programs through their local NRCS offices to assist with the purchase of infrastructure including solar panels, pipeline materials, well-drilling, tanks, gated pipe and projects to develop water. Such projects can benefit wildlife and wetlands as well as food production. An immediate and local response is imperative.

CONCLUSION

Why is protecting Western irrigated agriculture so important? There are three key reasons:

1) Maintaining food independence for this Nation is more than just providing a healthy, abundant, and transparent food supply – it is also a matter of national security;
2) Agriculture is the only U.S. sector that has posted a trade surplus for well over 50 years; and,
3) As diets evolve and the global population continues to expand, our position as the world's largest food exporter will play an increasingly significant role in the global economy.

Some Western producers are starting to feel that their way of life is being written off by a segment of the public that appears to believe that the tragedy occurring in many parts of the West is a comeuppance that farmers somehow deserve. It has been frustrating to our members across the West to see some of the media characterization of the tragedy that is being inflicted upon their fellow farmers and ranchers. *The New York Times*, *New Yorker* and *Los Angeles Times* in recent weeks have featured commentary from faraway critics who downplay the importance of using water to produce affordable and safe food and fiber. During a drought, it often seems like much attention is given to the critic, who has never managed water resources or implemented projects to improve water management or habitat for water-dependent species, but has the "simple" answer to the problem at hand[4]. Inevitably, the critics focus on their favorite beneficial use of water, which they favor at the expense of other important beneficial uses of water.

[4] For an excellent commentary on this topic, please read "Dry Years in California - Those in the Arena" (August 2021), by Todd Manley with the Northern California Water Association.

We still hold a sliver of hope that critical thinkers and leaders will easily distinguish this nonsense from reality.

There is a clear distinction to many of us in the rural West between those who are actively working, and the observers offering only critiques. Family Farm Alliance members are truly actively engaged, looking for ways to solve water challenges, as opposed to the myriad of outside interests who have no problem sharing their criticism and harmful strategies. We will keep pushing to inform policy makers and the public on the consequences of drought—namely water shortages, devastation to rural communities and lifestyles, food insecurity and higher prices at the supermarket.

Western producers need to manage water as if every year is a drought year. We need to invest in storage facilities to capture water in wet years, we need to look to innovative technology to enhance supplies and delivery, and we need to get the most benefit from the water we have available. The ability to measure, assess and show value for how that water is used is incumbent on every water manager - environmental, urban and agricultural.

The Alliance looks forward to working with your Subcommittee to address the issues we have identified in this testimony and those we have not. It has been a tough year for many of our producers and the rural communities they support. At the Alliance, we'll continue our efforts to ensure that irrigated agriculture continues to play a vital role in feeding our Nation, while keeping our rural communities and the environment healthy. At a time of unprecedented change, one certainty holds firm and true – our nation's most valuable natural resource must be preserved.

Thank you for this opportunity to submit this testimony.