PROTECTING WATER FOR WESTERN IRRIGATED AGRICULTURE

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Examining Drought in the American West
How Western Drought Affects Every American

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Ranking Member Westerman and Natural Resources Committee Republicans:

Thank you for this opportunity to share observations with you on the growing catastrophic drought situation across the American West, and how the drought – coupled with other global developments -will affect every American this year. 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.

The Western U.S. Drought Crisis

At a time when Western water projects typically begin diversions, allowing delivery canals to charge and bringing essential water supplies to the headgates of thousands of farmers and ranchers, crushing drought conditions are leaving millions of acres of productive farm and ranch land without water this spring. Many of our farmers and ranchers this year are going to be hit hard by this "unprecedented" drought, the second straight year we've used the term "unprecedented" when describing the Western drought.

Drought conditions worsened in much of the Southwest over the past week, according to the latest update from the US Drought Monitor, deepening the region's water crisis and fueling record-

setting wildfires across multiple states. More than 98% of the Southwest is in drought this week, according to the monitor, which noted that reservoir storage levels were below normal in all Western states except for Washington.

In California, the state's two largest reservoirs are at critically low levels moving into the dry season with Shasta Lake currently at 40% of total capacity on May 3 and Lake Oroville at 55% of capacity. In the Colorado River Basin, Lake Powell was at 24% of capacity and Lake Mead 31% of capacity on May 3, according to the USBR. In the Rio Grande Basin, New Mexico's Elephant Butte Reservoir was 13% full.

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, again make for a trying, shortened water year.

As you will learn from other witnesses testifying today, dire challenges are being faced by agricultural water users in California's Central Valley, the Klamath Basin, the Columbia River Basin and its tributaries in Idaho, Oregon and Washington, the Rogue River Basin in southern Oregon, the Colorado River watershed, and the Great Basin. We could dedicate reams of pages describing the agonizing plight faced by the farmers and ranchers in these areas. However, we'll leave that for another time. The focus of today's hearing is to discuss how the Western drought will impact average American citizens this year.

Before I discuss the importance of Western irrigated agriculture to our national security and well-being, I'd like to use this opportunity to once again reiterate that the drought underscores some important observations. We must look to several solutions in order to maintain food security for the nation and the economic wellbeing of the Western landscape:

- First, we must invest in Western water infrastructure. A suite of new water supply enhancement projects and demand management programs can help alleviate the stress on our existing Western water supplies;
- We must also invest in technology. We must manage our water supplies better– more efficiently and effectively. We can use technology to improve modeling and better predict weather patterns, snowpack, and runoff forecasting. New technology can also help us better manage water to improve efficiencies.
- We need to 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.
- Finally, there are opportunities to create collaborative partnerships between federal, state and local entities who are also interested in finding solutions to our water-climate problems. These solutions can be reached using adaptive strategies that can work on the ground.

The federal government has made historic recent investments in new water infrastructure projects, which can help mitigate the impacts of climate-driven hydrologic changes on the environment. At the same time, they support Western farms, ranches, and rural communities.

Our Western farmers and ranchers who produce food and fiber for Americans, and for the world, feel like modern-day Cassandras. In Greek mythology, she was cursed to deliver true prophecies, but not to be believed. We now face a reckoning. America gave up domestic manufacturing over the last several decades leading to global trade deals that resulted in a diminished national security. We are now experiencing a crisis which will lead to the loss of domestic food production, inevitably leading to a complete collapse of our national security.

Historically, strong nations are the ones that can feed themselves.

It was only a matter of time.

Fifteen years ago, the Family Farm Alliance appealed to the National Agricultural Research, Extension, Education and Economics Advisory Board (NRAEE) to pivot its energies towards assessing the real state of Western irrigated agriculture. The NRAEE Board in October 2006 was pondering agricultural topics to further investigate, including finding ways to "improve water use efficiency in agriculture", "reduce potential pollution from agriculture", and "adapt crops to grow well with less water".

At the time, we were surprised the NRAEE game plan virtually ignored the growing concerns many producers had with what we were seeing on the ground. Agricultural water supplies all over the West were being reallocated to meet new urban and environmental water demands.

Fifteen years ago, we explained to NRAEE how productive Western agricultural lands were being converted to residential and commercial development. In many cases, farm and ranch water was being used (transferred or bought) to support these new demands. At that time, ag water was also being looked to as a means of satisfying new environmental water demands imposed by regulatory agencies or courts.
Fifteen years ago, we asked NRAEE some pointed questions that demanded answers. At what point will too much agricultural land be taken out of production? Do we want to rely on imported food for safety and security?

Fifteen years ago, we pointed out that Europeans, who had starved within memory, understood the importance of preserving and protecting their food production capability. They recognized it for the national security issue that it is.

And some of those countries still do.

In March of this year, *Business Post* reported that all farmers in Ireland would be asked to plant some of their land in wheat, barley and other grains, as part of emergency plans being drawn up

by the government to offset a predicted food security crisis in Europe amid Russia's ongoing assault on Ukraine.

Fifteen years ago, we counseled NRAEE Advisory Board members that if they wanted to do something truly meaningful we, too, should look at the bigger picture. Urbanization, competition for water supplies and an increasing burden of regulations were already driving Western farmers off the land at a time when American food production in general was beginning to follow other industries "offshore" in search of lower costs.

Fifteen years ago, we raised concerns about the ability of global producers to keep up with food demand of a growing world population. Those concerns were amplified and documented by the Global Agricultural Productivity (GAP) Report, which in 2010 first quantified the difference between the current rate of agricultural productivity growth and the pace required to meet future world food needs. That report predicted that total global agricultural output would have to be doubled by the year 2050 to meet the food needs of a growing global population.

Ten years ago, we pleaded with policy makers to recognize and address the fact that our own farmers and ranchers were being subjected to increased regulations and related uncertainty that was making it harder to survive in a harsh economy. We warned that putting just a part of that group out of work and taking agricultural lands out of production so that water supplies can be redirected to new urban and environmental demands would impart huge limitations on our future ability to feed our country and the world. We urged our federal leaders to begin seeking the right combination of tools and incentives, as well as both public and private sector investments, to allow Western irrigated agriculture to help close the global productivity gap and sustainably meet the world's needs in 2050.

We kept speaking these truths for the following decade. We saw some growing recognition and even positive political response to some of our recommendations, most notably in the form of "once-in-a-generation" spending for Western water infrastructure included in the recent Bipartisan Infrastructure Law.

But sadly, the arguments we made in support of Western irrigated agriculture have been drowned in a flood of commentary from faraway critics, many of them developers and litigators, who downplay the importance of protecting the use of water to produce affordable and safe food and fiber.

Our worst fears have become very real.

For a long time, there was an inborn appreciation and awareness by our policy leaders for the critical importance of a stable food supply. A nation with a strong defense and a strong agricultural base is well poised for peace and prosperity. With these ends in mind, our forefathers created the strongest, most stable nation in the history of man. This foresight enabled us to rescue the world from darkness in two world wars, and largely -although not entirely- keep the globe at peace for the past 70 years.

Sadly, it appears that many policy makers and consumers alike have lost that awareness. Americans spend less of their income on food than any country in the world, but take the availability of abundant, better, safer and affordable food for granted. Meanwhile, farmers and ranchers continue to feel the pinch– and now that pinch is translating itself back into the supermarket.

That pinch is going to feel more like a punch soon, with inflation already spiraling out of control, and the seeds of a global food shortage germinating in the trampled grain fields of Ukraine.

Yes, you read that correctly: I said food shortage.

Ukraine's farmlands encompass the same land area as the entire state of California. It is referred to by many as the breadbasket of the world. It accounts for 12% of global wheat exports, 16% of global corn exports, and 18% of global barley exports.

The United Nations Food and Agriculture Organization just reported that global food prices hit their highest level on record this year. This report does not account for the full effects of the Ukraine conflict.

Farm Input Costs on the Rise

There is growing national concern on escalating gas and equipment prices, which in turn drive up food prices throughout the supply chain. Retail gasoline prices have surged since the invasion of Ukraine, with most of that increase due to soaring crude oil prices.

Because Russia is a main global supplier of fertilizer, the Ukraine conflict could affect what is grown in America and other countries. Russia has instructed producers to halt exports. Russian ally Belarus, another leading fertilizer source, is also being hit with sanctions. In the United States alone, fertilizer bills are expected to jump 12% this year, after rising 17% in 2021, according to American Farm Bureau Federation and U.S. Department of Agriculture (USDA) data. Production is most at risk in developing nations, whose farmers have fewer financial resources to weather the storm.

We have no direct control over these larger global developments, but we do have control over what we do with our resources here in the United States. Many of our farmers and ranchers stand aghast that, in a year when a critical food exporting country is heroically and desperately trying to stave off an invasion, our government is voluntarily doing away with our own food production capacity and with it, our own national security.

A Shift in Priorities

Curtailing U.S. agricultural productivity today seems to me to be both inconceivable and sheer madness. But it's actually happening, in places like the Oregon and California's Klamath Basin

and California's Central Valley. The Central Valley is one of only five areas on earth that feature a Mediterranean climate giving its farmers a unique advantage over other regions when it comes to growing crops—more than 230 varieties of fruits, nuts, and other valuable commodities.

The federal government and California's inflexible water management practices will likely provide ZERO water for the second straight year to these farmers, at a time when our country and the world will desperately need their products.

On April 11, 2022, the Bureau of Reclamation announced the Klamath Project Operations Plan, which determines how much water my neighboring farmers and ranchers here in the Klamath Basin will receive. Despite the fact that there is, again, sufficient water to irrigate all the Klamath Project land that relies on Upper Klamath Lake and the Klamath River, that plan anticipated only about 50,000 acre-feet of water being available for diversion for irrigation. This represents less than 15 percent of what Klamath Project farmers and ranchers need. Many acres will receive zero water from the Project, and no acres will receive enough for full production.

For context, my neighbors in the Klamath Project can produce about 50,000 pounds of potatoes, or 6,000 pounds of wheat, on a single acre. Once the production is lost, it is lost for good.

Less than a three-hour drive south of where I live, water suppliers on the Sacramento River (Sacramento River Settlement Contractors, SRSC) are receiving approximately 15-18% of their supplies when their contract provides for 75% of supplies in critically dry years. North-of-Delta ag service contractors once again received a ZERO Central Valley Project (CVP) allocation.

The Northern California Water Association (NCWA) recently posted a **blog** which predicts unprecedented and dire conditions, with significant impacts to every use of water. Extremely low supplies for agriculture will result in substantial fallowing of crop lands. The estimated acreage of all crops fallowed on the west-side of the Sacramento Valley is 370,000 acres out of 450,000 in the SRSC service area, primarily in two counties. Direct on-farm impact is estimated to be $925,000,000 (plus multiplier). For the rice industry, $251 million direct and induced impacts on rice mills, dryers and suppliers, with more than $76 million attributed to the loss of wages for 1500 jobs. As is the case in the Klamath Basin, the Sacramento Valley can expect significant environmental impacts to native fish, birds and other wildlife.

Westlands Water District – located on the West side of the San Joaquin Valley - is receiving a ZERO water allocation. This is the fourth time in the last decade the CVP south-of-Delta irrigation contractors have received a 0% allocation. **This report** from Westlands concludes that the district "is directly and indirectly responsible for some $4.7 billion dollars of economic activity and nearly 35,000 jobs across the economy." Activities resulting in a direct impact total $3.2 billion of the $4.7 total, the report states.

There is definitely a strong regulatory component to the drought impacting California and Oregon water users served by federal water projects. Much of the water that once flowed to farms and ranches will instead be directed to help fish populations, although nearly 30 years of empirical data

has failed so far to show a positive response to such water shifting schemes from those targeted fish populations.

In other words, federal water policy is shutting down water availability for hundreds of thousands of acres of productive farmland.

At the same time, punishing new farm labor laws – recently enacted in states like California, Colorado and Oregon – have been advanced by animal rights and environmental justice activists, who publicly call out farmers and ranchers as rapists, racists and human traffickers. This demonization is as destructive as it is false.

In the decade since 2006, new rules at both the state and federal levels have imposed significantly higher regulatory burdens on California growers, specifically with respect to food safety, water quality, labor wages, air quality; and worker health and safety. A **recent case study** by the California Polytechnic Institute at San Luis Obispo showed that, for one lettuce grower, production costs increased by 24.8% from 2006 to 2017, while the costs of regulatory compliance rose by **795%**.

We know that American farmers, and farmworkers, are literally "salt of the earth" folks. Much is made by some critics of the role of corporate agriculture, but almost 96 per cent of agricultural operations are family owned. They are the beating heart of America.

Yet many farmers today discourage their children from following them on the land. They cannot expect to profit from their hard work, and they are demonized for doing it. This is a crisis for Americans and American security. As in the past in this country, the critical work of food and fiber production must be respected and rewarded if we are to maintain our strength.

Family Farm Alliance was one of the first agricultural organizations to recognize the implications of a changing climate, and in 2007 we published a report with specific recommendations to help Western producers adapt to changing hydrology. While we share concerns regarding changing climatic conditions in the West, what really keeps some of us awake at night is the looming global food crisis that faces our planet if we don't find ways to increase agricultural production every year.

It's difficult, because our daily serving of news for the past year has been flooded with coverage of politicians, activists, and the media bombarding the public with a common message: climate change is destroying the planet, and we must take immediate and drastic action to halt it. Meanwhile, the need to produce 50 percent more food worldwide in the coming decades to fill the looming global "food gap" is hardly mentioned at all.

A Global Food Gap Looms

During the next 30 years, the world's population is projected to grow larger and more prosperous. Accelerating productivity growth at all scales of production will be imperative to meet the needs

of consumers and address current and future threats to human and environmental well-being. The human, economic, and environmental consequences of not meeting food production targets are profound. Poverty, food insecurity, and malnutrition – already at high levels in some parts of the globe – will condemn hundreds of millions more people to ill health and unfulfilled potential.

At a time when the future of Ukraine's ability to help feed the outside world is at risk, and the world's best producers are watching their water flushed out to the sea, our ability to increase productivity is being further curtailed. The grim global conditions we once expected to encounter in 2050 may now hit us a decade ahead of schedule. We may get a preview of that later this year.

We cannot continue long-term hypothetical processes that focus primarily on continued conservation and downsizing of Western agriculture. The U.S. needs a stable domestic food supply, just as it needs a stable energy supply. As we teeter on the brink of world war, the stability of domestic food supply becomes even more pressing. And, our irrigated system of agriculture in the West can provide the most stable food supply in the world if we let it.

Reality Check Time

A "politically correct" mindset seems to have become fashionable when it comes to Western water policy. That mindset assumes that the policies of the past have now outlived their usefulness and practicality. Those policies – built on the prior appropriation water rights system, sound hydrology, and water management accountability - enabled the West to be settled and to flourish. In the case of water rights, we are fortunate that prior appropriation has left much of the water in the hands of those who love the land – oftentimes, farmers, ranchers and tribes. Otherwise, the water would inevitably flow toward money and urban growth.

Now, certain activists, academics, and journalists are pushing a coordinated mantra and a belief that we no longer need to manage Western water resources in a manner that continues to encourage investment in agricultural production. And many times, this mindset is one that believes that the continued development and use of Western water resources for agriculture is inconsistent with the nation's goals to protect and steward the environment.

Current world events are leading more Americans to reconsider their priorities and ponder just how safe and stable we really are.

The Biden Administration needs to turn its attention to serious discussion of the climate "crisis" in the context of our food security. Policy makers need to coolly assess and address the vast press coverage about the latest "doom and gloom" reports from the United Nations Intergovernmental Panel on Climate Change (IPCC) warning of the deadly effects of climate change both now and in the future. We need to promote a measured understanding of the climate crisis in the context of food supply.

Could it be that political reality is setting in, as average Americans – bracing for increased inflation, higher gas prices, soaring food costs, and war – reset their priorities on issues that likely have a much more substantive impact on their daily lives?

"Those in the Arena"

Western producers are seeing 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 and ranchers somehow deserve.

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. Inevitably, the critics focus on their favorite beneficial use of water, which they favor at the expense of other important beneficial uses of water.

I 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 in the rural West between those who are actively working – "those in the arena", as once extolled by Teddy Roosevelt - and the observers offering only critiques[1]. Many Western ranchers, farmers and district managers 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 and downsizing Western agriculture—namely water shortages, devastation to rural communities and lifestyles, food insecurity and higher prices at the supermarket.

Ironically, perhaps it's because Western irrigated agriculture has been so adaptive and successful at providing plentiful, safe and affordable food that it is now jeopardized. Most policy makers and media pundits believed there could never be a problem with food production in this country. The last Americans to experience real food shortages were members of the so-called Greatest Generation and their parents. For the most part, they have left us, taking with them the memories of empty supermarket shelves and Victory Gardens.

When the issue has never been personalized, it's easy to be complacent.

Recent Public Outreach Efforts

I'll be the first one to admit it - we must become more effective in communicating to the world the value of farmers and ranchers. Our societies are confused. The basic principles of existence are

[1] For an excellent commentary on this topic, please read "**Dry Years in California - Those in the Arena**" (August 2021), by one of my fellow witnesses testifying at today's virtual hearing - Todd Manley with the Northern California Water Association.

under pressure. The steady rhythms of food production and attendant ecosystem services and benefits are crucial to understanding our challenges and finding solutions.

Consumers are aware of rising prices in the grocery store but connecting those concerns to Western farms and ranches and a lack of water is not yet on consumers' radars. That's our job.

Western producers caught in the crosshairs in March banded together to take out a full-page ad in the *Wall Street Journal*, sharing the viewpoint that the government's delivery of water to farmers is critical to ensuring a strong domestic food supply. Western agriculture has long wrestled with its ability to communicate with the people who take for granted that food will always be plentiful and available. In late March, an idea to sound the alarm of the pending food scarcity issue began with some Klamath Basin farmers. The idea seemed simple: tell the story in a full-page ad in a major newspaper to start the conversation with the unaware public.

It was a much bigger project than we could have imagined. The Alliance and California Farm Water Coalition (CFWC) teamed up with the Klamath interests and went to work. The paper chosen was the *Wall Street Journal* (WSJ). Circulation of that paper is the largest on Saturdays, about 900,000 copies in print. The digital version reaches even further, but the readership and reputation of the paper make it the ideal place to make an impact.

The ad ran on Saturday, April 2 and the QR code at the bottom of the ad led readers to a web page with more information about this dire situation and what must be done to correct it: **https://www.farmwater.org/food-security-and-water**. By clicking on the image of the ad you can be taken to its pdf link. The landing page links to a recent Alliance report – "**A Wake-up Call to Our National Leaders from an American Rancher**" – which further describes current and projected food shortages resulting from the Russia-Ukraine war. It also links to this **report** describing the remarkable contributions Western irrigated agriculture makes to the national economy, household income, and the ability for U.S. consumers to pay less of their disposable income on food than anywhere else in the world.

Working with CFWC, efforts are underway to do some focused social media advertising, as a follow-up to the full-page ad. So far, the ad has been seen by 230,000 people and generated 25,000 visits to the WSJ landing page. The average viewer was on the page was about 4 minutes, 20 seconds, which is an amazing result and shows how interested (concerned?) people are in this issue.

In retrospect, it's a bit sad that producers under stress feel that they must pay for the media to pay attention to their issues. Unfortunately, that is the state of the world we live in. I've been advocating for Western farmers and ranchers for over 25 years, and it seems like it gets more challenging with each year to get fair coverage of our issues.

The WSJ ad was a great first step, but it was only a first step. Now we need to hammer that message home through social media and other outreach if we are to have any hope of the message penetrating. We certainly have the public's attention in a way we have not had in the past. As sad

as the current and looming food shortage situation is, it provides us with a tremendous opportunity to deliver a message about the value of Western farms. Many, many businesses are struggling with inflation, workforce issues, and more. Individual families are also struggling with inflation, gas prices, COVID, kids schooling, and general life issues.

We have some decisions to make

Western water policy, over the past one hundred years, is one of the great success stories of the modern era. Millions of acres of arid Western desert have been transformed into the most efficient and productive agricultural system in the world.

Irrigated agriculture isn't a good investment, it is an incredible investment[2]. It continues to be a leading economic driver in the West. However, the successes of the past have not come without a cost. The incredible expansion of the population, physical modifications made to rivers and streams, and agricultural practices themselves have impacted the environment. It is these impacts that are now causing many to question the policies of the past.

Resolving these issues without destroying what we worked so hard to achieve is the challenge that we all face. But to be successful, we must face them together. No resolution will be found unless we find a way to balance all competing needs in a way that supports continued growth of irrigated agriculture.

Are we going to wake up and realize the world has drifted far from the stability we have known for our lifetimes and make required course corrections? Or do we remain committed to our own demise and continue on a crash course with what may likely be the greatest food shortage in American history?

We have some decisions to make.

Agricultural production in the West is an irreplaceable, strategic national resource that is vital to U.S. food security, the ecosystem, and overall drought resilience. The role of the federal government in the 21st Century should be to protect and enhance that resource by doing whatever it can to ensure that water remains on farms. There may never be a better time than now for thoughtful and courageous leaders to stand up and shout down the critics and back seat drivers who don't have a single minute's worth of experience "in the arena".

If not now, when? If not us, who?

[2] A 2015 study by Dr. Darryl Olsen found that, for the 17 Western states studied, the total household income impacts from irrigated agriculture, associated service industries, and food processing sectors was $172 billion. The annual return to the economy from the $11 billion investment in the federal system has been estimated at $12 billion annually. In other words, the economy of the United States receives a greater than 100% return each year on this investment.

Western producers can and will successfully work through future droughts and water shortages in a collaborative and effective way. The future of millions of people and millions of acres of farms and ranches and the food and fiber they produce rest on this belief. At the Family Farm Alliance, we will continue our efforts to ensure Western 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. The Alliance looks forward to working with you to address the issues we have identified in this testimony and those we have not.

Thank you for this opportunity to present this testimony today.