



P.O. Box 216 Klamath Falls, Oregon 97601

[www.familyfarmalliance.org](http://www.familyfarmalliance.org)

**Testimony of  
The Family Farm Alliance  
Mr. Dan Keppen, Executive Director**

**Submitted to the United States Senate  
Committee on Energy and Natural Resources  
Subcommittee on Water and Power**

**Hearing to Examine  
Increasing Water Security and Drought Preparedness through  
Infrastructure, Management, and Innovation  
August 2, 2017**

Good morning, Chairman Flake, Ranking Member King and Members of the Subcommittee.

On behalf of the Family Farm Alliance (Alliance), I want to thank you for the opportunity to submit this written testimony for the hearing record on water supply infrastructure needs in the Western United States. The Alliance is a grassroots organization of family farmers, ranchers, irrigation districts, and allied industries in 16 Western states. The Alliance is focused on one mission: To ensure the availability of reliable, affordable irrigation water supplies to Western farmers and ranchers. We are also 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.

In the world of Western water, a massive flood event or devastating drought is sure to get policy makers focused on the need to update and create more effective water management policy. The recent, multi-year drought in the arid Southwest ramped up Congressional interest in federal legislation to allow Western water providers to better address drought as well as improve preparations for future dry times. Earlier this year, the heaviest rains in a decade overwhelmed parts of the West Coast underscoring the critical importance of having modernized water storage and management infrastructure in place to optimize water resources management.

Many communities of the West – as well as the farms and ranches they are intertwined with – owe their very existence, in large part, to the certainty provided by water stored and delivered by

the Bureau of Reclamation (Reclamation) and other state and local water storage projects. The federal government has an enduring role in water supply infrastructure development and management that, consistent with state water laws, includes working with local water managers on both a policy and operational level and, in partnership with them, providing support for their efforts to secure a stable and sustainable water supply.

### **Importance of Water Infrastructure**

Water is the lifeblood of our nation. 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 water infrastructure is a high priority.

Water managers throughout the West are actively investing in new water supply options, embracing 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 partners to ensure that this impressive track record of water innovation can continue and even be improved.

When Congress begins to deal with infrastructure issues later this year, water infrastructure projects that would qualify for any federal assistance and support should include water conveyance, surface water storage, aquifer storage and recovery, wastewater, water reuse, desalination, and efficiency investments. Any new infrastructure legislation must also apply to the remediation of aging infrastructure as well as to the development of new infrastructure. Moreover, meaningful infrastructure legislation should encourage integrated water planning from watershed to wastewater discharge. Investments in forest health and watershed management can have as high or greater water yield and return on investment as more traditional brick-and-mortar capital investments.

Western water managers also face significant regulatory and policy-related challenges. Water infrastructure that was built early in the last century is aging, and once-available federal grant and loan programs have been greatly diminished. Meanwhile, little progress has been made at the federal level towards supporting the development of new and improved water supply infrastructure to keep up with the growing water demands of expanding cities, energy production, and environmental needs. While water conservation, water efficiency, and water transfers are important tools for addressing certain water supply challenges, these tools must be

balanced with supply enhancement measures that provide long-term solutions for the varying and specific circumstances in the West.

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 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.

This economically critical infrastructure is aging and is in need of rehabilitation and improvement. Most of Reclamation facilities are between 50 and 100 years old. Reclamation has reported an infrastructure and maintenance backlog of approximately \$3 billion. Such aging infrastructure presents a further challenge because it requires ever increasing maintenance and replacement investments. As of 2013, the replacement value of Reclamation’s infrastructure assets was \$94.5 billion. Investing in this infrastructure on the front end will save ratepayers’ money in the long run and allow us to preserve it, and the many benefits it provides, for future generations.

### **The Western Drought and Water Shortages**

Droughts occur routinely in the West; that is why Reclamation made such important investments in water supply infrastructure over the past century. However, this infrastructure was never designed to meet the current burgeoning demands of growing communities and environmental needs, while continuing to serve farmers, ranchers and rural communities through periodic droughts and floods. Unfortunately, future droughts in the West are predicted to be more intense and longer than we have historically experienced in the 20th century.

Droughts come and go in the West. The larger issue, the underlying problem, is the ever-present and worsening shortage of water. Droughts only exacerbate water shortages. They also highlight the need to re-examine how we manage our limited water resources in the West. When we must deal with chronic drought and water shortages in the West, the Alliance believes that we must

also continue to maintain existing rural economies, support agricultural food production and enhance the quality of life and the environment, rather than to abandon those things in order to accommodate growing future water needs arising from population growth or environmental demands.

The simple fact is, in many areas of the West, we have outgrown our aging water supply infrastructure. We have been living off investments of our forefathers in water infrastructure and have not planned well enough (or in some cases at all) to replace or add to those investments to meet the ever-increasing demand for water into the future.

We must invest (and reinvest) in our important western water infrastructure that we continue to rely on in meeting both current and future demands for water. Our existing water infrastructure is aging and in need of rebuilding; new water storage facilities are needed in order to adapt to changing hydrologic conditions and to develop new usable and sustainable water supplies to meet growing demands.

As a bright spot, Reclamation's WaterSMART program continues to leverage small cost-shared grants with local and state funding for water management improvements and conservation projects, assisting many local water providers in making timely investments in their aging water delivery systems. However, by better coordinating federal conservation programs at the U.S. Department of Agriculture (USDA), such as the Environmental Quality Improvement Program and the Agricultural Watershed Enhancement Program, with WaterSMART programs at Reclamation, such investments could be much more effective in effecting on- and off-farm water management improvements.

Streamlining federal regulations and permitting processes, along with federally-backed loans that could provide more affordable financing tools for large, new water storage infrastructure investments can help replace the more traditional approach to water infrastructure development through the mostly federally funded and built water projects of the past. The federal government can continue to be a partner in solving these water problems in the West by using new, innovative and more affordable financing and funding tools at a very low (if any) cost to the federal treasury.

### **Principles to Consider**

The Congress and the federal government certainly cannot change the hydrology of the West, but there is a role it can play to support family farmers and ranchers. As the Subcommittee continues its efforts to move legislation and develop policies to improve water management in the long-term, we will continue to gauge the level of our support for that legislation based on conformance with the following principles:

- State water laws, compacts and decrees must be the foundation for dealing with shortages.
- Water use and related beneficial use data must be accurately measured and portrayed.
- Benefits of water use must reflect all economic / societal / environmental impacts.
- Water conservation can help stretch water supplies, but has its limits in certain situations.
- Public sentiment supports water remaining with irrigated agriculture, and developing strategic new water storage as insurance against shortages.
- Technologies for water use, reuse and recycling are effective in stretching existing supplies for urban, environmental and other uses.
- Urban growth should be contingent upon expanding sustainable water supplies; using Western irrigated agriculture as the “reservoir” of water for municipal growth is not sustainable in the long run and can damage rural agricultural communities and the stability of our Nation’s food supply.
- Planning for water shortage in the West must look to the long-term goals of meeting future water demands for agriculture, energy, cities, and the environment.
- Unintended consequences associated with reducing productive agricultural land/groundwater recharge/riparian habitat benefits should be avoided and, if unavoidable, minimized and fully mitigated.
- A successful water shortage strategy must include a “portfolio” of water supply enhancements and improvements, such as water reuse, recycling, conservation, water-sensitive land use planning, water system improvements, and new water storage infrastructure. New infrastructure and technologies can help stretch existing water supplies for all uses, but developing new water supplies must be part of that equation.

These principles for smart, effective management of Western water resources are intended to help decision-makers deal with the harsh realities of current and future water shortages due to drought and the re-allocation of water away from traditional agricultural uses to growing predominantly environmental and municipal demands.

### **The Role of the Federal Government in Modernizing and Expanding Water Storage**

We need new water storage to adapt to our changing hydrology and develop usable and sustainable supplies to meet growing demands for water. New water supply infrastructure must be developed to capture water in good years and replace diminishing snowpack during drought conditions, provide for growing recreational and environmental needs, address climate change and variability, allow for continued economic and population growth, and protect the vitality of irrigated agriculture in the West.

Even with downward pressures on the budget, the federal government can be a partner with non-federal water users in solving water problems in the West by developing innovative policy and financing mechanisms with a very low federal cost. These types of programs should make water

infrastructure development more attractive and affordable for non-federal interests to invest in the types of projects the federal government can no longer afford to fund and construct.

a) Federal Funding and Competitive Cost-Shared Grant Programs

Western water providers have invested billions in local and regional projects and strategies in recent years to improve water supply reliability. Those investments have been a major factor in the West's ability to manage through years of severe drought.

The Alliance believes that new innovative federally-backed financing tools will be needed in the coming years to assist in constructing new and improved water infrastructure. One such example is the congressionally authorized and funded Water Infrastructure Finance and Innovation Act (WIFIA) program at the EPA. Water infrastructure is a long-term investment, and longer repayment and lower interest terms will be crucial to attracting investment in these water supply facilities. Such financing could help fund investments in everything from new water storage reservoirs (both on- and off-stream as well as groundwater storage), regulating reservoirs, canal lining, piping open channels, computerized water management and delivery systems, real-time monitoring of ecosystem functions and river flows to manage limited water supplies to benefit both fish and people, and watershed-based integrated regional water management project planning and implementation.

We need to develop innovative ways to encourage non-federal investments in new water infrastructure without requiring that the federal government actually build or fully fund that infrastructure. We believe such investments would allow for more cost-effective construction and operation and maintenance of much needed new water supply infrastructure and not impact federal budgets. Bridging the overall funding gap for water infrastructure will require a partnership between federal, state and local governments and the private sector. This partnership will necessitate diverse revenue streams to ensure that communities, both large and small, along with agricultural, municipal and industrial water providers are all able to meet the water infrastructure needs of the future.

We encourage Congress to:

- **Make water infrastructure a high priority in any infrastructure legislation.**
- **Maintain the tax-exempt status of municipal bonds, one of the most valuable financing tools used by our nation's water suppliers to build and improve infrastructure.**
- **Strategically target funding increases for the Bureau of Reclamation and the Army Corps of Engineers to assist in the development of projects that increase water**

**supply, address current and future drought and water shortage concerns, meet aging infrastructure needs, address rural water needs, and increase federal project operational efficiencies.**

- **Fully fund the Water Infrastructure Finance and Innovation Act (WIFIA).** The WIFIA program was recently updated by the 114<sup>th</sup> Congress in the passage of the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016 (PL 114-322) and WIFIA loans were funded for the first time in the FY 2017 omnibus appropriations bill.
- **Consider a “WIFIA-like” alternative for water supply projects in the Bureau of Reclamation.** The proposed Reclamation Infrastructure Finance and Innovation Act (RIFIA) and the New WATER Act (H.R. 434) would authorize a new affordable financing mechanism for certain large water supply projects in the West. The RIFIA/New Water Act provisions are similar to WIFIA but focused on non-federal water supply infrastructure loans through Reclamation. The New Water Act would provide up to 49% financing for larger (minimum project size of \$20 million) non-federal infrastructure projects through direct Treasury loans and loan guarantees. Such loans would carry longer repayment terms and low T-bill interest rates that are not currently available to water infrastructure proponents. And, the total “cost” to the federal government on the back end would be to cover the risk of default on these loans, which for the water supply sector is very low (less than 1% default rate for water infrastructure loans). As such, the New Water Act would authorize \$175 million in budget authority for this new loan program, and would support over \$11.4 billion in low-cost, long-term loans with actual out of pocket costs to the Treasury of less than \$10 million, and affordably financing about \$23 billion in new water supply infrastructure across the West.
- **Jump start investments authorized by the WIIN Act (PL 114-322) that provided critical new authorizations for water infrastructure development.** The FY 2017 omnibus appropriations bill and the House and Senate versions of the FY 2018 Energy and Water Development appropriations bills have included \$67 million per year for water storage and \$10 million per year for water reuse and recycling grants, both newly authorized provisions in the WIIN Act.
- **Expand Reclamation’s Water SMART grants to include a larger (up to \$20 million) competitive 50-50 cost-shared grant for water supply management projects integrated into a regional watershed plan could help fund larger water conveyance and conservation infrastructure.**
- **Find ways to improve coordination of WaterSMART and other water management programs at Reclamation with existing conservation programs at the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS).** This

would lead to more effective federal investments in on- and off-farm water management improvements.

- **Advance S. 1090, the “Water and Agriculture Tax Reform Act of 2017 (WATER Act)”**, introduced by Senator Mike Crapo. This important legislation seeks to reform section 501(c)(12) of the Internal Revenue Code to provide mutual irrigation and ditch companies with added flexibility that will promote new economic activity such as small-scale hydro power projects. The bill would reform outdated tax provisions that hinder ditch and irrigation companies’ ability to raise capital to invest in infrastructure. Current law dictates that mutual ditch and irrigation companies must receive 85 percent of their income from shareholder investment to maintain its non-profit designation. The bill allows these companies to receive other sources of income for operations and maintenance and still maintain its non-profit status. The legislation requires that the extra revenue be used exclusively for operations and maintenance of the ditch and irrigation company.
- **Support new ways to encourage investments in non-federal water infrastructure that can support and enhance federally owned water projects, including the use of public-private partnerships (P3s) and other innovative arrangements.** We fully understand that the federal funding mechanisms used in the past to build the vast majority of Reclamation’s water infrastructure are not available today. We view the future of water infrastructure as one where local districts plan, design, finance, construct, operate and maintain new non-federal water facilities, sometimes on federally-owned lands, as integrated features of existing federal projects. Innovative ideas currently being explored (and potentially in need of federal legislative authorities) include long-term leases of federally owned property, and full or partial title transfers of federally owned project features to project beneficiaries (see below). We need to encourage the innovative nature embedded in private-public partnerships (P3) to build non-federal water infrastructure, while also recognizing that a P3 relationship may not work for many smaller or rural water providers. More can be done to engage the unique relationships Reclamation has with project water users who depend on Department of the Interior infrastructure.

b) Bureau of Reclamation Title Transfers

The Alliance believes that in the water arena, a “one size fits all approach” dictated from Washington is counterproductive and ineffective. Federal laws and regulations should be drawn to recognize that facts and circumstances can vary significantly from region to region. Given the federal ownership and liability for each Reclamation-owned water project, bureaucratic inefficiencies sometimes overlay the process of managing and operating this important water infrastructure, even though operations and maintenance are typically performed by non-federal state-based local entities, such as irrigation or water districts. Such facilities, known as



“transferred works”, where project operation, maintenance and replacement responsibilities (other than title) are contracted to the non-federal entity, are still owned by the federal government and many of these projects are ripe for title transfer. Yet, there remain many barriers to an efficient transfer of title out of federal ownership to these local operating entities.

Our members include irrigation districts and water agencies across the West that are responsible for the operation and maintenance of most of the Bureau of Reclamation’s water supply and distribution facilities. Several of our members have worked with the federal government over the past two decades to transfer all or parts of Reclamation projects to these local operating entities. In fact, one of the first title transfers of a Reclamation district that was approved by 104<sup>th</sup> Congress to the Burley Irrigation District (IDAHO) in 1996 was facilitated by the Alliance.

The Alliance believes title transfers are one of several positive means of strengthening control of water resources at the local level. In addition, title transfers can help reduce federal costs and liability, and allow for a better allocation of federal resources. Operational decisions are timelier and many times are more cost effective when made at the local level. Further, maintenance and rehabilitation of our aging federally owned facilities is more effectively financed and constructed by the local agencies currently responsible for these activities anyway. Title transfer would allow for a broader portfolio of financing alternatives for cost effective reinvestment in these facilities to be made available at the local level.

Despite the potential benefits, local water agencies are many times discouraged from pursuing title transfer because the process is expensive and slow. Environmental analyses can be time-consuming, even for uncomplicated projects that will continue to be operated in the same manner as they always have been. National Environmental Policy Act (NEPA) and the procedures required to address real property and cultural and historic preservation issues are often very inefficient, time consuming and expensive. Moreover, every title transfer currently requires an act of Congress to authorize, regardless of whether the project covers 10 acres or 100,000 acres.

The Senate should introduce and advance legislation similar to the “Reclamation Title Transfer Act”, H.R. 3281, which would authorize the Secretary of the Interior to facilitate the transfer to non-Federal ownership of appropriate Reclamation projects or facilities, and for other purposes. Reclamation should work with Congress to develop this legislative concept for a programmatic approach intended to simplify transfer of “non-complicated” facilities. This would greatly reduce the hurdles and expense that can impede title transfers beneficial to local interests and to the federal government.

c) Forest Health Threats to Water Supply and Infrastructure

Improving the condition of our nation’s forested lands is of primary importance to water providers. National forest lands generally located in the headwaters of major river basins, are overwhelmingly the largest single source of water supply in the U.S. and, in most regions of the West, contribute nearly all of the water that supplies our farms and cities.

The unhealthy state of our national forests, which were 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. In addition, water supply infrastructure can be severely damaged or rendered useless by wildfire and post-wildfire flooding and debris flows. Large-scale, catastrophic wildfires today are more frequent and significantly larger than in the past. In Colorado alone, from 2004 through 2007, fires burned an average of 40,000 acres annually. However, from 2008 to 2015, that annual average jumped to 140,000 acres. Unfortunately, Colorado is not alone.

We believe it is critical that both forest management reforms and resolution of the “fire borrowing” issue are addressed in comprehensive legislation focused on improving the health and resiliency of our federal forests. Only by addressing both issues together can we ensure that on-the-ground forest management and restoration activities will proceed at the pace and scale equal to the problem and begin to improve the forest conditions that led to the recent devastating and costly fire seasons.

d) Opportunities for Water Storage Infrastructure Development

For many reasons – political, economic, societal, environmental – the construction of traditional surface storage projects is undertaken on a much more limited basis than in decades past. The most frequent reasons center around economics or an inadequate water market associated with the given facilities. In other cases, environmental, safety or geologic challenges came to light during a project’s development, rendering its construction, completion or operation unfeasible. Political opposition has often contributed to a project’s demise, leaving the facilities “on the books” awaiting further action, but with external events and new priorities passing them by. Even if funding and authorization were to be secured for a new storage project, the existing procedures for developing additional water supplies can make project approval incredibly burdensome and time consuming with companion permitting and environmental review costs outstripping the ability of local water providers to accommodate.

Individual surface storage proposals must be evaluated and the associated benefits and risks must be viewed in a net, comprehensive and efficient manner. While some critics of new 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 provide. Properly designed and constructed surface storage projects can 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 benefit downstream habitat and water quality.

- **We strongly support Senator Barrasso’s “*Water Supply Permitting Coordination Act*”.** This important legislation would authorize the Secretary of the Interior to coordinate Federal and State permitting processes related to the construction of new surface water storage projects on lands under the jurisdiction of the Secretary of the Interior and the Secretary of Agriculture and to designate the Bureau of Reclamation as the lead agency for permit processing, and for other purposes. The “*Water Supply Permitting Coordination Act*” provides a critical first step towards addressing current regulatory and bureaucratic challenges that many times will delay or even halt the development of new water supply enhancement projects in the Western United States.

As you are aware, developing new water storage projects is much easier said than done. For many reasons, existing procedures for permitting the development of additional water supplies can make project approval incredibly burdensome. In fact, on one project in Wyoming, a 20,000 acre-foot water storage reservoir took 17 years to build – 2 years to construct and 15 years to permit!

- **The Corps of Engineers, working with Reclamation where appropriate, should identify and study** (at the request of a non-federal water contractor or reservoir owner/operator) **flood control rule curves** at Corps-regulated reservoirs where additional water supplies could be stored and used in dry years without risking flood damages downstream of the facility. Congress should continue to provide the necessary authorities and direction to the Corps and Reclamation to maximize the use of existing infrastructure for both flood and water supply purposes.

e) Water Rights Protection

The Alliance has long advocated that solutions to conflicts over the allocation and use of Western water resources must begin with recognition of the traditional deference to state water allocation systems. The Alliance supports S. 1230, the “Water Rights Protection Act” (WRPA). This important legislation would prohibit the conditioning of any federal permit, lease, or other use agreement on the transfer, relinquishment, or other impairment of any water right to the United States by the Secretaries of the Interior and Agriculture. The WRPA would protect communities, businesses, recreation opportunities, farmers and ranchers as well as other individuals that rely on privately held state-based water rights for their livelihood from federal

takings. It would do so by prohibiting federal agencies from extorting water rights through the use of permits, leases, and other land management arrangements, for which it would otherwise have to pay just compensation under the 5<sup>th</sup> Amendment of the Constitution.

Our farmers and ranchers rely on their vested water rights to secure operating loans in order to irrigate and produce crops and water livestock. Federal agencies should not be able to leverage those private water rights against farming and ranching families who have long depended upon federal permits and leases to support actions like grazing.

### **Conclusion**

As we have testified before this Committee in the past, and even though we have experienced a very wet winter and spring this year, there are no guarantees that the West will not experience even more intense multiple drought years in the future. In order to avoid disaster and to ensure that all reasonable water demands are met in the future, the West must begin to manage water as if every year was going to be a drought year. This will require everyone in the West to adopt a new paradigm, one that promotes wise management of this limited and valuable resource and protects carryover storage for future use in dry periods. This new paradigm will also mean additional investment in technology, conservation and new water storage and management infrastructure in order to deal with the uncertainties that lay before us. A strong commitment to water infrastructure must be made in any infrastructure package that Congress and the Administration considers.

The public infrastructure challenges our Nation is currently facing are daunting, and they will require innovative solutions. The infrastructure investments made by prior generations have benefited this country for over a hundred of years. Now it is this generation's responsibility to invest in infrastructure and invest for future generations.

Thank you again for the opportunity to testify and for your attention to the many infrastructure challenges facing our nation. The Family Farm Alliance and our members stand ready to assist you in your efforts and will answer any questions you may have; please do not hesitate to contact Mr. Dan Keppen, Executive Director of the Alliance at [dankeppen@charter.net](mailto:dankeppen@charter.net) .