Good morning Chairman Flake, Senator Wyden and Members of the Subcommittee.

My name is Dan Keppen, and on behalf of the Family Farm Alliance (Alliance), I thank you for this opportunity to present this testimony on S. 2533, the “California Long-Term Provisions for Water Supply and Short-Term Provisions for Emergency Drought Relief Act.” 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.

Western drought and water shortages have become the most important issues for many of our members, particularly in recent years. As this Subcommittee reviews federal legislation dealing with drought, the Alliance believes achieving genuine, lasting solutions to drought and other water shortages also requires a more productive and proactive federal partnership role in Western water matters. This is a role that focuses on research and development of new water supply and use technologies; and the full integration, coordination and maximum sustainable use of water resources in partnership with Western states and local water users. Such a role would require the adoption of federal water resource policies that are driven from the “ground up” – not from the “top down,” and that all federal water resources planning and management efforts acknowledge irrigated agriculture as an asset to our still-growing nation and the global economy.

As we have previously testified before the full Committee, the Alliance reiterates that the negative impacts of today’s droughts and water shortages have reached staggering levels for our farmers and ranchers, their families and the irrigated agricultural economy. While the drought-related problems our members face vary by state or region, topography, climate, soil conditions,
hydrology, and crop, the Alliance believes that many solutions, while varied by location, are also characterized by certain common elements, including creativity, flexibility and balance.

**The Western Drought and Water Shortages**

Droughts occur routinely in the West; that is why the Bureau of Reclamation (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 help farmers, ranchers and rural communities make it through periodic droughts. 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.

The Alliance believes that we need a new approach to Western water management, one that includes a broader view of how water is used, considering population growth, food production and habitat needs, among other considerations. Past water development investments in the West have been a huge success, providing multiple benefits and economic certainty for both rural and urban communities, affording the Nation with a stable, safe and healthy year-round food supply, and allowing people to recreate, raise families and live a high quality life. Those achievements should not be sacrificed so that we can meet growing demand for water with static or shrinking supplies.

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 future 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 our forefathers’ investments 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.

However, there are several other causes of water shortages in the West besides hydrologic drought conditions. They include the adversarial application of federal environmental laws - such as the Endangered Species Act (ESA), the Clean Water Act (CWA) and the National Environmental Policy Act (NEPA) - by litigious organizations and some government agencies.
There can be no doubt that these environmental laws have provided significant benefits to our society. But they also have been used as legal weapons to thwart new investments in Western water development, to reallocate existing water supplies away from traditional uses, and to destabilize water supply systems, often in pursuit of unattainable goals such as resurrecting past ecological conditions in a constantly changing environment. Too frequently, the result is minimal (if even measurable) environmental improvement gained at great financial cost and significant water shortages to water users both in the short- and long-terms.

In order to respond to these current and future water shortages, as well as the significant drought conditions many in the West are experiencing today, we believe Congress should provide federal agencies with more flexibility under existing 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 process. In general, time is of the essence when making water management decisions during a drought.

In the Alliance’ view, western drought legislation should promote innovative solutions to pressing water problems including the research, development and implementation of new technologies in water management. Real-time monitoring and data collection can now be used to fine tune water supply management decision-making, from irrigation deliveries to actual fishery and environmental needs. And, Congress must empower local stakeholders and the states – and its own federal agencies – by recognizing and rewarding collaboratively developed solutions where all sides have come together to work out differences and build future solutions to complex water issues.

Finally, 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. Reclamation’s WaterSMART program leverages small cost-shared grants with local and state funding for water management improvements and conservation projects, assisting many local water providers in making significant investments in their aging water delivery systems. Coordinating federal conservation programs at the U.S. Department of Agriculture – such as the Environmental Quality Improvement Program and the Agricultural Watershed Enhancement Program -with other water programs at Reclamation could result in much more effective federal investments in on- and off-farm water management improvements.

Streamlining federal regulations and permitting processes, along with federally-backed loans and loan guarantees that provide more affordable financing tools for large new water storage infrastructure investments can help replace the more traditional approach to water infrastructure development through mostly federally-built water projects in 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 that would address the current drought 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 reuse and recycling are proven effective in stretching existing supplies for urban, environmental and other uses.
- Urban growth expansion should be contingent upon 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.
- Planning for water shortage in the West must look to the long-term in meeting the goals of agriculture, energy, cities, and the environment.
- 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, and water system improvements. New infrastructure and technologies can help stretch water for all uses.
- Unintended consequences associated with reducing productive agricultural land/groundwater recharge/riparian habitat benefits should be avoided and, if unavoidable, minimized and fully mitigated.

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 over-allocation of water to growing, predominantly environmental and municipal, demands.
In general, the Alliance supports the approach taken by S. 2533 because it provides for more flexible, efficient, multi-purpose management of the federal Central Valley Project (CVP) and the Sacramento-San Joaquin River Delta (Delta), as well as longer term tools for future water development throughout the West.

This is also true of the House-passed H.R. 2898, the “Western Water and American Food Security Act of 2015,” which the full Committee considered during an October 8, 2015 hearing that also examined Senator Feinstein’s earlier drought legislation, S. 1894. I testified at that hearing, expressing the Alliance’s support for both bills, which while similar in intent, differed on some important aspects regarding the Delta.

On balance, the Alliance believes that certain provisions in H.R. 2898, if enacted, would better assist producers in the CVP in dealing with ESA restrictions on water deliveries through improved management of species, water flows and habitat in the Delta. H.R. 2898 also would result in an improved regulatory landscape for Western irrigators for future water development projects through its water supply permitting and Reclamation project streamlining provisions.

The Alliance believes that good water management must be relevant, flexible, and adaptive. Many current regulations are triggered by fixed calendar dates and/or singular operational thresholds without consideration of species distribution or other relevant environmental factors. Such approaches are inflexible, inefficient, and ineffective. Federal agencies managing the competing demands for water in the West have in some cases failed to examine or pursue opportunities for more flexible water management that serves both economic and environmental goals. This lack of flexibility and innovation stems in part from the fact that Congress has not explicitly directed agencies to be flexible and innovative, so they default to the actions that are least likely to get them sued and the status quo persists. Delta operations in 2016 provide an excellent example of this.

Because of El Nino storms this winter, inflow into the Delta is almost three times greater than it was this time last year -- an additional 5.8 million acre feet of water passing through the Delta to the ocean. Yet the water pumped to supply more than 20 million Californians living south of the Delta has barely increased as compared to last year because of ESA restrictions. The attached charts illustrate this dramatically and prove that it’s not just the drought that’s drying up agriculture in Central California; the current regulatory regime is also having a devastating impact. In fact, for many farmers along the Westside of the San Joaquin Valley, there is less water available to them today than there was at this time last year.
Our farmers and their communities in the hard-hit San Joaquin Valley are outraged, as are their elected representatives. On March 24th Senator Feinstein and Members of the Central Valley Delegation in the House wrote to the President calling for a more realistic approach to Delta and CVP operations. As Senator Feinstein put it in her letter, “This year’s El Nino has highlighted a fundamental problem with our water system: A dogmatic adherence to a rigid set of operating criteria that continues to handcuff our ability to rebuild our reserves.” We could not agree more.

The Alliance and its many members in California are grateful to the California Delegation, and to this Committee, for the enormous amount of time and effort that has been invested in attempting to craft a balanced and workable solution for California. We urge you to keep at it. The farmers and ranchers in California and across the West need your help now more than ever.

The introduction of S. 2533, the inclusion of some drought provisions in House Energy and Water Development appropriations legislation - and this hearing - give us reason to hope that comprehensive Western drought and water policy legislation can be enacted this year.

**California Provisions**

S. 2533 includes California specific provisions that would give local water project managers and regulators additional flexibility and tools to address water conveyance and flows in relation to fish populations on a real-time basis consistent with the ESA and other laws, particularly in the Delta. Specifically, the bill would address certain operations of the Central Valley Project (CVP) and the State Water Project (SWP) in relation to the biological opinions (BOs) associated with the threatened Delta smelt and with threatened and endangered salmon species under the ESA. By tying actions to environmental conditions informed by the best available science, as opposed to calendar dates, species protection will become more relevant, efficient, and effective.

We support provisions in S. 2533 that, in consultation with water users and other stakeholders in the Delta, would improve management of the Delta smelt, such as mandating greater data collection on the smelt population through a Delta smelt distribution study. We also support the authorization of greater real-time monitoring of Delta smelt which, along with the best scientific and commercial data, can be used to advise water conveyance management and maximize the use of water for humans, as well as fish species. S. 2533 also directs that water transfers be approved consistent with state and federal laws on a timely basis.

The Alliance backs provisions in S. 2533 that seek to address “other stressors” in the Delta environment, especially non-native fish that prey on the ESA listed species such as Delta smelt and Chinook salmon. The bill also authorizes the Department of Commerce’s participation through the National Oceanic and Atmospheric Administration (NOAA) Fisheries in a locally funded program to reduce predation of salmon by non-native fish on the Stanislaus River.
S. 2533 also includes specific federal authorities and actions that would aid fish passage in the Delta (trap and barge), increase hatchery production, and improve spawning and rearing habitat of listed species, all to boost available water supplies from the Delta. While the Alliance believes these actions could be helpful in achieving more efficient water use for the environment, the bill could be improved by allowing for non-federal partnerships and expedited permitting in facilitating such actions (e.g. construction of habitat improvements that aid in fish spawning and rearing by non-federal irrigation districts). For decades, numerous independent scientists have advised that multi-stressor, comprehensive approaches must be employed to effectively protect and recover listed species and efforts to do so are long overdue. And, any improvements in listed fisheries should equate to increases in flexibility and usable water supplies under the ESA.

S. 2533, in general terms, directs the Secretaries of Commerce and the Interior Department (Secretaries) to maximize water supplies to CVP users and SWP contractors by approving, consistent with applicable laws, projects and operations that provide additional water supplies. The bill provides broad permanent and temporary authorities to the Secretaries to approve any project or operational change to address emergency provisions, although it does also contain limitations on this authority. The bill includes temporary operational flexibility provisions that would allow for the diversion and capture of peak winter storm flows in the Delta, subject to federal and state laws and regulations.

The Alliance is encouraged by this Committee’s consideration of both the House-passed H.R.2898 and S. 2533, and we again urge Members of the California Delegation to find common ground on provisions that will aggressively improve water operations in the Delta.

**West-Wide Scope**

In addition to its California Delta-focused provisions, S. 2533 contains a number of additional provisions that would apply throughout the West and have been supported previously by the Alliance’s membership. S. 2533 would streamline some NEPA permit decisions on water infrastructure projects by allowing for a state to be considered the “lead agency” under the federal law.

As we stated above, the Alliance supports new sustainable water storage projects in order to increase usable supplies of water to help meet current and future demands. S. 2533 would direct Reclamation to complete certain ongoing feasibility studies for new or augmented surface water storage in California that were originally authorized nearly 20 years ago and have languished ever since. The bill would also provide up to $600 million in budget authority for the Secretary of the Interior to request funding for the federal share of new water storage projects across the West – 50% for federally owned facilities and 25% for non-federally owned projects.
The Alliance supports innovative affordable financing tools that could assist in the planning, design and construction of new water storage and improved water management infrastructure. S. 2533 includes a provision, the Reclamation Infrastructure Finance and Innovation Act (RIFIA) that would provide up to 49% financing for larger (minimum $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 would be to cover the risk of default on these loans, which for the water supply sector is very low (estimated at 1-2% of loan value). As such, the $200 million in budget authority in the bill could be used to affordably finance almost $27 billion in new water supply infrastructure across the West.

S. 2533 Title VI Sec. 602 would authorize accelerated repayment (or prepayment) by non-federal Reclamation project users for certain project construction costs that are currently paid over 40-year or 50-year terms. It would allow for the conversion of water service contracts to repayment contracts and for subsequent accelerated repayment of allocable construction costs for any repayment contract. This provision would also allow contractors to forgo certain requirements (e.g., acreage and full-cost pricing limitations) under Reclamation laws sooner than would otherwise be the case. The funding that is generated by these payments would be placed in the Reclamation Surface Storage Account to fund either the construction of new water storage projects or the expansion of current water storage reservoirs, subject to the 25% / 50% federal share provisions of the bill.

Both federal and non-federal storage projects would be authorized under the bill to receive fully reimbursable funding from the proposed new Reclamation Surface Storage Account (authorized under Title VI Sec. 602). The new storage account that would be established in S. 2533 would be funded out of the proceeds from accelerated repayment by users, of which 50% would be available for new surface water storage.

The Alliance supports the provision in S. 2533 directing the Corps of Engineers to 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. However, this provision has been superseded by an improved version included in the Senate passed S. 2012 energy bill, and should be updated accordingly.

The Alliance supports the bill’s expansion of Water SMART grants to include a larger (up to $20 million) competitive 50-50 grant for water projects integrated into a regional water plan. Such a grant could be used for larger water conveyance conservation infrastructure, such as small storage reservoirs, that are a part of a larger, broader watershed plan. Also, S. 2533 would expand the availability of Reclamation Title XVI water recycling and reuse grants to reuse projects that have been declared feasible by Reclamation but have not been congressionally
authorized (currently a requirement for funding). This provision would allow for water reuse and recycling projects that have merit but could not be authorized by Congress under current earmark rules to compete for funding alongside authorized projects. Expansion of the Title XVI program could improve water supplies in many metropolitan areas and help to take the pressure off agricultural water supplies targeted under land fallowing ag-to-urban transfers.

**Conclusion**

As we have testified before this Committee in the past, 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, California and the West must begin to manage water as if every year was a drought year. This will require everyone in the West to adopt a new paradigm, one that promotes wise management of the resource and protects carryover storage for future use in dry periods. This new paradigm will also mean additional investment in technology, conservation and new infrastructure in order to deal with the uncertainties that lay before us.

The House has passed H.R. 2898 to address this crisis, and California’s Senator Feinstein has now introduced S. 2533. However, two separate bills are of absolutely no value to a parched West. As has been twice emphasized in letters to the Senate Energy and Natural Resources Committee and signed off by over 100 Western agricultural and water organizations in the past eight months, what is needed is a single bill that can be enacted by Congress and signed into law by the President, and time is not on our side.

What happens in the next several years could fundamentally change the face of Western agriculture forever. In California alone last year, 21,000 jobs were lost, equating to a $2.7 billion hit to economic activity. Consumers ended up paying 15% more for products grown in California. Over 540,000 acres of farmland were fallowed, and $2 billion in direct farm losses were realized.

Family farmers have been good stewards of the land for generations, but are now facing catastrophic losses from which they may never recover. Young farmers just starting out are at great risk of being driven off the land. Thousands of men and women working throughout our great and diverse community, from the field, to the store, to the restaurant, are overwhelmed by the uncertainty of what this “mega drought” means for their families.

We must all work together to ensure that Western water users have every tool available to survive and recover from the current drought and the hard, dry years that the future may hold.

Thank you and I would stand for any questions you may have.
2016 Export Constraints

Total Volume Dec1-May4
- Exports 1,195 TAF
- Outflow 8,369 TAF
- BiOps Impacts 1,049 TAF

- D1641 (Salinity)
- D1641 (Outflow)
- D1641 (SJR Pulse Flow)
- Salmon BiOp (OMR Jan., I/E Apr & May)
- Delta Smelt BiOp (OMR)
- Total Export
- Delta Outflow
- Negative OMR (Actual)

Export Capacity

T. Boardman, SLDMWA
5/11/2016
Delta Outflow and Export
2015 vs 2016 (Jan1–May9)

- 2015:
  - Delta Outflow: 1974 TAF (28% of Delta Inflow)
  - Exports: 875 TAF

- 2016:
  - Delta Outflow: 7818 TAF (12% of Delta Inflow)
  - Exports: 1067 TAF

T. Boardman, SLDMWA
5/10/2016