**Testimony of Jason Phillips, Chief Executive Officer Friant Water Authority, CA**

**Before the**

**Subcommittee on Water, Power, and Oceans, U.S. House Committee Natural Resources**

**On**

**The State of US Water Infrastructure**

**February 14, 2018**

My name is Jason Phillips, and I am the Chief Executive Officer of the Friant Water Authority in California. The Friant Water Authority (Authority/Friant) is a public agency formed under California law to operate and maintain the Friant-Kern Canal, a component of the Central Valley Project (CVP) owned by the Bureau of Reclamation (the Bureau/Reclamation).

Thank you for the opportunity to share Friant's views on the state of water infrastructure in the United States. Friant is particularly well positioned to comment on the topic of this hearing, given the significant water-related challenges Friant and others face in the San Joaquin Valley (Valley) and elsewhere in California. For those facing an uncertain future of water supply, meeting the needs of our customers and communities will require a coordinated effort at the state and federal levels.

My testimony will discuss the water imbalance in the Valley, the need for steps at the federal level to ensure additional storage is available, the imperative for regulatory reform, and the status of Friant's current aging infrastructure, and the importance of an effective title transfer program.

**The Water Imbalance**

The San Joaquin Valley is home to about 5 million acres of productive, irrigated farmland and includes 9 of the top 10 agricultural producing counties in the United States. More than half of all produce and nuts grown in the United States come from the Valley. Over the past 30 years, increasingly stringent environmental regulations have redirected water away from the Valley in an attempt by regulators to find a solution to declining fish populations dependent on the Sacramento-San Joaquin River Delta (Delta). Although these regulations have failed to produce any positive impact to fish species, they have forced San Joaquin Valley water users to rely heavily on groundwater supplies to maintain economic viability. From 2012-2015, this growing problem was compounded as California weathered its worst drought on record.

Although 2017 brought near-record precipitation and a brief reprieve from California's most severe drought on record, the combined effects of the recent drought and three decades of increasing regulatory pressure on water resources have left the San Joaquin Valley in a state of severe groundwater overdraft. In fact, California's most urgent groundwater issues exist in the San Joaquin Valley, where the greatest extent of state-designated "Critically Overdrafted" basins exist.

Overdraft occurs when groundwater is extracted faster than it is replenished over the long-term. Groundwater pumping, if done only in dry years, can be part of a balanced conjunctive use project. The Friant Division, as one example, was designed with the expectation that groundwater would serve as a

backstop for dry conditions, and that heavy surface water deliveries in wet years would allow the regional groundwater to replenish. The Friant Division was designed to bring stability to groundwater in the eastern San Joaquin Valley, which was threatened in the 1930s by decades of groundwater overdraft. Groundwater levels on the eastside of the Valley stabilized almost immediately in the years after the Friant Division began operating. The Friant Division's two canals – the Friant-Kern and the Madera – deliver high-quality surface water from the San Joaquin River to supports crops and cities, and in doing so brought balance to groundwater within the region for over 60 years. In this way, the Friant Division maintained a stable surface and groundwater supply that supported a world-class agricultural sector that in turn supports numerous communities and businesses.

As a result, for the past several decades, the success of the Friant Division's conjunctive use design had insulated its water users (and in some cases neighboring lands) from the problems of an eroding water supply reliability throughout the San Joaquin Valley. This is no longer the case, and consequently, Friant districts are now drawn into the imbalance of the entire Valley and the need to develop comprehensive solutions. The extent of groundwater overdraft in the San Joaquin Valley connects all of the valley's water users in an urgent effort to comply with California's Sustainable Groundwater Management Act (SGMA). Friant water users have water contracts that presumed access to groundwater that is changing with SGMA implementation. It's estimated that the greater San Joaquin Valley could lose 30 percent of its irrigated lands to the implementation of SGMA, or an estimated 1.5 million acres.

The overdraft situation in the Valley is entering a crisis stage and action must be taken now to ensure greater access to surface water. In the Valley, the most important element to restoring adequate surface water supplies will be to improve water delivered through the Delta with new infrastructure and revising regulations restricting water deliveries. The focus of my testimony is on the infrastructure improvements that will represent only a small fraction of the overall solution to this larger crisis.

**Expanded Storage and Regulatory Reform**

The Congress -- and by extension Reclamation -- can take steps now to expedite efforts to expand water storage. First, Congress should direct the Bureau to complete feasibility studies currently underway on federal and non-federal projects. This is particularly needed in the case of federal projects where the feasibility studies have languished for years. Second, regarding non-federal projects, including those expected to be funded through 2016's Water Infrastructure Investments for the Nation (WIIN) Act, Congress should direct the Bureau to develop feasibility criteria tailored to projects where the federal government has a role but is not the majority owner and operator. Third, Congress should advance legislation this Committee has supported for several years to create a "one-stop shop" approach to streamline the Reclamation storage project process.

Fourth, Friant supports the administration's commitment to NEPA reform, as outlined in the recently released infrastructure blueprint. In particular, we support the proposal to establish a deadline of 21 months for lead agencies to complete their environmental reviews as well as the establishment of a deadline of three months after the lead agency's environmental documents are finalized for Federal agencies to make decisions on the necessary permits.

In addition to the need for greater storage and regulatory reform, Friant believes there is a key role for the Congress and the administration to reform the management of Reclamation's crumbling infrastructure, especially the Friant-Kern Canal.

**The Long-term Legacy: Aging Infrastructure and Subsidence**

The 152-mile-long Friant-Kern Canal and the 36-mile-long Madera Canal, together with Friant Dam and Millerton Lake on the San Joaquin River, form the Friant Division of the CVP. On average, the Division delivers 1.2 million acre-feet of irrigation water annually to approximately 15,000 farms on over million acres of the most productive farmland in the world. Friant Division deliveries also are vital to meeting the domestic water needs of many small communities in the San Joaquin Valley, as well as larger metropolitan areas, including the City of Fresno – California's fifth-largest city.

The Friant Division was designed and is operated as a conjunctive use project to convey surface water for direct beneficial uses, such as irrigation, and to recharge groundwater basins in the southern San Joaquin Valley. Relative to the amount of water runoff into Millerton Reservoir, which is about 1.8 million acre-feet per year, the operational surface storage capacity of Friant Dam is minimal – only about 385,000 acre-feet. The ability to move significant water through the canals in wetter years to store in groundwater recharge basins is critically important for the project to work as intended. The system delivers two classes of water: Class 1, which is the first 800,000 acre-feet of "firm" supply; and Class 2, which is up to an additional 1.4 million acre-feet of supply available only during wetter years. Historically, the Friant Division has received a combination of Class 1 and Class 2 water totaling about 1.2 million acre-feet annually. Much of the Class 2 water is directed to groundwater recharge.

Built between 1945 and 1951, the Friant-Kern Canal (Canal) carries water south from Millerton Lake along the foothills of the Sierra Nevada Mountains on the eastern edge of the San Joaquin Valley to its terminus at the Kern River, four miles west of Bakersfield. The Canal is lined by concrete for most of its length, and has an initial capacity of 5,300 cubic feet per second (cfs) at the San Joaquin River that gradually decreases to 2,500 cfs at the Kern River. The width of the Canal ranges from 128 feet where it starts to 64 feet at its lower end.

The 32-mile Madera Canal carries water north from Millerton Lake on the San Joaquin River to the Chowchilla River. Completed in 1945, the Madera Canal has an initial capacity of 1,275 cfs that decreases to 750 cfs at its terminus.

Now, at nearly 70 years old, the Friant-Kern Canal is the very definition of "aging infrastructure." Since taking over the responsibility for the operation and maintenance of the Canal in 1986, the Authority has taken an aggressively proactive approach to maintenance and repairs. Despite those efforts, however, the water-carrying capacity of the Canal has gradually diminished over time, partly because of natural "settling" but mostly because of land subsidence resulting from over-pumping of the groundwater in the Valley, as described earlier. The Canal is a gravity-fed facility and does not rely on pumps to move water, which means small changes in elevation along the Canal can have major impacts for water delivery. Subsidence has caused parts of the Canal to sink in relationship to other parts. This negatively affects the Canal's ability to convey water. Because of the subsidence, the Canal must be operated at a lower flow-stage to ensure that water doesn't overflow its banks or several bridge crossings.

Groundwater pumping during the recent drought, including pumping by non-Friant irrigators in the Valley, caused alarming and rapid subsidence along a portion of the Friant-Kern Canal. The drop is so severe that it has reduced our ability to deliver water to some Friant Division contractors by nearly 60 percent. This means that during the exceptionally wet 2016-2017 water year, when the Friant-Kern

Canal should have been recharging badly depleted groundwater supplies, the Canal could function at only 40 percent of its capacity in areas with some of the greatest ability to store groundwater.

We estimate that subsidence prevented the delivery of 300,000 acre-feet in 2017. However, the long-term effect of subsidence on Class 2 reliability is even more troubling. Without correction, the six contractors downstream from the constriction will likely have their Class 2 reliability reduced by almost half (resulting in a reduction of long-term average reliability from 36 to 19 percent). This reduction is equivalent to the supply needed to sustain 50,000 acres of land, or 15 percent of the land in the six affected districts. These losses are recoverable if the Canal is repaired.

The Authority (and its predecessor, the Friant Water Users Authority) has operated and maintained the Friant-Kern Canal as a "transferred work" under contract to the Bureau of Reclamation since 1986. Reclamation retains ownership of the Canal and its appurtenant works, and Reclamation administers the contracts governing the purchase and delivery of CVP water in the Friant Division. The Authority is responsible for all aspects of the Canal's operation, maintenance and replacement (OM&R) as well as all costs related to those activities.

**The Current Title Transfer Program and Advancing Reform Legislation**

The Authority regards Reclamation's title transfer program – which permits transfer of ownership from Reclamation to a non-federal operator – as a means of increasing the flexibility of non-federal interests to improve water management and address the challenges of aging infrastructure, while at the same time reducing costs to the Federal government and relieving it of potential liabilities.

The Authority and its 15 member agencies are eager to engage Reclamation in discussions to acquire title to the Friant-Kern Canal and related distribution facilities (and possibly to the Madera Canal). However, Reclamation's current title transfer process, though developed with substantial input from Reclamation's customers, remains lengthy, overly complex and costly for the non-federal parties. And once the administrative process is successfully completed, an act of Congress is still required to transfer the title to a facility from Reclamation to a non-federal entity. Time, cost and uncertainty are powerful disincentives to undertaking a title transfer effort.

To its credit, Reclamation has worked to improve the title transfer process by actively engaging with water user organizations such as the Family Farm Alliance, of which the Authority is a founding member, to simplify and speed development of transfer agreements and implementing legislation.

The agency, however, can only go so far to facilitate a process that must conform to the requirements of existing laws, which sometimes serve little useful purpose but nevertheless entail substantial time, complexity and cost.

The Friant-Kern Canal presents a good example of how title transfer can benefit both the non-federal project beneficiaries and the Federal taxpayer. It also illustrates how Congress can act to facilitate title transfers in a manner that continues to safeguard the interests of the public.

And, having paid their capital obligation for the facility, Friant Division water users are eligible to take title to its components.

The Authority and Reclamation are currently exploring options to address the Canal's subsidence problem both in the short term and more permanently. The San Joaquin Valley is already facing an

estimated 2.5-million-acre-foot per year water supply deficit, and in the near future, implementation of SGMA, which could enlarge that shortfall during drought years. Thus, it is absolutely vital that the Friant-Kern Canal be restored to its original full capacity. Doing so could cost as much as $400 million.

**Title Transfer Opportunities and Benefits**

The cost for the capacity restoration of the Friant-Kern Canal is largely allocated to the Authority, although there would be considerable costs to Reclamation as well. Transferring ownership of the Canal to the Authority would significantly improve our ability to pay for the capacity restoration project, and reduce or eliminate any Federal costs. Owning the Canal means the Authority would have the asset necessary to secure favorable financing in the market. If the Canal remains in Federal ownership, securing affordable financing terms would be difficult if not impossible. Simply put, it's hard to borrow money with collateral that's not yours.

With ownership of the Canal, the Authority could move more rapidly and efficiently than Reclamation in designing and carrying out repairs. Normal operations, while still governed by existing contracts, laws and agreements, also would become more flexible and responsive to changing circumstances and needs when decisions are not slowed by review and approval of Federal bureaucracy. The Authority would still be bound to meet all contractual obligations to water users, as well as its obligations under the San Joaquin River Settlement and other applicable environmental laws. And the Authority would continue to operate and maintain the Friant-Kern Canal as it has for more than 30 years.

At the same time, Reclamation would be freed from the costs associated with designing and overseeing capacity repairs to the Canal, as well as the cost of overseeing the normal day-to-day operations of the facility and any liability associated with its operations.

But Reclamation would continue to make water-delivery decisions, consistent with the existing contracts, laws, regulations, water rights and agreements that govern the operation of the CVP and the San Joaquin River. And Reclamation would continue to receive the revenues from the sale of CVP water through the Friant Division.

In other words, transferring title of the Friant-Kern Canal to the Authority would not, and likely could not, change the current operation of the facility, or saddle the Federal taxpayer with the cost of building the Canal – already repaid by Friant water users – or deprive the government of the revenues that the Canal will generate into the future. Instead, with a title transfer, Federal costs would decrease while the Authority's ability to protect the original Federal investment in the project would increase.

**Title Transfer Legislation**

The Authority appreciates the interest of this Committee and others on Capitol Hill regarding legislation to address challenges, and opportunities, associated with the current title transfer program. We are also encouraged by the administration's commitment to a legislative proposal regarding title transfer and look forward to reviewing once it is officially transmitted to Congress.

Thank you for the opportunity to share Friant's views.

- **Reducing Inefficiencies in Environmental Reviews**:
    - ***Require a Single Environmental Review Document and a Single Record of Decision Coordinated by the Lead Agency***: Requiring the lead federal agency under NEPA to develop a single federal environmental review document to be utilized by all agencies, and a single ROD to be signed by the lead Federal agency and all cooperating agencies, "would reduce duplication and create a more efficient, timely review process."
    - ***Clarify that Alternatives Outside of the Scope of an Agency's Authority or Applicant's Capability Are Not Feasible Alternatives***: Clarifying that alternatives outside the scope of an agency's authority or an applicant's capability are not feasible alternatives for purposes of NEPA "would allow agencies and applicants to focus their resources and analyses on those alternatives that are actually legally, technically, and economically feasible."
    - ***Direct the Council on Environmental Quality to Issue Regulations to Streamline the NEPA Process***: Requiring CEQ to revise its regulations to streamline NEPA would reduce the time

and costs associated with the NEPA process and "would increase efficiency, predictability, and transparency in environmental reviews."

- ***Eliminate Redundancy in EPA Reviews of Environmental Impact Statements under Section 309 of the Clean Air Act***: Eliminating EPA's additional review and assessment of Environmental Impact Statements (EISs) "would remove duplication and make the environmental review process more efficient."
- ***Focus the Scope of Federal Resource Agency NEPA Analysis on Areas of Special Expertise or Jurisdiction***: Focusing federal resource agencies' authority to comment on portions of the NEPA analysis that are relevant to their areas of special expertise or jurisdiction "would maximize the effectiveness of agency reviews and streamline project delivery."
- ***Reduce Duplication and Increase Flexibility in Establishing and Using Categorical Exclusions***: Authorizing any federal agency to use a Categorical Exclusion (CE) that has been established by another federal agency and identifying documented CEs that can be moved to an agency's undocumented CE list without undergoing the CE substantiation and approval process "would reduce duplication and unnecessary environmental analysis for actions that do not create a significant environmental impact."
- ***More Effectively Address Environmental Impacts by Allowing Design-Build Contractors for Highway Projects to Conduct Final Design Activities before NEPA Is Complete***: Allowing design-build contractors to conduct final design activities "would facilitate better environmental reviews in conjunction with the design of projects and would facilitate more efficient and more effective efforts to address environmental impacts."
- ***Curtail Costs by Allowing for Advance Acquisition and Preservation of Rail Rights-of-Way before NEPA Is Complete***: Allowing the advance property acquisition and preservation of rail corridors for rail projects "would help control costs and improve project delivery."
- ***Enhance Integration of Transportation Planning and NEPA by Removing an Unneeded Concurrence Point for Using Transportation Planning Documents and Decisions in NEPA***: Eliminating the requirement for concurrence by a cooperating agency "would reduce duplication and delay, and would facilitate the integration of the NEPA process with the transportation planning process."
- ***Remove Duplication in the Review Process for Mitigation Banking by Eliminating the Interagency Review Team***: Removing the second review "would enhance the efficiency of the mitigation bank approval time frames."
- ***Authorize All Lead Federal Agencies for Infrastructure Projects to Opt into Highway and Transit Streamlining Procedures***: Amending the current law to allow other lead federal agencies to opt into these provisions "could make environmental reviews on other infrastructure projects more efficient."
- ***Increase Efficiency by Expediting Certain Small Telecommunications Equipment in NEPA and the National Historic Preservation Act***: Amending the law to expedite small cells and Wi-Fi attachments in NEPA and the NHPA "would eliminate unnecessary reviews without adversely affecting the environment."

- ***Create Incentives for Enhanced Mitigation***: Establishing procedures that expedite environmental or permitting reviews for projects that enhance the environment through mitigation, design, or other means "would provide incentives for project sponsors to propose more environmentally beneficial projects. This would streamline the environmental and permitting review process for those projects that demonstrate an improvement to the environment."
- ***Modify the Federal Power Act and Other Laws to Prohibit the Ability of Federal Agencies to Intervene in FERC Proceedings***: Modifying the Federal Power Act and other laws to require Federal agencies, upon request, to participate as a cooperating agency to a FERC NEPA review "would ensure that agencies fully participate in the preparation of FERC NEPA documents."
- ***Authorize Federal Agencies to Accept Funding from Non-Federal Entities to Support Environmental and Permitting Reviews***: Amending the law to provide broader authority for federal agencies to accept funds from non-federal entities to support review of permit applications and other environmental documents "would provide additional resources to streamline project delivery and would help defray the costs of the environmental review."