UNITED STATES HOUSE OF REPRESENTATIVES COMMITTEE ON RESOURCES Subcommittee on Water and Power The Honorable Grace F. Napolitano, Chairwoman

WRITTEN TESTIMONY OF RONALD D. JACOBSMA

Consulting General Manager Friant Water Users Authority

> July 21, 2008 Fresno, California

MADAME CHAIRWOMAN AND MEMBERS OF THE SUBCOMMITTEE:

It is a pleasure to again have the opportunity to testify before your Subcommittee, and particularly here in Fresno County and the San Joaquin Valley where, for so much of the water crisis gripping California, we are in the center of the storm.

Like millions of our fellow Californians, we are watching what drought and orders of a federal court in Fresno to protect the threatened Delta smelt are doing to water supplies, creating increasing amounts of economic and social suffering in vast areas of the state in a miserable situation that seems bound to get worse. I would like to address these conditions, including a report on current water conditions and other potential water supply impacts from a different perspective – that of the southern San Joaquin Valley's East Side.

Introduction

I am Ronald D. Jacobsma. I serve as Consulting General Manager of the Friant Water Users Authority (FWUA) and as General Manager of the FWUA's sister agency, the Friant Water Authority (FWA). Both of our agencies are joint powers authorities formed under California law. The FWUA is composed of 21 member agencies along the San Joaquin Valley's East Side that receive water deliveries from the Central Valley Project's Friant-Kern and Madera Canals in portions of Merced, Madera, Fresno, Tulare and Kern counties in California. The FWA operates and maintains the Friant-Kern Canal and the Madera-Chowchilla Water and Power Authority operates and maintains the Madera Canal. Our member agencies contract with the U.S. Bureau of Reclamation (USBR) for water from the Friant Division of the CVP. The FWUA's primary focus is on water supply and environmental issues, including litigation and settlement related to the San Joaquin River, the source of Friant's water supply. In total, there are 28 agencies – districts, cities, communities and counties – with USBR contracts for Friant water and eight agencies that contract for a companion exchange supply of CVP water delivered through the Cross Valley Canal in Kern County.

Average annual San Joaquin River runoff is in excess of 1,700,000 acre-feet. Unfortunately, our principal surface water storage facility, Millerton Lake behind Friant Dam, is relatively small with a capacity of 520,500 acre-feet. Of that capacity, Millerton Lake includes only 385,000 acre-feet of usable capacity since 135,000 acre-feet of "dead" pool storage is in the reservoir below which deliveries to Friant contractors can't be made into the Friant-Kern and Madera canals. That small size severely limits water storage management and flood control options.

The Friant Division delivers an average of approximately 1.3 million acre-feet of water annually. Some of the Friant districts (including the Cities of Orange Cove and Lindsay) are almost entirely dependent upon Friant water supplies while others use Friant water in conjunction with generally good quality groundwater aquifers or other local sources of surface water. In wet years, water supplies in excess of irrigation needs are used to replenish groundwater aquifers. Thus, the Friant system was built upon a system of conjunctive use of surface water and groundwater supplies.

Water Supplies and People

Our member agencies are, naturally, concerned with being able to provide and deliver water supplies that are adequate, reliable and affordable for the several municipalities and 15,000 mostly small family farmers who use Friant water on nearly one million acres of the world's most productive farmland. Our service area stretches from southern Merced County to the foot of the Tehachapi Mountains in Kern County. Friant's service area annually produces about \$4 billion in gross agricultural production with crop variety and productivity that are extraordinary in their scope and value, and sustained by highly efficient use of irrigation water.

San Joaquin River water retained at Friant Dam and delivered through the Madera and Friant-Kern canals have always provided a great deal of opportunity. Without this water, much of this amazing land would be largely dry and in many cases barren, its ability to produce food for the state, nation and world crippled to the point of insignificance.

There is, however, much more to it. Lives and livelihoods of hundreds of thousands of people from all walks of life depend upon the water we deliver. These individuals are counting upon Friant and its districts, the U.S. Bureau of Reclamation, other federal agencies and the state government for the water supplies that make possible and support their jobs, their farms, their businesses, their homes and their families. They need water supply certainty. They know firsthand that the Friant Division does more than provide surface water for crops. It sustains

underground water supplies relied upon by residents, businesses and industries in the cities within the Friant service area and delivers surface water to cities and towns that include Fresno, Friant, Orange Cove, Lindsay, Strathmore and Terra Bella.

Under the best of conditions, water supply certainty in California can be elusive. Friant water users, like those who depend upon all rivers and streams flowing west from the Sierra Nevada, are always under a natural water supply gun. In some years, there is so much rain, snow and runoff that supplies are greater than reservoirs and existing below-ground water banks and recharge areas can handle. During such periods, flooding is often a problem. Then there are the drought years, as last year and this year have demonstrated, in which water availability falls well short of demand.

Unfortunately, records show that below-normal water years such as these seem to hold an uncomfortable edge. They occur on average in six out of every 10 years. Friant overcomes this cycle of natural but radical swings in water availability by relying upon the conjunctive use of surface water and groundwater to provide a steady overall water supply, and attempting to use as much floodwater (when available) as possible to recharge the aquifer and stabilize overall supplies.

In fact, the Friant Division was conceived and designed to create and support an overall regional conjunctive-use water supply. That concept has been a tremendous success. Crops and farm production are supported and sustained by groundwater in times and in places in which surface water supplies are not available. In addition, groundwater is also depended upon by most cities and towns along the southern San Joaquin Valley's East Side. Lessons learned from practical experience gained under drought conditions make it painfully clear that Friant's overall conjunctive-use water supply is highly vulnerable to any sustained decreases in surface water availability. We expect groundwater depths to plunge this year because of the drought.

Those of us in the Friant Division already know what the result would be if Friant were ever to lose all or most of its Central Valley Project water supply, because such a total lack of irrigation supply has historically occurred.

Prior to development of the CVP's Friant Division in the 1940s and 1950s, much of the valley's East Side had been developed for irrigated agriculture. In most areas, reliance upon use of groundwater was nearly total. Heavy pumping throughout the region in the decades prior to initial Friant surface water deliveries resulted in severe groundwater overdraft conditions in most parts of what is now the Friant Division. Water tables plunged. Acute land subsidence became common and resulted in significant damage to public facilities and private properties. By 1939, when ground was broken for construction of Friant Dam, there were 50,000 acres of former irrigated farmland out of production because groundwater supplies had become exhausted or too deep for pumping equipment then available. The USBR projected that if the project were not constructed, hundreds of thousands of acres within what is now the Friant Division would ultimately go out of production or revert to dry-land farming. The Friant Division has been in

service for 50 years and has been largely successful in arresting the worst of the serious groundwater overdraft condition that existed prior to the project. Without CVP water, the Friant service area's history would doubtlessly be repeated. It would take time but eventually wells would go dry and increasingly large portions of the aquifer would become unusable, leading to loss of farms (and the food and fiber they provide to the nation and the world), jobs and businesses.

The Friant Division's Drought-Reduced Water Supply

This is another of those water-supply years in which agricultural water users in many parts of the Friant Division have had to rely upon the project's conjunctive use aspects by pumping groundwater reserves in order to sustain permanent and annual crops.

Much of today's hearing relates to water supply curtailments along the San Joaquin Valley's West Side but the fact is that the Friant Division and its Central Valley Project water users are also being hurt by the effects of what is becoming an extended drought.

As you may know, the water used within the Friant Division has its origin in the San Joaquin River, one of the Central Valley's two principal rivers. San Joaquin River runoff from the Sierra Nevada, as stated earlier, tends to vary radically from year to year, and even season to season.

Last year, for instance, full natural unimpeded runoff into Millerton Lake amounted to 682,637 acre-feet. That was only 40% of average. How did that translate into water supply for Friant's CVP users? Friant has a two-class water supply system that is unique in Reclamation. Class 1 water is the first 800,000 acre-feet of project yield – the firm supply. If the U.S. Bureau of Reclamation determines that all Class 1 demands can be met, Reclamation makes available Class 2 water, up to an additional total of 1.4 million acre-feet. In 2006-07, no Class 2 water supply was declared and Reclamation was able to only make available 65% of the Class 1 supply, some 520,000 acre-feet, strictly because of storage carried over from an above-average water year in 2005-06 and largely from upstream storage in power company reservoirs. That 65% Class 1 supply represents only 40% of Friant's historic annual diversions and wasn't available at all to the 15 Friant districts – including our largest districts – that contract for Class 2 water for supplemental and groundwater recharge supplies.

This year's total San Joaquin River natural runoff is greater and could end up at nearly 900,000 acre-feet, but it is still significantly lower than average in large part due to what turned out to be a near-record dry spring. The result? The Bureau of Reclamation has made available a 100% supply of Class 1 water, as well as very minute Class 2 supply of 5% that may still be reduced or eliminated. At best, Friant will be able to deliver two-thirds of its historic average water supply, and virtually none to Class 2 users.

Having significantly less surface water available than usual for two years in a row means that pumps are being used much more frequently, drawing water from ever-greater depths in the

aquifer at significantly higher energy costs, in order to sustain crops. At the same time, there is not enough supply to permit the meaningful Class 2 use that, when available, results in extensive groundwater recharge or deliveries and use of water to be used in lieu of pumping. Both of the latter are prime tools for helping the water table recover. Now, it is dropping rapidly.

Increasingly severe drought conditions such as those being experienced throughout the Friant system, coupled with the extremely limited surface storage capacity within Millerton Lake, removes opportunities for positive, constructive and useful water management tools such as water sales, transfers and exchanges among districts. Any water management flexibility normally found within the Friant system tends to be minimized and water values and costs are driven up under conditions such as those we are experiencing again this year. Our water agency colleagues on the West Side are experiencing the same sorts of limitations, only with even less flexibility and even more costly water.

Finally, eight water agencies along the Friant-Kern Canal that contract for CVP water delivered through the California Aqueduct and Cross Valley Canal in Kern County are caught in exactly the same Delta water export pumping curtailment squeeze that is affecting so many CVP and State Water Project contractors along the West Side and elsewhere. Their situation is grim.

California's Water Crisis and Its Effects Upon Friant Users

At a glance, it would appear that the Friant Division is geographically immune to the sorts of events, activities and court decisions related to the Sacramento-San Joaquin Bay-Delta Estuary that have created such a water supply crisis in vast portions of California. Friant's supply of CVP water conveyed through the Friant-Kern and Madera canals has the San Joaquin River as its physical origin. Both canals begin at Friant Dam, where the San Joaquin River emerges from the Sierra Nevada foothills and begins making its way across the valley.

However great the actual distance may be between Friant Dam and the great pumps that lift water from the Delta into the CVP's Delta-Mendota Canal and the State Water Project's California Aqueduct near Tracy, what happens to Delta supplies also has direct effects upon the Friant Division service area.

As I stated in the current issue of our newsletter, the Friant *Waterline*, "Friant's interest in the Delta is front, center and end."

The U.S. Bureau of Reclamation some 70 years ago obtained the use of San Joaquin River water for what is now the one million acres within the Friant Division service area. However, the underlying water rights are still held by four irrigation districts and canal companies on the valley's West Side which we know as the "Exchange Contractors." These historic water rights rooted in claims by the old cattle giants Miller and Lux for a major portion of the San Joaquin River's natural flow. In the 1930s, however, Miller and Lux agreed to permit the CVP's justbeing-planned Friant Division to be supplied from the San Joaquin River at what became Friant Dam as part of a bigger deal. The Bureau of Reclamation in the 1930s agreed to provide the Exchange Contractors with a substitute supply of CVP water totaling 840,000 acre-feet in all but the driest years without charge (with Friant water users primarily paying system costs).

This water is pumped from the Delta with one of the CVP's highest priorities and delivered through the CVP's Delta-Mendota Canal for the most part to Mendota Pool on the San Joaquin River, west of Fresno. There it is diverted into several canals built long ago by the Miller and Lux farming interests and delivered into a region stretching from Mendota to north of Newman. If Reclamation were ever unable to deliver Delta water to the Exchange Contractors, those agencies could make a "call" for release of water into the San Joaquin River from Friant Dam to satisfy their historic water rights from the CVP's Millerton Lake supplies used within the Friant Division. No such "call" has ever been made and we do not believe such an event will occur this summer, either. However, because of this year's drought and the Delta supply crisis along with rapidly declining storage in San Luis Reservoir, Friant has been watching the situation closely. There are other potential Delta factors that could result in Reclamation being unable to meet its Delta water supply obligation to the Exchange Contractor which might prompt a "call" under historic San Joaquin River rights. Those include the possibilities of further court-ordered pumping restrictions or problems such as levee failures in the Delta.

Because of all of this, the Friant Division depends upon other features of the CVP, including Shasta Dam, the Tracy Pumping Plant and the Delta-Mendota Canal, to facilitate this required exchange. Should the Exchange Contractors ever have to be supplied with water released from Friant Dam and delivered down the San Joaquin River (and particularly if such a situation were to arise in a dry year such as this), the San Joaquin Valley's East Side would immediately begin to feel the negative agricultural, economic and social impacts that are currently being experienced on the West Side.

There is another important way in which the Friant service area is already directly experiencing Delta water supply problems and pumping restrictions under the Endangered Species Act. The first and most immediate of these involves a reduction in CVP water available to eight water agencies along the Friant-Kern Canal that have Reclamation contracts for CVP water delivered into Kern County through the Cross Valley Canal from the California Aqueduct. Cross Valley water is the junior CVP contract supply and, thus, the first to experience supply curtailments such as those occurring this year. Four of those agencies, representing the bulk of Cross Valley water supplies, are members of the FWUA and FWA.

In short, in these and other potential ways, Delta water supply curtailments already ordered by the court and any other such supply reductions that may be ordered in the future can only harm East Side water users and the region as a whole.

Water Supply Certainty and the San Joaquin River Settlement

This hearing is focused on effects of the drought and California's water supply crisis but the San Joaquin Valley's East Side for many years has been dealing with another major water issue. It is

a situation that is nearing resolution, thanks in large part to your continued support and tireless legislative efforts, Madame Chairwoman, as well as those of several of your distinguished colleagues representing the San Joaquin Valley. I speak of the San Joaquin River litigation Settlement and the federal legislation – the San Joaquin River Restoration Act – required to implement the settlement in order to restore the San Joaquin River and its salmon fishery. Your interest and that of your colleagues last fall resulted in the House Natural Resources Committee favorably reporting the necessary legislation to authorize certain federal actions and other Settlement implementation has been a major step toward creating water supply and cost certainty for Friant water users where none had existed.

As this Subcommittee is well aware, Friant Division water certainty for 18 years was clouded by litigation brought against the federal government by the Natural Resources Defense Council (NRDC) and a coalition of environmental and fishing plaintiffs. Court decisions in the litigation pointed toward a strong likelihood of the plaintiffs prevailing. The only question was just how much water, from the Friant Division's supply in Millerton Lake behind Friant Dam, might be ordered released down the river. There was reason to believe, based upon years of decisions in the case being decided by the court in the plaintiffs' favor, that those who farm and the communities that exist because of Friant could end up losing a major portion, or in some years all, of their water through a judge's decision in the NRDC case or because of some other challenge. Nor did it appear there would ever be an opportunity to get any, some or all of that water back. Such a possibility was unacceptable. Just as is now being demonstrated along the valley's West Side, farmers cannot continue to farm without an adequate, reliable and affordable water supply.

Our Board of Directors watched what has been happening for years on the West Side and realized it is a glimpse of what could happen throughout the much more densely populated, developed and cultivated East Side if water supply uncertainty and major reductions were to ever become the rule. If Friant's CVP water were ever to stop flowing, it would be the people of Kern, Tulare, Fresno, Madera and Merced counties who would pay the price, just as has happened in past regulatory droughts and which now is again occurring along the West Side. The first to feel the pinch would be those who can afford it least – the farm workers and those in service, retail and other jobs in stores, businesses and industries that rely on a healthy farm economy. One by one those jobs, hopes and opportunities would vanish.

For all of these and other reasons, the FWUA chose to pursue and ultimately agree to a Settlement in the San Joaquin River litigation. Friant interests were motivated to find a way to settle the NRDC's lawsuit over the San Joaquin River because of their determination to preserve the valley's way of life. It became evident such an outcome would be possible because of compromises by all parties within the Settlement that would strictly limit the amount of Friant water required for San Joaquin River restoration and the financial cost to Friant Contractors.

That instantly provided Friant water users with what had long been missing – an affirmation of water supply and cost certainty for decades into the future. The settlement also includes a Water Management Goal – one equal to the settlement's San Joaquin River Restoration Goal – that

pledges to return all or a major part of the Friant water used for river and salmon fishery restoration. The water supply certainty and opportunity created by the San Joaquin River Settlement are key elements of the implementing federal legislation that awaits floor action in the House and Senate.

In an era in which court decisions, changing biological opinions and operations and adaptive management have slashed water supplies for tens of millions of Californians, FWUA is reminded that the alternatives we faced would almost certainly have caused far more uncertainty, grief, and negative impact, than will the pending water dedications for river restoration. FWUA representatives acknowledged this to the Subcommittee in a previous hearing where we testified in support of Settlement.

Friant's consistent position is that Friant's users of CVP water cannot risk potentially devastating court actions and decisions. Our member districts' home boards and the FWUA's directors have repeatedly agreed over the past few years of negotiating, reaching settlement and striving for San Joaquin River Restoration Act passage and program implementation that Settlement was by far the most practical option for each of the parties. That is particularly true for members of the Friant Water Users Authority and the water users they serve.

It should be noted that a key feature of the San Joaquin River Restoration Program's Water Management Goal almost certainly depends upon successful resolution of the Delta infrastructure, environmental, water quality and water supply crisis. Currently, Delta pumping restrictions would appear to make it difficult for water to be re-circulated down the river, recovered and pumped from the Delta into the Delta-Mendota Canal or California Aqueduct for return to Friant water users through the southern end of the Friant service area. It is vital that water released into the San Joaquin River under Settlement be recovered and returned to the Friant service area so that cumulative impacts upon groundwater within Friant districts' territories do not result in Friant experiencing the sort of tragic situation now facing West Side and south-of-the-Delta entities.

While not the focus of this hearing, having the opportunity to do so, I urge the House and Senate to act quickly in support of the San Joaquin River Restoration Act as amended and passed out of the Senate Energy and Resources Committee. The amendments improving water contracts and opportunities for water recovery furthers Friant's support of the Settlement.

The Need For Delta 'Fixes' and a Comprehensive Water Infrastructure Program

As previously stated, even though the Friant Division of the Central Valley Project seems remote from the Delta and its environmental, infrastructure and water supply problems, the fact is that Friant is very much affected by what happens in that troubled estuary. Solutions to these vexing problems must be found. The entire state is being adversely affected. The FWUA and FWA Boards of Directors believe a comprehensive water infrastructure, supply and conservation plan and water program is vital for "fixing" the Delta and meeting present and future water supply needs, in Friant and throughout the state.

Our Authorities were very pleased by the new state proposal advanced July 10 by Governor Schwarzenegger and Senator Feinstein. The Governor and Senator envision a comprehensive water infrastructure bond that has been changed for the better from previous plans. It is what California needs to successfully address its long-term water needs and current water crisis. We encourage the federal government to engage in the approach being presented as federal interests are directly affected.

Friant joins other water agencies throughout California in hoping this compromise plan will break the long-standing stalemate over a water bond package so it can reach the voters in November while at the same time urging the Congress and Bush Administration to be as supportive as possible in making such a program a reality.

The new state proposal would assure the reliability of the state's major water supply systems while making investments in water quality, the Delta ecosystem, Delta levees and improving water conveyance. It would also reduce the seismic risk to water supplies and lead to statewide water system operational improvements. Those improvements would include additional surface water storage identified in the CalFed Bay Delta Program Record of decision, including the proposed Temperance Flat Reservoir on the San Joaquin River above Millerton Lake, and other surface and groundwater storage facilities.

Conclusion

There is no denying that the sheer numbers and complexities of the water issues Californians face, and the crisis these weighty matters have created, are unprecedented in their scope. Perhaps never before has so much been needed, expected and even demanded from our federal and state elected officials in search of solutions for water problems.

Madame Chairwoman, the San Joaquin Valley is a unique region. Our valley feeds the nation and the world, with water use efficiency and rates of high productivity never before experienced. Valley people love the land and their communities. We need to develop solutions to maintain and enhance our water supplies to keep agriculture viable here at home, and to support the huge population that relies upon farming and farmers for their livelihoods.

The Friant Water Users Authority, Friant Water Authority and their member agencies stand ready to work constructively with you and your colleagues in search of the solutions we must have.

Thank you, members of the Subcommittee, for the opportunity to testify. I will be glad to answer any questions you may have.