

**TESTIMONY OF THE MERCED IRRIGATION DISTRICT  
BY KENNETH M. ROBBINS, GENERAL COUNSEL  
REGARDING THE SAN JOAQUIN RIVER RESTORATION LITIGATION  
SETTLEMENT  
BEFORE THE WATER AND POWER SUB-COMMITTEE OF  
THE HOUSE COMMITTEE ON RESOURCES**

**September 21, 2006**

Good morning Chairman Radanovich and members of the Subcommittee. My name is Ken Robbins and I am General Counsel for Merced Irrigation District. I am pleased to have this opportunity to testify regarding the proposed legislation that would implement the settlement agreement reached by the parties to the Friant litigation.

Merced Irrigation District is part of the San Joaquin Tributaries Association (SJTA), a group of five associated Irrigation Districts with water storage and hydroelectric facilities located on the three principal tributaries to the San Joaquin River (SJR). Mr. Short has already testified on behalf of the SJTA, so I shall not revisit those points.

I am here today to testify about the impacts the proposed settlement will have on Fall Run Chinook Salmon and the operations of the District's hydroelectric and water supply facilities.

Let me preface my remarks by reiterating what Mr. Short said earlier. The SJTA, including the Merced Irrigation District, is supportive of the goals of the proposed settlement. The District is confident the proposed settlement can be implemented in a manner that ensures both the restoration of the SJR and the mitigation of impacts from such an undertaking on third parties. The District believes the settling parties when they say they do not intend to impose impacts on third parties. My testimony will offer suggestions and a proposed legislative approach to ensure the settlement goal of no third-party impacts is achieved.

The five eastside irrigation districts of the SJTA have expended substantial water and money to restore the Fall Run Chinook Salmon fishery on the Merced, Tuolumne and Stanislaus Rivers. These efforts include active participation in, and funding for the San Joaquin River Agreement, the Vernalis Adaptive Management Plan (VAMP), Federal

Energy Regulatory Commission (FERC) proceedings, on-going district funded studies and monitoring and restoration activities, and the Merced River Fish Hatchery.

### The SJRA/VAMP

In May of 1995, the State Water Resources Control Board, as part of the river flow objectives in the 1995 Bay-Delta Plan, set minimum monthly average flow rates on the San Joaquin River at Vernalis. The Sacramento and San Joaquin River flow objectives were included to provide attraction and transport flows and suitable habitat for various life stages of aquatic organisms, including Delta smelt and Chinook salmon.

The five Eastside irrigation districts, the City and County of San Francisco, the San Joaquin River Exchange Contractors and the Friant Water Users Authority settled with the United States Bureau of Reclamation and the California Department of Water Resources resolving a dispute on how the responsibility for implementing the flow objective was to be met. This consensus resulted in the San Joaquin River Agreement, and the ongoing experiment commonly known as VAMP.

Under the VAMP, the five Eastside irrigation districts and the San Joaquin River Exchange Contractors agree to provide a supply of up to 110,000 acre-feet for an April – May pulse flow. In addition, the parties expend \$750,000 a year to conduct the VAMP experiment which is designed to gather better scientific information regarding fisheries on the lower San Joaquin River.

### Federal Energy Regulatory Commission

Flows for facilities operated by the Modesto Irrigation District and Turlock Irrigation District on the Tuolumne River are governed by Article 37 of the Federal Power License for the Don Pedro Project (FERC Project No. 2299). The minimum flows are designated by 10 different water-year types ranging from “Critical & Below” to “Median Wet/Maximum.” Each year is broken into three time periods plus two pulse periods. The minimum annual flows ranged from 94,000 acre-feet to 300,923 acre-feet, mainly for the benefit of Fall Run Chinook Salmon.

Merced Irrigation District operates the Merced River Hydroelectric Project (FERC No. 2179), a 103.5-megawatt project consisting of the Exchequer and McSwain

developments. Under its FERC license, Merced Irrigation District provides flow based on two year types, as defined by its license. These flows, when combined with the flows required pursuant its Davis Grunsky Agreement with the State of California, provide annual flows totaling about 100,000 acre feet per year. That amount of water is doubled across the salmon spawning grounds as Merced releases even more water to downstream water right holders. In addition, Merced Irrigation District provides 12,500 acre-feet of water in October, the equivalent of approximately 200 cubic feet per second, pursuant to a memorandum of understanding with the California Department of Fish and Game. These flows are maintained predominantly for the benefit of Fall Run Chinook Salmon.

### District Operations

Currently South San Joaquin Irrigation District and Oakdale Irrigation District on the Stanislaus River spend approximately \$500,000 annually to operate rotary screw traps and the Vika weir, and to participate in gravel restoration, habitat restoration and river mapping.

Modesto Irrigation District and Turlock Irrigation District on the Tuolumne River collectively have spent about \$500,000 a year for the last 10 years on their Tuolumne fishery program. Another \$1,000,000 has been spent on restoration work over that same time period. The \$500,000 annual expenditure is expected to increase in the years ahead.

Merced Irrigation District invests over \$475,000 annually to operate its Fall Run Salmon enhancement program in conjunction with the California Department of Fish and Game. The Merced Irrigation District and the California Department of Fish & Game have entered into a ten-year agreement for studies and projects to address habitat and salmon restoration programs on the Merced River. This program is known as Merced River Adaptive Management Program or “MRAMP.” The district has committed matching funds of \$5 million over a ten-year period for this program.

### Merced River Fish Hatchery

Merced Irrigation District and the California Department of Fish and Game, in collaboration with the State Water Contractors, have agreed to cooperatively fund the future operation and management of the Merced River Fish Hatchery. Annual operating

costs for the Merced River Fish Hatchery are over \$400,000. These costs are scheduled to be borne by the Merced Irrigation District, the Four Pumps Agreement Group, and the San Joaquin Tributaries Association. Fall Run Chinook Salmon production from this facility is targeted at about 960,000 smolts per year. The hatchery production is devoted to maintenance of the Merced River Fall Run salmon, the VAMP program delta studies, and other experimental programs conducted on other California Rivers in the San Joaquin Valley by the California Department of Fish and Game and their partner agencies.

The status of Fall Run Chinook Salmon on the San Joaquin River and its tributaries is one of improvement, but still of concern. At the end of an unprecedented six year drought, from 1987-1992, salmon returning to the San Joaquin River basin numbered about 1,373, including hatchery fish. Over the last ten years Fall Run Chinook Salmon production in the San Joaquin River basin has ranged from a low of 14,023 to a high of 79,679. Recent trends have once again been troubling.

In 1998, Fall Run Chinook Salmon became a candidate species for listing as threatened under the Endangered Species Act. In recent testimony to the State Water Resources Control Board, the California Department of Fish and Game expressed concern regarding the recovery of Fall Run Chinook Salmon in the San Joaquin River basin. It stated:

“Fall-run salmon populations in the SJR Basin are not making progress toward meeting the narrative doubling goal.”

So we are not out of the woods yet in terms of assuring the recovery of Fall Run Chinook Salmon in the San Joaquin River basin. It is still a species of concern.

### Third-Party Impacts of Settlement

The problem we identified early to the settling parties was the impact of the released water from Friant on water temperatures at the confluence of the Merced and Tuolumne Rivers. If the temperature of water flowing down from Friant is too hot it will literally cook the little Fall Run Chinook Salmon smolts out-migrating from the Merced and Tuolumne Rivers. In response to our concerns the settling parties have agreed to advance the pulse flows to an earlier date depending upon air and water temperatures. We do not know if this will be sufficient nor do we yet have a voice in how this will be done.

Plaintiffs' expert focused his temperature criteria solely on Spring Run Chinook Salmon. Dr. Peter Moyle testified that temperatures as high as 74 degrees Fahrenheit would protect Spring Run Chinook Salmon during the Spring migration period. The California Department of Fish and Game has recommended optimal temperatures for Fall Run Chinook Salmon of 55 degrees Fahrenheit and set lethal temperatures at 62 degrees Fahrenheit during this time period. If Plaintiff's expert is incorrect, or the California Department of Fish and Game is correct, then Fall Run Chinook Salmon smolts leaving the Merced and Tuolumne Rivers may perish.

Of course, another potential consequence of such a scheme would be to have Merced Irrigation District, or others, release massive amounts of water over what is currently required to maintain, if possible, cold water temperatures. This could have a major impact on the Merced Irrigation District and its farms and cities in terms of power production, storage and water supply reliability. It would have a lesser impact on the Tuolumne River system, but there would be a similar demand for additional water.

Merced Irrigation District's position is that an experimental fish population should not be reintroduced to the detriment of an existing species of concern, Fall Run Chinook Salmon. These impacts must therefore be mitigated.

This brings me to the second major point of my presentation, the reintroduction of Spring Run Salmon and its impact on Merced Irrigation District's hydroelectric and water supply facilities. The Merced River Project and other SJTA projects are focused on Fall Run recovery, which involves concentrated water requirements from the fall through spring. Fall Run generally return from the ocean from late October thru December. They spawn and their progeny migrate out of the system in the spring. Because of winter rain runoff and colder winter temperatures, satisfactory salmon habitat is much easier to maintain in the foothills. Spring Run, on the other hand, require summer fresh water habitat as most of the population spend an entire year in the system before migrating to the ocean. This means cold water temperatures must be maintained in the foothills throughout weeks of 100+ degree days. The Spring Run no longer has access to the high mountain regions of the San Joaquin Sierra Mountains as they do in some areas of Sacramento Sierras.

Merced Irrigation District does not agree with the settling parties that conditions are conducive now or will be in the future on the upper San Joaquin River for the reintroduction of Spring Run Salmon. We have only to look to the mainstem Sacramento River from Redding to Red Bluff. The overall population trend for Spring Run Chinook Salmon on the Sacramento River has been negative. Average abundance on the mainstem Sacramento River has gone from a high of 12,107 for the period 1980-1990 to a low of 609 for the period 1991-2001. Spawning populations are so low the California Department of Fish and Game biologists believe Spring Run have nearly disappeared entirely from the mainstem Sacramento River. This is not to suggest their condition on the Sacramento tributaries. However it is important to recall that the settlement calls for Spring Run restoration on the mainstem of the SJR, not its high mountain tributaries.

The Sacramento River has 4.5 million acre-feet of storage at Lake Shasta compared to Friant's 500,000 acre-feet of storage on the SJR. The flows on the Sacramento River can be 10 times the flows on the upper SJR. The Sacramento River has 100 ± miles of deep pools, cold water and shaded riverine aquatic habitat. The San Joaquin River has neither – and will have nothing even remotely comparable to the Sacramento for decades, if ever.

In fact, as Plaintiff's expert, Dr. Moyle, pointed out, in many years when it is dry it will be necessary to trap and truck the fish because flows will not be sufficient to sustain them. In critically dry years there may be no water at all.

I do not say this as a pessimist. There are reputable biologists who suggest the experiment may work. But make no mistake, this is an experiment. The third parties, particularly the SJTA districts operating water storage projects on the SJR tributaries below the proposed Spring Run restoration area, do not want to get left holding the bag for a potentially failed experiment, if the experiment fails in the target area and the National Marine Fisheries Service (NMFS) determines the Spring Run cannot be restored as set out in the settlement.

### The Need to Legislate Third-Party Protections

To avoid these potential impacts, the third parties have offered language to amend the proposed legislation accompanying the settlement agreement to protect the Eastside districts, as well as the San Joaquin River Exchange Contractors, other diverters on the mainstem San Joaquin River and the USBR and DWR at the Delta pumping facilities. This language leads to the making of certain findings under section 10(j) of the Endangered Species Act (ESA) prior to the re-introduction of the threatened Spring Run salmon. It also protects the Merced, Turlock and Modesto Irrigation Districts from having to mitigate impacts to the experimental population of Spring Run prior to 2026 when their hydroelectric projects are relicensed by FERC in 2014 and 2016.

#### ESA Section 10(j)

Section 10(j) of the ESA authorizes the Secretaries of Commerce or the Interior to release “experimental populations” of threatened or endangered species outside the current range of the species in order to further the conservation of the species. 16 U.S.C. § 1539(j). At the present time, NMFS has not adopted any regulations concerning experimental populations, although it is permitted to do so under the ESA. The U.S. Fish and Wildlife Service (USFWS) has, however, adopted regulations under Section 10(j).

“Experimental population” means a designated population, including subsequent off-spring, which can be introduced into an area where it is “wholly separate geographically from nonexperimental populations of the same species.” 16 U.S.C. § 1539(j)(1); 50 C.F.R. § 17.80(a). When a population is designated “experimental,” it is treated as if it were listed as a threatened species, rather than an endangered one. 16 U.S.C. § 1539(j)(2)(C); 50 C.F.R. § 17.82. A “*nonessential experimental population*” means an experimental population whose loss would not appreciably reduce the likelihood of the species' survival in the wild. 50 C.F.R. sec. 17.80(b). If an experimental population is deemed nonessential, no critical habitat designation is made for the population. 16 U.S.C. § 1539(j)(2)(C); 50 C.F.R. § 17.81(f). In addition, for purposes of Section 7 consultations, nonessential experimental populations are treated as species proposed to be listed under Section 4 of the ESA, rather than threatened or endangered. 16 U.S.C. § 1539(j)(2)(C)(i).

The SJTA believes that in order to protect third-party interests from unintended impacts of the settlement, it is both reasonable and essential for Congress either to make the required findings under Section 10(j), or at a minimum to predicate the reintroduction of Spring Run in the SJR on the Secretary of Commerce's making the necessary findings. The required findings include:

- i. that the San Joaquin River spring-run Chinook salmon is wholly separate from any other population of the species, and is thus an "experimental" population;
- ii. that the loss of the experimental population would not appreciably reduce the likelihood of the species' survival in the wild, and the population is therefore "nonessential";
- iii. that the reintroduction of spring-run Chinook salmon in the San Joaquin River will further the conservation of the species;
- iv. that "take" of San Joaquin River spring-run Chinook salmon that is accidental or incidental to an otherwise legal activity, such as recreation (e.g., fishing, boating, wading, trapping, or swimming), forestry, agriculture, operation of dams and reservoirs for irrigation, hydroelectric power, municipal and industrial water supply, and other uses, and other activities that is in accordance with federal, state and local laws and regulations, is permitted; and
- v. that the reintroduction San Joaquin spring-run Chinook salmon nonessential experimental population is within the historic range of the species and shall include the San Joaquin River watershed, including its tributaries, and that all spring-run Chinook salmon found within these boundaries will be considered nonessential experimental animals.

With regard to the "wholly separate" criterion, the reintroduction of Spring Run to the SJR should qualify as no other populations of Spring Run exist on the SJR or its tributaries. Indeed, to reintroduce them individuals or eggs of Spring Run on the Sacramento River will have to be transported to the SJR.

With respect to the required finding that the experimental population's loss would not appreciably reduce the species' likelihood of survival, it would be difficult to understand how the Secretary could find that the population to be reintroduced is "essential to the continued existence of the species" and still remove it from a much more friendly habitat – particularly in light of its threatened status rather than endangered. One would reasonably conclude that the fish would not be taken from their original habitat for such an experiment if they were in fact "essential."

In making the findings, Congress would also determine that current lawful operations in the SJR watershed – including tributary water supply and hydroelectric operations on which the SJTA districts are critically dependent – would not be subject to “take” under the ESA for the re-introduction of this non-essential fish population pursuant to section 4(d).

This protects all SJR and tributary water operations in three ways. First, if the experimental reintroduction of Spring Run Chinook Salmon cannot be sustained based upon the actions of the settling parties, the Eastside Districts will not be required to release additional water, change operations or commit resources to make up the shortfall. Second, if the experimental reintroduction is successful, such success will demonstrate that the current, lawful operations of the five Eastside districts have no detrimental affect on the reintroduced Spring Run Chinook Salmon therefore do not need to be changed. Third, the designation of the reintroduced Spring Run Chinook Salmon as a nonessential experimental population protects the water users while the experiment is in effect and allows an opportunity for the third parties, the State of California, the settling parties and the federal government to develop a longer term Habitat Conservation Plan.

#### *FERC License Protections*

Finally, the Merced Irrigation District and the other Eastside districts need the same level of protection as is afforded to the U.S. Bureau of Reclamation under the terms of the settlement. Under the settlement there is no re-opener for twenty years, until 2026, for the release of additional water from Friant Dam. The Third Parties want this same protection given to them for their FERC re-licensing. Merced Irrigation District’s current FERC license expires in 2014, while Modesto Irrigation District and Turlock Irrigation District will seek to re-license their Don Pedro Project in 2016. These Districts do not want the National Marine Fisheries Service, which otherwise has mandatory conditioning authority under section 18 of the Federal Power Act and section 7 of the ESA, to condition their licenses with terms and conditions related to the reintroduced, experimental, non-essential fish population. The Districts want this protection until 2026. The Districts are agreeable to have a re-opener clause in their new FERC licenses to specifically address the population’s status at that time, but not earlier.

This concludes my testimony. Mr. Chairman, thank you for the invitation to testify before this Sub-committee today. I will be happy to answer any questions members of the sub-committee may have.