San Joaquin River
Plumbing and Politics

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Introduction

The San Joaquin River system has tremendous social, environmental and economic value to the people of California. The river system provides water for farms, cities and industries; hydroelectric power; fish and wildlife; recreation and navigation. The Sacramento-San Joaquin River Delta is the source of drinking water supplies for 22 million Californians and hundreds of thousands of acres of farm land. The San Joaquin River provides irrigation water to over one million acres of San Joaquin Valley and Delta agriculture, which comprises a major segment of the multi-billion dollar agricultural production of the State. The anadromous fisheries of the San Joaquin River are an important segment of California's inland sport fisheries as well as the commercial and sport fisheries along the California Coast. There are more demands for its resources than the river can provide.

At present, 100 percent of the river's flows are diverted approximately 30 miles downstream from Friant Dam, dewatering sixty miles of the river. A coalition of environmental organizations successfully sued the dam operators forcing restoration of a continuous river.

The River System

The San Joaquin River is 290 miles long and averages about 130 miles wide. The SJR watershed covers 32,000 square miles or one-fifth of the State of California. Eight major streams and twenty-two minor streams drain into the San Joaquin River. All of the major streams have their headwaters in the Sierras, some as high as 14,000 feet.

Friant Dam

The construction of Friant Dam in the late 1940s, caused significant and negative changes to the riverine environment including the a change in the timing of flows, less variability of flows, increased temperatures and an incised channel resulting in habitat homogenization.

At the same time, construction of Friant Dam provided significant benefits such as flood protection, recreation, water supply to urban and industrial users, and irrigation water to over one million acres of prime agricultural land.

The Lawsuit

In 1988, the Natural Resources Defense Council sued the U.S. Bureau of Reclamation and the Friant Water Users Authority claiming that current water management practices destroyed native fisheries in the San Joaquin River.

By the late 1980s, the 40 year FWUA water contracts were coming up for renewal. New environmental laws and regulations provided an opening for major change to the renewal contracts and a lawsuit. The opportunity for a lawsuit was provided by the contract renewals as well as passage of the Central Valley Project Improvement Act in 1992.

In 1992, the CVPIA stated that environmental uses would now become purposes of all Central Valley Projects along with water supply and flood protection and included collection of a Friant surcharge for restoration.

In August 2004, a federal judge ruled that the USBR and FWUA had violated Fish and Game Code Section 5937. Section 5937 states that:

> The owner of any dam shall allow sufficient water at all times to pass …. over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam.

In 1999 NRDC and FWUA entered into settlement talks and on September 13, 2006 a Settlement Agreement was reached. Key points of the Settlement Agreement are:

> "to restore and maintain fish populations in good condition in the main stem of the San Joaquin River below Friant Dam to the confluence of the Merced River, including naturally-reproducing and self-sustaining populations of salmon and other fish as well as to reduce or avoid adverse water supply impacts to all of the Friant Division long-term contractors that may result from the Interim Flows and Restoration Flows by December 31, 2025."

Now What

After two decades of litigation, the San Joaquin River Settlement Agreement stimulated rejoicing and optimism in California, but then the daunting reality of restoring 150 miles of river, much of which has been nearly abandoned for over 40 years, became apparent. The scope is intimidating: dozens of jurisdictions, 150 miles of river, hundreds of land owners, thousands of salmon, hundreds of thousands of acre feet of water, hundreds of millions of dollars, and only a few years to bring it all together.

After the settlement was reached, the onus for action was shifted from the settling parties to the implementing agencies. The Settlement Agreement established the Department of the Interior as the primary party for restoring the San Joaquin River, with the State of California as a partner. A five-agency Program Management Team (PMT) was established to guide implementation of the Settlement Agreement. Significant progress has been made in a short period of time, including the formation of PMT sub-groups that are developing a Program Management Plan and scopes of work for environmental compliance and related studies. The agencies are also initiating preliminary investigations to establish a foundation for successful restoration, including geologic surveys, topographic mapping and installation of monitoring stations along the river.

Restoration Schedule

Interim flows commencing October 1, 2009 and full restoration flows commencing January 1, 2014. Fall run and Spring run Chinook salmon will be introduced by December 31, 2012.

Sources of Water

Water will be purchased from willing sellers or acquired through transfers, exchanges, recirculation, recapture or reuse.

Introducing flows

Introducing flows by themselves will not restore the river. There is a multitude of actions that need to be implemented and damage that needs to be repaired. Non-flow related obstacles that need to be overcome include: land subsidence, water diversions, bypass flood channels, degraded levee system, blockages to fish passage, damage from past mining operations, encroachment into the river bottom by urban sprawl and agriculture, invasion of exotic species, degraded water quality and funding.

Specific Actions

Specific actions are identified in the Settlement Agreement to address many of these outstanding issues. These include a bypass around Mendota Pool, increase channel capacity, modifications for fish passage, and filling or isolating high priority gravel pits.

Funding

Cost estimates for restoring the SJR range from $250 million to one billion dollars. Funding will come primarily from the State and federal appropriations. Propositions 84 and 1E passed in November 2006, have specific line items for SJR restoration totaling approximately $200 million. Federal legislation is still being discussed. There is a strong concern that no money should be appropriate for restoration without appropriating money for water supply actions as well. This could significantly delay any restoration; because the water supply alternatives have not a fully developed at this time.

Conclusion

Restoring the San Joaquin River is an enormous undertaking. It will be one of the largest restoration projects in the world. A restored San Joaquin River would provide broad economic, natural resource and recreational benefits as well as needed water quality improvements, increased water management flexibility, and improved quality of life within the San Joaquin Valley and elsewhere in the State.