



## San Joaquin River Gets A New Lease on Life

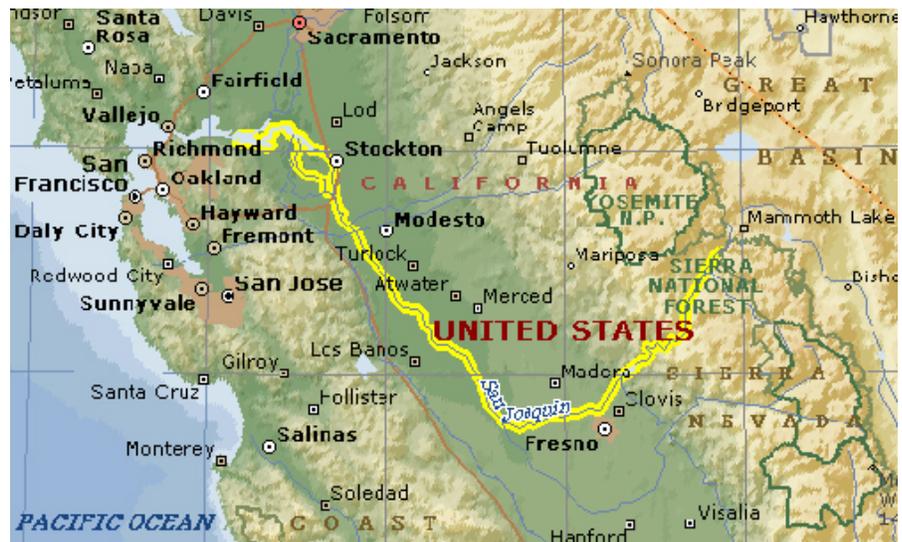
Imagine a river mighty enough to support steamboat travel from San Francisco to Fresno, with a productive and diverse ecosystem that supported millions of migratory birds and one of the largest salmon populations on the Pacific Coast - and the southernmost North America.

That was the San Joaquin, California's second-longest river and the vital southern artery to the Bay-Delta estuary. It changed dramatically in the late 1940s when Friant Dam, located a few miles northeast of Fresno, began diverting so much water that the river literally died. Flows that once sustained remarkable biodiversity were captured and diverted to irrigation canals that serve a million acres of farmland on the east side of the San Joaquin Valley. Downstream of the dam, 60 miles of the river were dried up, the salmon runs were extinguished, and for the past half century the "flow" of the San Joaquin River as it enters the Delta has consisted largely of polluted agricultural runoff.

In one of the biggest environmental victories in California history, NRDC and 13 other environmental and fishing groups that comprise "the NRDC Coalition" have negotiated a settlement which, over the next several years, will transform the San Joaquin back into a living river, restoring flows to the Delta, improving water quality and bringing back the river's native salmon populations. Final approval by the federal government and the U.S. District Court is expected in early September.

### Impact of Diversions

The United States Bureau of Reclamation dammed the San Joaquin as part of the massive Central Valley Project (CVP), an attempt to save Valley farmers from economic ruin at the end of the Great Depression. The river, which springs from the high Sierras is one of the main sources of fresh water in the San Francisco Bay-Delta. Since becoming fully operational in 1948, the Friant Division of the CVP has diverted over 90 percent of the San



The San Joaquin River, California's second-longest, runs westward from the Sierra Nevada to the San Francisco Bay-Delta. Pictured is the course of the riverbed, of which some 60 total miles have been dry since operation of Friant Dam began.

Joaquin's water into two huge canals, the Madera Canal and the Friant-Kern Canal, which deliver irrigation water to farmers along the valley's east side from Madera to Bakersfield. This valuable water supply is heavily subsidized by federal taxpayers through long-term federal

water contracts.

Friant Dam helped create the nation's richest agricultural region. But drying up the San Joaquin River and destroying its fisheries has adversely impacted much of the rest of the state. Severe water quality impairments in the lower San Joaquin River and Delta are among the problems Friant Dam has caused for downstream areas, including farmers in the Delta who struggle to sustain San Joaquin County's own \$1 billion-per-year agriculture industry. Delta farmers who have historically relied on water in the lower San Joaquin River for irrigation must contend with elevated salinity levels that can cause crop damage. Farmers and cities in San Joaquin County have also seen cutbacks in their water supplies from the Bureau of Reclamation's New Melones Reservoir (on the Stanislaus River) because the Bureau uses that facility - instead of Friant Dam releases - to release "dilution flows" into the lower San Joaquin to avoid violations of Delta water quality standards.

The Delta is not merely a region of fertile soil for farmers. It is the largest estuary on the west coast of North America, with global ecological significance. And it is the source of drinking water for 23 million Californians from the Bay Area to San Diego. The chronic water quality problems caused by massive diversions at Friant Dam degrade the Delta environment and impact people throughout the state, including Bay Area water districts that have been forced to invest millions of dollars in elaborate water blending and exchange programs to maintain drinking water quality.

The desiccation of the San Joaquin River's salmon runs also dealt a heavy blow to California's commercial fishing industry. Recognizing the importance of the San Joaquin fishery, the California Department of Fish & Game mounted heroic efforts to save it in the late 1940's. They constructed underwater fences to trap the salmon as they migrated upstream, and then drove them in tank trucks around the dry stretches in the river, enabling thousands of adult salmon to reach holding pools at the base of Friant Dam and eventually complete their life cycles in the 20-mile spawning reach below the dam. But efforts to persuade the Bureau of Reclamation to release enough water to sustain salmon were unsuccessful and by 1950, the rescue effort was ended. The prolific spring run was completely abolished from the San Joaquin basin, and the smaller fall run was relegated to remnant populations on downstream tributaries (the Merced, Tuolumne, and Stanislaus Rivers). Each year, at a location 150 miles downstream of Friant Dam, the Department of Fish & Game erects a temporary barrier that forces fall run salmon to ascend the Merced River instead of attempting in vain to swim further upstream on the San Joaquin.

Another effect of drying up the river has been significant costs to municipalities and farmers who must take extraordinary measures to treat wastewater and runoff in order to meet water quality objectives on the lower San Joaquin River. Cities like Turlock, Modesto, Manteca, Newman and Stockton have been forced to spend tens of millions of dollars to manage their wastewater because the San Joaquin has so little clean water that it cannot assimilate or dilute even highly treated wastewater. Millions of dollars have been spent on the dissolved oxygen impairment in the Stockton Ship Channel, a problem that could be solved with increased flows in the river.

Ironically, the lack of flow in the San Joaquin River also contributes to flooding problems. Degraded sections of the river have lost the capacity to carry high flows, leaving farmland and residents along the river at risk for major flooding. Because federal flood control funding is allocated based on a cost-benefit formula that considers property values along with the

potential for ecosystem improvements, agricultural lands and low-income communities like Firebaugh near the de-watered San Joaquin River have been unable to qualify.

### **Benefits of Restoration**

Just as the de-watering of the San Joaquin contributed to some of California's most severe water problems, restoration of the river can help solve these problems. Restoring continuous flow from the Sierra to the Delta will bring benefits not only to the river's riparian and aquatic species and ecosystems, but also to the drinking water supply for millions of people, to downstream farmers and communities, and to the commercial and recreational fishing industries, among others.

The state and federal governments have spent billions trying to improve water quality and stabilize failing ecosystems in the Delta, the hub of California's massive state and federal water projects. Water quality and fisheries improvements from a restored San Joaquin River will have significant economic benefits for the state and the millions of people whose lives and livelihoods depend on clean and reliable water supplies from the Delta. Along the lower San Joaquin River, where water districts, municipalities, and farmers face the prospect of spending tens of millions of dollars each year to address impairments for salt, boron, and low dissolved oxygen, restored flow in the San Joaquin River means major cost reductions.

One of the biggest economic benefits is water-related recreation, which is big business in California. In a 2002 survey by the California Department of Parks and Recreation (see California Department of Water Resources, 2005, Volume 2, page 24-1), 84.1 percent of respondents regarded outdoor recreation areas and facilities as important or very important to them and their families. Viewing scenery and wildlife, swimming, fishing, motorized and non-motorized boating were among the top activities that respondents had participated in. A recent analysis by NRDC's expert economist, Dr. Michael Hanemann of U.C. Berkeley, concluded that restoring the San Joaquin River will generate hundreds of millions of dollars in economic benefits - more than enough to offset any adverse economic impacts of restoration. Dr. Hanemann also conducted a "contingent valuation" survey which showed that Californians are willing to pay up to \$1.7 billion to restore the San Joaquin River, far more than the total expected cost of the new restoration program.

Additional benefits include better flood protection for communities and farms adjacent to the river. While 60 miles of the San Joaquin are dry most of the time, flood releases are required one out of three years from Friant Dam, and in some years such as 1997, 1998, 2005 and 2006, the volumes of these releases were large enough to overwhelm parts of the degraded river channel and aging levee system. Restoring the channel and in some places setting back and improving the levees to allow for natural river functions, including the capacity to carry higher flows for out-migrating juvenile salmon, will naturally provide greater flood-carrying capacity. And by releasing water into the river, Friant Dam itself will have more flood retention capacity. For landowners and communities along the river, restoration will provide flood management improvements which, as explained earlier, would likely not otherwise be available to the region.

Finally, the restoration settlement will bring greater certainty to San Joaquin Valley water contractors who have been operating without a clear process to renew their water contracts since 1988, when the NRDC filed suit with the Bureau of Reclamation. In the course of this 18-year litigation, two different sets of federal renewal contracts were declared invalid by the courts, and throughout this period farmers were unable to tell their financial lenders with

certainty how much water would be delivered in future years in light of the pending litigation. The settlement of NRDC, et al. v. Rodgers, et al. lifts the burden of uncertainty, clarifies how much water will be needed for restoration, and allows farmers and their lenders to plan ahead for their financing needs and operations.

### **The Final Chapter in an 18-Year Legal Struggle**

The basis of the new settlement is NRDC's lawsuit against the Bureau over its operation of the federally-owned Friant Dam and its proposed 40-year renewal of water supply contracts for the Friant Water Users Authority member irrigation districts. The lawsuit claimed that the Bureau was in violation of California Fish and Game Code which requires owners of dams to release sufficient water to keep in good condition any fish that may exist below the dam.

Over the course of 18 years, NRDC won virtually every major ruling and appeal (including a denial of review by the United States Supreme Court). These critical rulings set the stage for a February 14, 2006 trial to determine the "remedy" for the legal violations - i.e., what flows and other measures would be required to restore the river and its historic fisheries. As this high-stakes trial approached, the case drew the attention of Senator Dianne Feinstein and Congressman George Radanovich, who facilitated the beginning of a nine-month negotiation process that culminated in a settlement agreement among the parties on June 30, 2006. Lawyers in NRDC's Western Water Project expect final approval by the Department of Justice to occur in early September, and a joint motion for court approval - at which time the settlement documents will become public - to be filed a few days thereafter.

While the details of the settlement agreement were still subject to a confidentiality order at the time of this writing, we can disclose that the settlement includes a specific schedule of water releases from Friant Dam, a restoration timetable, identification of physical improvements in and around the river channel, and some level of funding for these improvements. In addition to the funding provided in the settlement itself, Proposition 84 (see below) would provide \$100 million from the state of California to help implement the NRDC settlement.

### **E2's Role**

Because of its value to a healthy environment and healthy businesses - as well as healthy employees - clean water has always been an area of focus for E2. In July 2003, E2's newsletter featured an [article](#) on NRDC's work to reform CVP water contracts, including the problems with San Joaquin flows and the fact that the federal government was committing to deliver more water than was physically available. It also described how some farms produce crops worth less than the water they consume, while other farmers earned more by selling their subsidized water to cities than by farming.

During our annual advocacy trip to Sacramento in March 2004, E2 discussed the issue of water contract renewals with assembly members and senators from districts where agriculture is big business. In meetings with administration officials we asked that the state continue to investigate whether renewing old contracts would constitute a give-away of California's precious water resources, maintain funding for a study on what it would take to restore the San Joaquin River and block increased Delta pumping in order to maintain drinking water quality standards. We also reached out later that year to Senator Dianne Feinstein, expressing our concerns with the CVP's water contracts.

## How E2 Can Help Support the Settlement

While NRDC's landmark settlement agreement will soon be approved by all parties and the court, there is still much work to do in order to ensure that it is successful. Here are some of the ways E2 can play an important role in ensuring that the settlement succeeds and the broad benefits of restoration are realized:

- **Help NRDC enact narrowly-tailored federal authorizing legislation:** in the weeks ahead, it is very likely that the principal opponents of restoration - a small but politically powerful group of irrigators on the Westside of the San Joaquin Valley - will attempt to materially modify the authorizing legislation for NRDC's settlement in order to undermine restoration and advance their own political agenda, potentially even trying to use this bill to create exceptions the Endangered Species Act. NRDC is very focused on preventing this, and may need your help. Specifically, E2 members may be called on to contact or meet with members of Congress to stress the importance of restoring the river according to the current settlement in order to avoid the increase in costs associated with water treatment, insurance, diminished Delta crop quality and lost recreation opportunities that the status quo would perpetuate.
- **(2006) Help Pass Prop. 84, the Clean Water, Parks and Coastal Protection Bond:** Ensuring adequate funding to carry out the channel improvements and other measures called for in the settlement is critical to keeping San Joaquin River restoration moving forward. Prop. 84 provides \$100 million for this specific purpose. For information on how you can support the Yes on Prop. 84 campaign, please write to [anotthoff@nrdc.org](mailto:anotthoff@nrdc.org).
- **(2006) Help Defeat Prop. 90:** While the passage of Prop. 84 would help San Joaquin River restoration succeed, the passage of Prop. 90 (the so-called eminent domain "reform" initiative) would deter river restoration. For information on why Prop. 90's expansive re-definition of "regulatory takings" and overreaching compensation mechanisms would undermine not only San Joaquin River restoration but also virtually all of NRDC's advocacy in California, please contact the NRDC Western Water Program (415-875-6100).

## Summary

In the past, witnesses recounted salmon runs in the San Joaquin River so dense that you could almost "walk across the river" on the backs of the fish, and people near the present site of Friant Dam were literally kept awake at night by the noise of thrashing salmon. We may not be able to fully recapture that time, but after 18 years of hard work, California is poised to restore and reclaim the San Joaquin, one of its most valuable resources. Bringing this dead river back to life will clearly rank as one of the greatest restoration success stories, rivaling that of the Everglades and Mono Lake. Moreover, it is hard to imagine any restoration effort that will produce such broad and meaningful benefits - including benefits to our state's fish and wildlife, to commercial and recreational fisherman, to communities along the river who will receive greater flood protection, and to the downstream farmers, cities, and millions of people who depend on cleaner and more reliable flows reaching the Bay-Delta. After being known for so long as one of the most desecrated bodies of water in America, the San Joaquin River can now look forward to becoming one of America's best comeback stories.