

SEPTEMBER 1996



## The Bay-Delta: A Key to Solving California's Water Problem

### The Water Supply Problem

The Department of Water Resources concluded in its 1994 *California Water Plan Update* that California's annual water supplies are generally adequate to meet current demand in "normal" (nondrought) years. However, the department forecasts a shortage in the year 2000 for California's water users as a group (domestic, industrial, agricultural, and environmental) that will increase in subsequent years. The projected shortage results both from factors that reduce supply and those that increase demand. Among the most important factors reducing water supply for nonenvironmental users are recent federal limits on water diversions in order to protect fish and wildlife habitat. Projected population growth adds most to future increases in demand.

### Solution Must Address Bay-Delta Problem

In devising solutions to California's water supply problem, attention must be paid to the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (the "Bay-Delta")—a 700 square-mile region of waterways, sloughs, and islands where the San Francisco Bay meets the state's two largest rivers. This is because the Bay-Delta serves a number of purposes each of which depends on the quantity and quality of water in the area. The overuse of water for one purpose could adversely impact the region's ability to serve the other purposes.

Specifically, the Bay-Delta supplies some or all of the water needs for two-thirds of the state's homes and businesses and over four million acres of agricultural land. Water



moves through the Bay-Delta's conveyance system of canals and channels, and is transported to cities and farms in the Bay Area, the San Joaquin Valley, and most of Southern California by the State Water Project and the federal Central Valley Project (CVP). This diversion of water for uses elsewhere in the state (particularly during drought years), together with other factors (such as water pollution), has resulted in the deterioration of the ecological health of the region and reduced the region's role as a fish and wildlife habitat. As a result, fish and wildlife populations have declined to the point where some species have been classified as threatened or endangered.

To address the declining fish and wildlife habitat in the Bay-Delta, the State Water Resources Control Board will implement over the next few years more stringent water quality standards for the Bay-Delta in compliance with state and federal clean water laws. As a consequence, the ability of some of the 7,000 or so water right holders to draw water could be affected and it is almost certain that the supply of water to nonenvironmental users will be reduced.

The Bay-Delta also serves as an important agricultural region. Its productivity depends on flood-protecting levees and freshwater releases to counter the intrusion of salty seawater. Diversion of water for other uses reduces the volume of fresh water to control salinity. At the same time, levees are deteriorating and must be maintained for the Bay-Delta to continue functioning as a viable agricultural region.

***Problems Are Interrelated and Involve Competing Interests.*** The Bay-Delta problems of inadequate water quality, declining fish

and wildlife populations, deteriorating levees, and uncertain water supplies to meet future needs are all interrelated. Unless these problems are addressed in a coordinated way, the Bay-Delta will not be able to provide in the future a reliable source of clean water for all users. Potential solutions that address one problem may have an adverse impact on supply available for other water users. Thus, balancing the needs of competing users of Bay-Delta waters must be a fundamental component of the overall solution to the state's water supply problem.

## **CALFED Process Addresses Bay-Delta Problems As a Whole**

The CALFED, created in 1994, represents the most recent attempt to address Bay-Delta problems in a collaborative fashion, with extensive public and stakeholder participation. The CALFED is a consortium of ten federal and state agencies that have regulatory and resource management responsibilities in the Bay-Delta. In December 1994, these agencies signed the Bay-Delta Accord which, among other things, provided for the creation of the Bay-Delta Program to develop a long-term Bay-Delta solution.

The basic objectives of the Bay-Delta Program are four-fold:

- ◆ To provide good water quality for all beneficial uses.
- ◆ To improve fish and wildlife habitat.
- ◆ To reduce the gap between water supplies and projected demand.



- ◆ To reduce risks associated with deteriorating levees.

**Status and Future of CALFED Bay-Delta Program.** In mid-1996, CALFED staff and stakeholder advisors narrowed a list of potential Bay-Delta solutions to three broad conceptual alternatives. All three alternatives have common elements relating to water quality, levee stability, water use efficiency, and ecosystem restoration. (Ecosystem restoration involves restoring the qualities of the natural environment that allow native fish, wildlife, and plants to prosper.) The alternatives vary primarily in the manner and scope of changes to the conveyance system and storage facilities. For example, one alternative essentially maintains the existing system of channels and canals which move water through the Bay-Delta, while the other alternatives make significant improvements, with one including the construction of a bypass to carry water around the Delta.

The CALFED staff anticipates that environmental review of the three alternatives will be conducted through 1998, cumulating in final federal and state environmental impact reports and the recommendation for a single solution. Beginning in 1999, the chosen solution will be implemented, following detailed project-level environmental review. Full implementation will continue potentially for 20 to 40 years, depending on the solution adopted. As the implementation of individual projects will occur over time, funding needs will be spread out over many years as well.

**CALFED Program Costs Substantial.** The capital outlay costs for the three alternatives under consideration are estimated to range from \$4 billion to \$8 billion, with the ecosystem

restoration component, common to all three alternatives, costing an estimated \$1.6 billion. No matter which alternative is chosen, major capital expenditures would likely include the construction of water storage facilities, the rebuilding of many miles of levees, and the development of hundreds of acres of new habitat. Funding for these capital costs will be sought from a variety of federal, state, local, and private sources. Some of these costs, however, will be met with existing program funding, such as that under the federal Central Valley Project Improvement Act.

## Role of Legislature

The Legislature will play a major role in the Bay-Delta Program in two ways. First, it will have to determine how much of the program costs the state should fund. Second, the Legislature will ultimately have to provide the statutory (and budgetary) authority for the implementation of the chosen alternative.

The Legislature, recognizing the importance of the water supply problem and related Bay-Delta issues, has placed a bond measure on the November 1996 ballot. If approved by the voters, Proposition 204, the Safe, Clean, Reliable Water Supply Act (SB 900, Costa) would authorize the state to sell \$995 million in general obligation bonds for various water quality and supply projects. Of this amount, \$390 million would be available exclusively for ecosystem restoration projects to be identified in CALFED's final environmental review documents. Another \$193 million would be used for other Bay-Delta improvements, including fish and wildlife restoration projects associated with the CVP, and levee rehabilitation. The remaining



\$412 million is dedicated mainly for loans and grants for local wastewater treatment, water recycling, water conservation, and water supply projects. Some of this funding could be used for projects related to the Bay-Delta.

The Bay-Delta Program and the CALFED process to develop a long-term solution to the Bay-Delta problem will continue regardless of the outcome of Proposition 204. As a chosen alternative is being determined, the Legislature will have to deliberate the policy merits as well as fiscal feasibility of the alternatives.

*Contact—Mark Newton—(916) 445-5921*

## Economic and Revenue Developments

### The Economy

The California economy appears to be accelerating in 1996, and is now growing at rates which are on par with those of the latter half of the 1980s. Wage and salary employment increased by 34,000 jobs in August, and is now up by 327,000 jobs (or 2.6 percent) from the prior year. The job gains have been led by healthy increases in a wide variety of industry sectors.

In other positive developments, taxable sales were up by 7.8 percent between the second quarter of 1995 and the second quarter of 1996, the strongest increase since 1990. Exports of California goods also continued to expand in the first half of 1996, increasing by 13 percent from the prior year.

### Revenue Performance

General Fund revenue collections in August exceeded the 1996 Budget Act forecast by \$45 million (1.4 percent), bringing cumulative receipts for the first two months of 1996-97 to \$186 million (3.3 percent) above the forecast. About one-half of the year-to-date gain appears to be permanent. This performance is consistent with the economic developments noted above.

September is a major month for tax collections, as it includes quarterly estimated payments from both individuals and corporations as well as a variety of other key payments. Collections for this period should provide the first significant indication of how the underlying trend in revenues during 1996-97 compares to that assumed in the 1996 Budget Act.

*Contact—Brad Williams—(916) 324-4942*

To request publications call (916) 445-2375.

Reports are also available on the LAO's World Wide Web page at <http://www.lao.ca.gov>.

The Legislative Analyst's Office is located at 925 L Street, Suite 1000, Sacramento, CA 95814.