

## **The Environmental Water Account: Reducing Conflict Between Fishery Management and Water Supply**

### **What Is the EWA?**

The Environmental Water Account (EWA) is one of the most innovative components of the CALFED Bay-Delta Program. Implemented in 2000, the EWA has the dual purposes of providing water for fishery protection and recovery and providing assurances against additional water supply losses for urban and agricultural water supplies.

With the EWA, fishery managers are able to purchase water on a voluntary basis and manage operations of the State Water Project (SWP) and Central Valley Project (CVP) on a real-time basis to reduce the “take” of fishery populations. Because the EWA is responsible for the water costs of “incidental take” under the Endangered Species Act (ESA), water users in California finally obtain the certainty promised under the Bay-Delta Accord of 1994.

Perhaps more than any other tool in the CALFED Record of Decision (ROD), the EWA is able to dramatically reduce the conflict between fishery management and water supply.

### **Why Do We Need the EWA?**

Historically, fishery management in California took the form of rigid restrictions on water project operations based on “typical” hydrologic and biologic conditions. For example, water quality standards adopted in 1978 by the California State Water Resources Control Board established pumping limits on the SWP and CVP that varied by month. Because certain spring months were typically biologically sensitive, pumping levels were required to be low during these months, regardless of whether the fish were actually present. Later in the year, when biological activity near the pumps is typically low, pumping was allowed to increase, even if fish populations were “in harm’s way”. Not surprisingly, this rigid system of regulatory control did a poor job of protecting the environment and providing water supply reliability.

The simple fact is that no year is ever “typical,” either hydrologically or biologically. To take only one example, water year 1999 was initially quite wet. But, the spring of 1999 was extraordinarily dry, so dry that although the year was classified as “wet,” the Delta smelt, an ESA listed species, behaved as though it was a drought year. Typically, Delta smelt have moved away from the SWP and CVP pumps by May. In 1999, however, they lingered in the vicinity of the pumps throughout June and into July.

ESA regulators attempt to manage such varying circumstances through enforcement of “take limits,” which are numerical guidelines on the number of fish that can be taken at the pumps. The problem with this regulatory approach is that it is highly laden with conflict. In 1999, to protect the Delta smelt, tight restrictions were placed on the project pumps in June and early July. But, the previously agreed operating protocol for the year

provided for increased pumping to meet demands and fill San Luis Reservoir during these months. Although the Bay-Delta Accord of 1994 had promised water users protection from just such a circumstance, no mechanism had been developed to deliver on that assurance until the ROD was issued in 2000.

By July of 1999, 500,000 acre-feet of water had been withdrawn from San Luis Reservoir as operators tried to maintain water deliveries to the California economy while Delta pumping was drastically curtailed. In fact, water was withdrawn from San Luis Reservoir to protect the Delta smelt at such a rapid rate that engineers were concerned about the integrity of the dam. The precipitous decline of storage levels also threatened the water supply and water quality of major portions of the California economy, including Silicon Valley. Media accounts at the time were filled with stories of the conflict between this tiny fish and the economic engine of California and the nation.

Although intended to allow real-time management of the system to protect the environment, the traditional "take limit" approach to implementing the ESA invites frequent and severe conflict. Every action to protect a listed species can pose a direct economic threat. Under such conditions, real-time management, which we now recognize as an essential tool for fishery protection and restoration, is virtually impossible. The EWA was expressly designed to substantially reduce this conflict, thereby allowing real-time management to protect fisheries, but without the risks previously faced by the California economy.

### **How Does the EWA Work?**

Under the CALFED ROD, fishery managers agree to operate within a defined water budget. The water budget includes water made available by a regulatory baseline (called Tier 1) and EWA water (called Tier 2). The regulatory baseline includes instream-flow, pumping restrictions, and other requirements based on existing regulations.<sup>1</sup>

The EWA itself includes two types of assets: first, EWA managers are granted access to a portion of high flow water when it is available (called "variable assets"); second, they purchase through voluntary market transactions a specified amount of additional water (called "fixed assets"). These assets are used to protect endangered species. Under the CALFED ROD, the fishery agencies are responsible for ESA incidental take requirements utilizing their Tier 1 and Tier 2 assets, thereby substantially reducing the previous water supply risks facing the California economy.<sup>2</sup> In addition, the EWA, along with an unprecedented habitat restoration program, is intended to promote recovery of Bay-Delta dependent fisheries.

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<sup>1</sup> The primary regulations include requirements of ESA biological opinions, the SWRCB 1995 Water Quality Control Plan, and the Central Valley Project Improvement Act (CVPIA). A federal judge recently held that a portion of the baseline reflecting CVPIA requirements is illegal. CALFED, in consultation with its science program, is currently determining how to respond to this changed circumstance.

<sup>2</sup> In the event that Tier 1 and Tier 2 do not provide enough water to assure that an ESA listed species is not placed in jeopardy, the ROD includes provisions for a third tier of regulatory water. Use of Tier 3 water is considered unlikely.

Operations this year illustrate the value of the EWA. Using the flexibility of the EWA, during February and early March, fishery managers took advantage of the relative absence of fish in the Delta (based on real-time monitoring data) to pump and store south-of-the-delta nearly xxx (fill in stats from this year) of EWA water. Later in the season, when fish were in greater need of protection, pumping was curtailed and the previously stored water was delivered to water users.<sup>3</sup> Thus, fish were protected while maintaining water supply service to the urban and agricultural economy.

Under the EWA, the fisheries receive ample amounts of water to protect them from jeopardy and promote recovery. The California economy receives certainty in the supply of a vital infrastructure service.

### **Conclusion**

The EWA promises significant, positive change in fishery management, essentially replacing “command-and-control” regulations with a market-based approach. By providing water for fish beyond existing regulatory requirements, it supports our ecosystem restoration goals. By relying on compensated transactions and providing assurances to water users, it greatly reduces opposition to fishery protection measures and promotes the support of sound science.

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<sup>3</sup> Currently, this EWA water is stored in San Luis Reservoir and is subject to spill. To deal with this concern, the ROD provides for EWA managers to acquire 200,000 AF of groundwater storage capacity south of the Delta. Efforts to develop this EWA storage are underway.