



AN INTEGRATED WATER SUPPLY MANAGEMENT AND WATER DEVELOPMENT PROGRAM FOR THE SACRAMENTO VALLEY

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I. INTRODUCTION

Water use within the Sacramento Valley does not contribute, in any meaningful way, to the Bay-Delta problem being addressed by the consortium of federal and state agencies known as CALFED. Because of its location upstream from the Bay-Delta, all water not consumptively used within the Sacramento Valley returns to the system for subsequent diversion by others or for Bay-Delta outflow. To the extent that use of water within the Sacramento Valley has had an adverse impact on the environment, it is an impact related specifically and directly to upstream diversion and use and not on any impact to the Bay-Delta.

Sacramento Valley environmental mitigation, protection and enhancement have been properly focused on issues such as fish screens and related fish passage and upstream-related fishery habitat issues. The use of water within the Sacramento Valley itself contributes to habitat improvement, including the creation and enhancement of habitat for waterfowl.

This paper discusses the CALFED process as it relates to the watersheds of origin, particularly within the Sacramento Valley. Most important, it sets forth a framework for partnership and cooperation between CALFED, its member agencies and individuals and entities within the Sacramento Valley and it describes an integrated water management and water supply development program that will further these partnership goals.

II. BACKGROUND

For several decades, there have been numerous efforts by state and federal regulatory agencies to “fix the Delta,” i.e., to (1) restore the environmental health of the San Francisco Bay/San Joaquin Delta Estuary to conditions that are more comparable to those that existed prior to the construction and operation of the federal Central Valley Project (“CVP”) and the State Water Project (“SWP”), and (2) create a reliable, high quality water supply for export from the Delta by the CVP and SWP.

It is clear that the Bay-Delta is critical to California's overall economy. The drinking water supply for two-thirds of California's population is diverted from the Delta. Water for irrigation of over seven million acres of highly productive agricultural land is diverted from the Delta.

Since 1994, fifteen state and federal agencies (most notably including the California Department of Water Resources (DWR), the California Environmental Protection Agency, the California Department of Fish and Game, the California State Water Resources Control Board (SWRCB) the United States Bureau of Reclamation (USBR), the United States Environmental Protection Agency, the United States Fish and Wildlife Service and the United States National Marine Fisheries Service) have been developing the CALFED program "to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system." The stated objectives of the CALFED program are to implement improvements to ecosystem quality, water supply reliability, water quality and levee system reliability.

The "watersheds of origin" or "areas of origin" are those areas of California whose river and stream systems are tributary to the Delta, and which provide the water supplies used in the operation of the CVP and SWP. Numerous representatives of watershed-of-origin interests, including counties, cities, local water suppliers, water associations, farm associations and interested citizens have actively participated in the CALFED process. Moreover, the watersheds of origin generally support the CALFED program objectives, if not specific elements of the CALFED program, and have worked hard to try to help to make the CALFED program a success.

A fundamental question, however, which needs to be addressed focuses on the conditions that have caused the need to "fix" the Delta. CALFED asserts that the degraded conditions in the Delta have been caused by the following: "Upstream water development and use, depletion of natural flows by local diverters, and the export of water from the Bay-Delta system have changed seasonal patterns of the inflow, reduced the outflow, and diminished the variability of flows into and through the Bay-Delta system. Facilities constructed to support water diversions (upstream, in-Delta and export facilities) cause straying or direct losses of fish (for example, through unscreened diversions) and can increase exposure of juvenile fish to predation. Entrainment and removal of substantial quantities of food-web organisms, eggs, larvae, and young fish further exacerbate the impacts of overall habitat decline. Habitat alteration and water diversions are not the only factors that have affected ecosystem health. Water quality degradation caused by pollutants and increased concentrations of substances also may have contributed to the overall decline and the health and productivity of the Bay-Delta system. In addition, undesirable introduced species may compete for available space and food supplies, sometimes to the detriment of economically important introduced species."

While the foregoing statements may be true in varying degrees, if there have been any impacts at all to the Delta from upstream diversions for beneficial uses of water within the watersheds of origin, those impacts have been insignificant compared to impacts caused by the construction and operation of the CVP and SWP. Unfortunately, the CALFED process has, to date, failed to recognize and act based upon this simple truth and as a result watershed of origin commitments have not been honored.

There can be little legitimate doubt that the primary cause of the decline in the environmental health of the Delta was the construction and operation of the Delta Cross Channel and the subsequent construction and operation of the CVP's Tracy Pumping Plant and the SWP's Banks Pumping Plant. After the Delta Cross Channel was constructed, large portions of the Sacramento River began to flow, for the first time, into the Central Delta, taking large numbers of fish from the Sacramento River with them, and dramatically altering the historical flow patterns in the Central Delta. The Banks and Tracy Pumping Plants have further altered these flow patterns, and also have directly entrained and killed millions of Delta fish.

The CVP and SWP were developed in reliance on water rights that were expressly recognized, by law and in numerous policy statements, to be junior in priority and entitlement to the water rights that are explicitly preserved for uses within the watersheds of origin. Over time, the yield of the CVP and SWP has declined due to obligations to increase water releases for environmental purposes and as senior water rights and entitlements secured to meet the existing and future needs within the watershed of origin have been exercised. The need for the CVP and SWP to develop new water supplies to maintain and increase project yields to fulfill project commitments has been self-evident for decades. Yet, no new water supplies have been developed.

Indeed, instead of recognizing that truly new water supplies must be developed if the future of all Californians is to be secured, CALFED member agencies appear to be focused on a process that would redirect negative impacts associated with resolving the Bay-Delta problem to other regions of California, including the Sacramento Valley. This is simply inappropriate given the little adverse impact that is caused by upstream diversion and use, and in light of area-of-origin protections that were the predicate for the construction and subsequent operation of both the CVP and SWP.

III. A Framework for Partnership and Cooperation With the Sacramento Valley

A. General Principles

As noted above, Sacramento Valley interests (1) recognize the importance to California's future of restoring the environmental health of the Bay-Delta and providing high quality and reliable water supplies for all beneficial uses, (2) generally support the CALFED program objectives, and (3) have been willing to play a constructive role in implementing a successful CALFED program.

It is essential, however, for the CALFED program to deal with the Sacramento Valley interests as full partners, honoring the commitments that were and are the essence of the watershed protection laws and, in that regard, refrain from imposing on the Sacramento Valley any burden for mitigating impacts to the Bay-Delta that have been caused by the construction and operation of the CVP and SWP.

Future partnership and cooperation between the Sacramento Valley and CALFED is possible and, indeed, desirable. However, it must advance based upon a framework that includes the following principles:

1. CALFED actions must be undertaken in a manner that insures that solutions implemented to resolve problems within the Bay-Delta would not redirect negative impacts to the Sacramento Valley.
2. CALFED must identify new water supplies and include those supplies in its plans to meet current and future water supply needs. CALFED must refrain from simply relying on the reallocation of existing supplies and demand reduction as a means to address water supply shortages. The proposed funding levels in the CALFED plan to investigate new storage facilities must be adequate to actually proceed with storage options.
3. CALFED must provide acceptable assurances that Sacramento Valley water rights and entitlements will not be sacrificed in favor of other CALFED objectives. CALFED agencies must work with, not against, Sacramento Valley water users in meeting their mutual water supply needs. The SWRCB must not use its regulatory authority to reallocate watershed-of-origin water supplies to meet Delta water quality standards and other environmental objectives in the Bay-Delta system.

B. Sacramento Valley Assets

Using the foregoing principles as the foundation for partnership and cooperation between the Sacramento Valley and CALFED, the Sacramento Valley can assist CALFED in its implementation of a viable program by the following:

1. We are willing to forge partnerships for the protection and development of upstream habitat. Sacramento Valley interests, in partnership with state and federal agencies, have resolved many long-standing endangered species problems by constructing fish screens and siphons and by re-managing water supplies. In addition, several water users have partnered with agencies to deliver water to wildlife refuges, and it has been done at a cost that is far less than what would have been expended without local cooperation. Sacramento Valley interests seek to forge additional partnerships as a means to address Endangered Species Act problems as well as a means to generally enhance wildlife and fishery habitat.

2. We can assist in reducing increased water supply demand through Sacramento Valley water management. Sacramento Valley interests over the past decade have been involved in an intense effort to develop an overall water management program which would allow us to use our existing water supplies to meet not only our existing needs, but also our projected future needs. If successful, we would reduce substantially the amount of additional water that would need to be committed to this area of origin. In order to fully accomplish this, we will need legislative and administrative changes to allow for real water management, including the intra-regional transfer of water for these purposes. In addition, water users need the ability to locally manage both surface water and groundwater resources.

3. We can assist in maximizing the benefits of additional upstream storage. We are willing to partner with state and federal agencies in the development of upstream storage. Not only are we willing to discuss the utilization of our facilities to wheel water for off-stream storage, but we are also willing to combine direct diversions of surface water and groundwater management to maximize the benefits that can be achieved through any upstream storage project.

The full realization of such a partnership can best be accomplished through an integrated water management approach as discussed below.

IV. NCWA Integrated Water Management and Water Supply Program

There is any number of programs and projects that are currently underway that seek to address water management and water supply issues involving, directly or indirectly, the interests of Northern California. For the most part, these programs and projects focus on

portions of the water supply management and development picture with none looking at the broader benefits that can be derived through looking at these issues in a comprehensive and integrated fashion. The NCWA Integrated Water Supply Management and Water Development Program (“Program”) is intended to fill this crucial role.

As noted above, in the past, water supply associated with Northern California has been more or less dealt with in a piecemeal fashion. As a consequence, we have focused on or developed programs that deal with: direct diversions of water; surface water storage; and groundwater extraction and management, but which do not really integrate any of them.

Additionally, we have undertaken the securing of water rights through contracting (either with the USBR or DWR), the appropriation of water (through senior water rights or posed area-of-origin concepts), the extraction of waters from the ground, and the screening of major diversions to protect fish, but we have rarely integrated all of these methodologies. Moreover, we have proceeded in a manner that focuses on the political boundaries associated with existing counties and districts, ignoring the benefits that might be derived through the integrated use of water. Proceeding in this manner has also precluded us from achieving the benefits of water management opportunities that could be achieved by focusing on broader management opportunities that can be available within single political boundaries.

This same piecemeal approach has been adopted or repeated by the USBR, DWR, CALFED and export efforts as they put together programs directed at Northern California.

The instant Program is intended to integrate all of the above in a comprehensive fashion in order to broaden the water supply benefits that can be achieved by maximizing the total water resource mix that is available in Northern California. The goal of the Program is to do this in order to achieve 100 percent of existing and future M&I and agricultural demand within Northern California. Integration should result in no loss of water needed to meet demand within Northern California areas. Integration should result in, and cannot in any way sacrifice, the maintenance of safe yield and aquifer health in all groundwater basins within Northern California.

In developing this Program and its specific components, the following may be helpful:

- The concept involved can be best visualized perhaps as viewing the Sacramento Valley area of origin as a “virtual water district” where water management decisions, including basic operational questions, are made contemplating the total water resource available to the “virtual district.” Just as we know that more can be done with respect to total water management within a district than can be done on a farm-by-farm basis,

better overall management can be accomplished with basin-wide planning than can be done on a district-by-district basis.

- Proceeding in this manner would create incentives for some districts or individuals to optimize their water use through source shifting and other similar means. As an example, by relying on groundwater resources during certain critical months of crucial years, we could provide more surface water for others within the area of origin and/or environmental uses.
- Proceeding in this manner would create incentives for districts or individuals with the ability to do so to take water from Sites reservoir, thereby retaining a cold water pool within Shasta or Oroville for fishery purposes or to provide water for other area-of-origin, environmental or other needs.
- Proceeding in this manner would create incentives for water transfers and exchanges and could facilitate the pre-planned operation of systems within the Sacramento Valley to meet a variety of needs, including agricultural, municipal, industrial and environmental needs within the Sacramento Valley, other environmental needs and even export needs.

The foregoing is, in fact, a fairly limited articulation of the scope of the Program, but it attempts through focusing on the most obvious elements of the Program to demonstrate the multiple benefits that can be achieved through further Program development and implementation.

V. CONCLUSION

As CALFED moves from a planning to an implementation agency, it can choose to either proceed with a regulatory approach that will engender scorn and resistance from Sacramento Valley interests, or it can seek partnerships and cooperation from the Sacramento Valley. Sacramento Valley interests urge CALFED to refrain from pursuing solutions to the Bay-Delta problem that redirect negative impacts to the Sacramento Valley. Instead, we encourage CALFED to recognize the benefits of its proceeding in partnership and cooperation with the Sacramento Valley and thus facilitate the development of an integrated water management and water supply development program for the Sacramento Valley.