

ART ISSUE PAPER

EXPANSION OF THE CALFED WATER QUALITY COMMON PROGRAM TO INCLUDE EVALUATION OF ADDITIONAL SALT MANAGEMENT ALTERNATIVES

Statement of Issue

Should CALFED's Water Quality Common Program be expanded to include evaluation of additional salt management alternatives in the San Joaquin Valley? The principal alternative that is not presently considered in the Water Quality Common Program is out-of-valley disposal through a constructed drain.

Background

The San Joaquin River is dominated by drainage flows from agricultural, urban, industrial, and wetland sources for much of the year. At present drainage from agricultural sources is the most significant drainage source, but drainage from the other sources is increasing. This drainage contains high concentrations of salts and occasionally high concentrations of trace metals. This drainage has a significant negative effect on beneficial uses of the San Joaquin River and the Delta.

The geographic scope of the CALFED Program is defined as the area that contributes to the water quality and habitat problems in the Delta. The drainage problem in the San Joaquin River falls within this scope. Consequently, CALFED has included drainage management measures in the Water Quality Common Program, but the judgement of water quality experts is that these measures will not achieve water quality adequate to protect the beneficial uses of the waters of the San Joaquin River and the southern Delta.

The San Joaquin River drainage component of the CALFED Water Quality Common Program relies on in-valley management of the salt load and controlled releases to the San Joaquin River. In-valley management includes water use efficiency measures, storage, and research into treatment. Water use efficiency measures will reduce the salt load entering the San Joaquin Valley, which over time will reduce the load of salt discharged to the river. However, salt concentrations in the river can rise as a result of conservation measures that reduce surface discharges. Controlled releases to the San Joaquin River maximize the use of the assimilative capacity of the river. In general, controlled releases will not change the load of salt discharged to the river, but they can reduce salt concentrations in the most critical periods. In addition to the water quality benefits associated with the Water Quality Common Program, salt load reductions to the San Joaquin Basin will occur if a conveyance alternative is selected that results in the export of less saline water from the Delta.

The general approach to the drainage problem proposed in the Water Quality Common Program first appeared in the San Joaquin Valley Drainage Program's 1990 Management

Plan (often referred to as the Rainbow Report). The Rainbow Report indicated that implementation of the recommendations would be sufficient to manage the drainage problems for several decades before considering construction of an out-of-valley drainage facility. Currently, the San Joaquin Valley Drainage Implementation Program Management Group, consisting of four state and federal agencies, is reevaluating all in-valley options for drainage management. The review is scheduled to be complete in the spring of 1999.

The principal remaining alternative that is not being evaluated by the CALFED Program is a constructed drain to discharge salts from the San Joaquin River to the Pacific Ocean either directly or through the San Francisco Bay. This alternative is highly politicized, and the following concerns regarding this alternative have been expressed.

A proposal for a constructed drain would create additional opposition to the CALFED Program and reduce the likelihood of its success.

A constructed drain could transfer the problem and potential impacts to other regions, thus violating CALFED's solution principle against redirected significant impacts.

A constructed drain could conflict with the restoration goals of the program because its adverse effects may interfere with the recovery of aquatic resources and ecosystem processes and functions.

One of the purposes of the drain is to address the long-term sustainability of agriculture in the San Joaquin Valley, which is beyond the scope of the CALFED Program.

The salt load in the Tulare Basin is presently not discharged to the San Joaquin River, but if a drain is constructed there will be pressure to extend the drain into the Tulare Basin and an additional salt load would be discharged to the Delta.

Adding a drain at this time would conflict with the current schedule for environmental documentation because it could add several years to the process.

The following arguments in support of a constructed drain have been expressed.

The actions proposed by CALFED will not solve the serious water quality problem caused by drainage flows. A constructed drain is the only feasible, long-term solution to the problem.

In lieu of a constructed drain, the San Joaquin River is being used to transport drainage to the Delta, and this management alternative may be more detrimental to the overall River/Delta/Bay/Ocean complex than a constructed drain.

There are numerous possible permutations for a constructed drain including a drain that does not extend into the Tulare Basin and a drain that discharges to the ocean.

The CEQA/NEPA analysis should be used to determine whether a constructed drain is an environmentally or economically desirable alternative in comparison to other water quality management alternatives, but the constructed drain was excluded from the environmental analysis.

The sustainability of San Joaquin Valley agriculture and groundwater supplies is in question without achieving a reasonable salt balance in the area.

Some CALFED agencies involved in the drainage issues have taken formal positions on the constructed drain. The Central Valley Regional Water Quality Control Board's 1995 Basin Plan and the State Water Resources Control Board's 1995 Bay-Delta Plan state that "Inadequate drainage, and accumulating salts and trace elements are increasingly persistent problems in many parts of the San Joaquin Valley. These drainage problems threaten water quality, agriculture, fish and wildlife, and public health. Ultimately, it will be necessary for the in-basin management of salts to be supplemented by the disposal of salts outside of the San Joaquin Valley for protection of these beneficial uses to continue."

Some water districts within the San Luis Unit of the Central Valley Project have been engaged in litigation with the USBR claiming that the USBR is obligated to provide drainage facilities. This matter was decided in favor of the plaintiffs and is currently before the federal court of appeals. In a related matter, Westlands Water District (WWD), USBR, and the State Water Resources Control Board began preparing a Memorandum of Understanding two years ago whereby WWD and USBR would proceed with environmental documentation needed to evaluate alternatives for a permit for disposal of drainage through a constructed drain. There has been no progress on this MOU in two years, but the USBR has indicated that it would be reinitiating this process.

Options

1. Continue the present course of not considering a constructed drain. Discuss the evaluation of an out-of-valley drainage solution as an activity that could affect the CALFED Program but defer to the outcome of the current legal proceedings.
2. CALFED request that a state/federal commission be formed to prepare CEQA/NEPA documentation on alternative solutions to the San Joaquin Basin drainage problem.
3. Expand the drainage management alternatives in the Water Quality Common Program to include a CEQA/NEPA process for evaluating alternative solutions to the San Joaquin Basin drainage problem.