

## STAFF REPORT

### MANAGEMENT AGENCY AGREEMENT WITH THE UNITED STATES BUREAU OF RECLAMATION ADDRESSING SALINITY IN THE LOWER SAN JOAQUIN RIVER

#### Background

In 2004 the Central Valley Regional Water Quality Control Board (Regional Water Board) adopted a Basin Plan amendment that established total maximum daily loads (TMDLs) for salt and boron in the San Joaquin River, and a plan for implementing those TMDLs. The amendment became effective in July 2006. The goal of the amendment is to achieve compliance with salt and boron water quality objectives without restricting the ability of dischargers to export salt out of the river basin. The water quality objective for salt to be achieved is the one established at Vernalis, located at the downstream end of the river before it enters the delta. The Vernalis objective is set at an electrical conductivity, or EC, of 700  $\mu\text{mhos/cm}$  during the irrigation season and 1,000  $\mu\text{mhos/cm}$  during the non-irrigation season.

The amendment indicates that the Regional Water Board would attempt to enter into a Management Agency Agreement (MAA) with the U.S. Bureau of Reclamation (Reclamation) to address salt imported by Reclamation via the Delta-Mendota Canal (DMC). If the two parties do not enter into an MAA within two years (by the end of July 2008), the implementation plan in the amendment states that the Regional Board would request a Report of Waste Discharge from Reclamation to address salt discharges. The reason for this requirement is that the DMC, a water transmission facility of Reclamation's Central Valley Project, is a major importer of salt into the San Joaquin River basin. On average, Reclamation imports approximately  $\frac{1}{2}$  million tons of salt annually into the basin via the DMC. This is equivalent to about 50% of the salt load that passes Vernalis.

The amendment holds Reclamation accountable for the DMC salt load by prescribing a DMC salt load allocation. This is a formulaic allocation that is based on the volume of water imported via the DMC. The amendment provides Reclamation with two options to fulfill its load allocation requirements under an MAA. The first compliance option is to import a volume of salt that does not exceed their load allocation. The second option is to provide mitigation and/or dilution flows equivalent to imported salt loads in excess of the DMC allocation. Compliance is required within 8 years from the effective date of the amendment (July 28, 2014) during wet through dry years, and within 12 years from the effective date of the amendment (July 28, 2018) during critical years. The basic purpose of the MAA is to describe and formalize into an agreement the mechanisms by which Reclamation would fulfill its load allocation requirements, and how compliance would be monitored, reported, and evaluated.

### **Reclamation's Plan for Addressing Salinity**

Because the formula for determining Reclamation's load allocation makes it impossible for them to meet their allocation without changing their water source, the only feasible approach for complying with the amendment under current circumstances is for Reclamation to provide mitigation and/or dilution flow to offset its excess load. A preliminary analysis conducted by Reclamation of the mitigation and dilution flow benefits of its current projects and activities determined that they are not adequate to offset the excess DMC salt load. Therefore, in order to enhance their mitigation efforts, Reclamation has proposed to initiate the development of a comprehensive real-time management program for the San Joaquin River. Real-time management is a mechanism for coordinating the discharge of saline waste to the river from many sources (e.g., wetlands, irrigated agriculture) so that saline waste discharges are made only when the river has the assimilative capacity to accommodate those releases without violating the salt objective for the river. The amendment encourages real-time management as a mechanism for achieving the control program goal of maintaining compliance with salt and boron water quality objectives while at the same time, exporting as much salt from the basin as possible. Real-time water quality management is seen as a potentially valuable tool for managing salinity for the protection of both surface water and groundwater in the river basin.

Reclamation has prepared a salinity management plan (plan) that identifies and describes those projects and activities that may qualify for offset credit under the amendment. The plan identifies both current projects and activities, and their effort to develop a real-time management program for the river. Although it is unclear at this point if or to what extent all the elements identified in the plan would qualify for load off-set credits, the MAA provides for an initial two-year period, during which an evaluation of the benefits of each element would be conducted.

### **Summary of the Management Agency Agreement**

Because of the complexity of the issues involved, the difficulty in evaluating the salt-load offset benefits of the various elements of Reclamation's plan, and the uncertainty regarding the potential for establishing a real-time water quality program for the river, a phased approach has been proposed. The first phase, which would consist of two years, would be an initial monitoring, quantification, and evaluation period. During this time, methodologies for evaluating the salt-load offset benefits would be developed and Reclamation would provide the Regional Board with the information and data. In addition, the progress toward establishing a real-time management program would be monitored. At the end of this initial phase, the Regional Board would conduct a thorough evaluation of Reclamation's plan and progress, and make a decision either to continue with the MAA process or terminate the MAA and pursue the more traditional regulatory approach of Waste Discharge Requirements.

Under this agreement, Reclamation would agree to:

- meet the MAA requirements prescribed in the Basin Plan Amendment
- implement its plan

- offset at least 15% of its excess DMC load by 2010, and
- submit certain plans and reports that would facilitate the Regional Board's evaluation of the plan's effectiveness.

The Regional Board would agree to:

- accept Reclamation's plan as a way of working toward achieving compliance with their load allocation requirements
- evaluate the effectiveness of the plan in providing the required salt load offset benefits, and
- have staff make regular reports at Regional Board meetings on Reclamation's performance and progress.

Either party could terminate the agreement upon 90 days written notification of the other party. If either party terminates the agreement, the Basin Plan calls for the Regional Board to request submittal of a Report of Waste Discharge and begin the more traditional process for regulating waste discharges.

### **Public Comments**

Reclamation requested that the initial process of developing the MAA involve only the two parties to the agreement, without participation by other parties. It was not until April 30, 2008 that Reclamation's draft salinity management plan and a draft MAA were released for public review and comment. On May 20th, a public informational meeting was held to discuss the draft plan and MAA and to answer questions. Subsequently, written comments were submitted on behalf of the following:

- San Joaquin River Group Authority
- United States Fish & Wildlife Service
- San Joaquin River Exchange Contractors Water Authority
- California Department of Water Resources
- County of San Joaquin and San Joaquin County Flood Control and Water Conservation District
- South Delta Water Agency
- Stockton East Water District

In an attempt to clarify certain issues and to identify more specific suggestions, all those who submitted written comments were invited to participate in follow-up conference calls with Regional Board and Reclamation staff. In late June, all except United States Fish & Wildlife Service participated in conference calls.

In general, the comments received addressed both the MAA and Reclamation's plan. Staff has prepared written responses to comments regarding the MAA. A summary of comments received and staff's response to those comments are provided in Attachment A. Because many of the comments were similar in nature, we have grouped comments into general categories and prepared responses accordingly.

Reclamation was invited to provide written responses to comments on their salinity management plan but did not do so.

It is important to note that there was not enough time between the receipt of comments and the preparation of this staff report to discuss proposed changes with Reclamation. Discussions with Reclamation and other interested parties are expected to continue up to the time of the Board meeting and these discussions may result in late revisions.

**Recommendation**

Staff recommends that the Regional Board approve the proposed MAA and authorize the Executive Officer to sign the agreement on its behalf.

July 2008