



United States Department of the Interior

BUREAU OF RECLAMATION
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Mr. Patrick Morris
Senior Water Quality Control Engineer
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive #200
Rancho Cordova, California 95670

Subject: Comments on the Sacramento – San Joaquin Delta Estuary TMDL for Methylmercury Staff Report (Draft Report for Scientific Peer Review), dated June 2006

Dear Mr. Morris:

Enclosed for your use are our comments on the subject report. Reclamation recognizes this report is preliminary and appreciates the opportunity to review and comment on it. Our main concerns are summarized as follows:

- Reclamation must operate its facilities in accordance with the terms and conditions of its water permits and licenses. To operate the Central Valley Project (CVP) in a manner to meet the methylmercury standard may cause it to violate these terms and conditions.
- Reclamation must conduct flood control operations in accordance with the mandates of other agencies such as the U.S. Army Corps of Engineers, and does not have the discretion to deviate from these criteria.
- Reclamation operates the CVP to provide fishery flows in accordance with the Central Valley Project Improvement Act. These flows are determined by other agencies such as the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

We look forward to working with you toward finding viable solutions regarding these concerns. If you have any questions, please feel free to contact Lee Mao, Regional Water Quality Coordinator, at 916-978-5089, or Paul Fujitani, Chief, Water Operations, at 916-979-2197.

Sincerely,

Alan R. Candlish
Regional Planning Officer

Enclosure

*Comments on the Sacramento – San Joaquin Delta Estuary TMDL for Methylmercury
Staff Report (Draft Report for Scientific Peer Review)
June 2006*

1. Characterization and Control Studies

Phase 1 of the total maximum daily load (TMDL) requires responsible parties to: (a) evaluate methyl and total mercury concentrations and loads in source and receiving waters and discharges; (b) identify variables that control methylmercury production; and (c) propose management practices and implementation schedules to reduce methylmercury loads and concentrations by December 2012.

The time schedule to complete Phase 1 is very optimistic with regard to the level of effort required and available resources. Reclamation does not have the technical expertise to perform such studies nor the ability to propose potential management strategies to reduce methylmercury loads. In addition, Reclamation does not have Federal appropriations to conduct the studies described in Phase 1 of the TMDL, and some of these studies may require Congressional authorization.

With regard to the sulfate portion of the study, how definitive is the linkage between sulfate concentration and methylmercury production? Your analysis states there is a connection between sulfate concentration and methylmercury production. However, your data indicates the Sacramento River Basin has a lower sulfate concentration than the San Joaquin River Basin, but the methylmercury concentration is higher in the Sacramento River Basin.

A related question is how does the X2 position relate to sulfate concentration and methylmercury production? If seawater has a sulfate concentration of approximately 800 ppm, methylmercury in the Bay should be correspondingly high.

2. Flood Conveyance Flows, Water Management Storage, and Storage

The TMDL states that changes in flood conveyance, water delivery to, diversions from, or storage in the Delta, and salinity standards or flow management practices used to maintain current salinity standards could affect methyl and total mercury loading in the Delta.

However, the Central Valley Project is operated to meet numerous project purposes and permit requirements, including water supply, flood control, navigation, protection of fish and wildlife, and power generation. These project purposes and permit requirements either limit or eliminate operational flexibility, as the following examples illustrate:

- a. Our flood operations criteria for Folsom, Shasta, Friant, and New Melones Reservoirs were established by the U.S. Army Corps of Engineers. Altering the level of releases for non-flood related purposes, such as Delta water quality, while the reservoir has encroached into the flood storage pool would be difficult to justify and could be seen as endangering the public as well as the integrity of the dam.

- b. The fishery agencies determine when and what volume of releases they would like to have for instream flow benefits. The Central Valley Project Improvement Act (CVPIA), 3406(b)(2) authorizes the US Fish and Wildlife Service to dedicate and manage up to 800 taf of project yield for anadromous fishery restoration. To a large extent, fishery restoration actions usually take the form of increased instream releases. The California Department of Fish and Game have minimum instream release requirements on both the American River and the Stanislaus River.
- c. On the San Joaquin River, Reclamation is required to make releases from some source (currently New Melones Reservoir) to meet the Vernalis salinity requirements and Vernalis flow objectives. These releases are required under SWRCB D-1641 and are non-negotiable.
- d. In regard to salinity control and the X2 standard, D-1641 mandates Reclamation meet the X2 standard as a condition of its permit.
- e. While power production is an incidental benefit to water operations (e.g. Reclamation operates to our water and permit obligations; power generation is an incidental benefit), varying the release patterns from our reservoirs could have an adverse effect on power revenues and a corresponding energy supply impact to the State of California.

Reclamation may only have a small impact on flows entering the Yolo Bypass and other floodways. A large percentage of the flow in the system under winter high-flow conditions originates from other non-project streams and unregulated flows. These floodways also serve an important role in protecting other lands and property.

3. *Agricultural Lands Wetlands*

The TDML control program applies to agricultural lands and wetlands in the Delta and within 30 miles of the Delta. Although Reclamation does not own or operate any wetlands, Reclamation is obligated under CVPIA to convey and provide water to wildlife refuges. The volume and timing of these deliveries are determined by the refuge managers.

Reclamation believes the development of wetlands in the Delta is an important component of CALFED's Ecosystem Restoration Program. The proposed control program would appear to prevent or create additional obstacles for wetlands restoration.

4. *Miscellaneous Comments*

Page 15, section 3.2.1: The first sentence indicates that the "recreational fishery (REC1, COMM)" is among the impaired uses in the Delta. COMM is the designator for commercial fisheries and should be separate from recreational fisheries.

Page 110 (Adobe page 145): Section 6.5.5 indicates that Sec. 401 water quality certification is required for Corps of Engineers Dredge and Fill Permits (Section 404 Permits). Actually, Section 401 certification may be required for any Federal permit or license that may result in the discharge of pollutants to navigable waters of the U.S., not just under Section 404.