UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

July 7, 2008

Don Reck
U.S. Bureau of Reclamation
16349 Shasta Dam Blvd.
Shasta Lake, CA 96019

Subject: Final Environmental Impact Statement (FEIS) Fish Passage Improvement Project at the Red Bluff Diversion Dam, Tehama County, CA (CEQ# 20080198)

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The Tehama-Colusa Canal Authority (TCCA) and US Bureau of Reclamation (Bureau) propose to implement modifications to Red Bluff Diversion Dam (RBDD) to reduce or minimize the impacts of the RBDD on upstream and downstream migration of juvenile and adult anadromous fish, while improving the reliability of agricultural water supply in the Tehama-Colusa and Corning Canal systems.

The Proposed Action would include a new pumping plant with a fish screen with an initial installed pumping capacity of 2,180 cubic feet per second (cfs) and a footprint that would allow expansion to 2,500 cfs. There would be no increase in water diversions at this time. The current 4-month gates-in operation (May 15 thru September 15) would continue until the new pumping plant is completed, at which time, operation would switch to a 2-month gates-in period from July 1 to September 1.

We rated the Draft Environmental Impact Statement (DEIS) Environmental Concerns – Insufficient Information (EC-2) due to concerns regarding hazardous materials, air quality, and water quality and the need for additional clarifying information regarding the proposed pumping capacity. Based upon our review of the FEIS and Response to Comments, we continue to have concerns and questions regarding water quality, the basis for the proposed pumping capacity, and adaptation to climate change. We recommend the Record of Decision include a commitment to a short-term post-project groundwater monitoring plan, additional information on potential river temperature effects, the rational for the proposed pumping capacity, and discussion of potential impacts of climate change on the proposed action. Our detailed comments are enclosed.

EPA commends the joint goals of improved fish passage and agricultural water supply reliability. The environmental documentation demonstrates that the Gates-Out or 2-month gates-in alternatives best meet the purpose and need of improving fish passage, while improving the reliability of agricultural water supply in the Tehama-Colusa and Corning Canal systems. The Fishtastic! Sensitivity Analysis and updated data in the FEIS on average daily water temperatures at RBDD support the conclusion that gates-out operations would likely provide the maximum benefits for fish and water supply reliability.

We acknowledge the potential adverse recreation and economic impacts which could occur with the loss of Lake Red Bluff or reduction of its presence from four months to two months. Extensive mitigation measures are provided in the DEIS and FEIS that would help to offset these impacts. We recommend continued consideration of future gates-out operation of the RBDD as potential recreation and economic effects are addressed through a transition from a lake-dependent to river-focused recreation, short gates-in periods to accommodate recreation events, and other mitigation measures.

We appreciate the opportunity to review this FEIS. Please send one copy of the Record of Decision to the address above (mail code: CED-2). If you have any questions, please call me at 415-972-3988 or Laura Fujii, of my staff, at 415-972-3852, or at fujii.laura@epa.gov.

Sincerely,

/s/

Nova Blazej, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosure: Detailed Comments

cc: Jeff Sutton, Tehama-Colusa Canal Authority

EPA DETAILED COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE FISH PASSAGE IMPROVEMENT PROJECT AT RED BLUFF DIVERSION DAM, TEHAMA COUNTY, CA., JULY 7, 2008

Water Quality

Commit to a short-term post-project groundwater monitoring plan. EPA remains concerned with potential effects of the rise of groundwater, caused by creation of Lake Red Bluff, in the unlined Class III landfill owned and operated by the Pactiv Corporation. We acknowledge the construction of the pumping facility and fish screen may isolate groundwater at the Mill Site from the Sacramento River by forming a barrier between shallow groundwater and the river. Post-project groundwater monitoring would help confirm this anticipated benefit.

> ***Recommendation:***
> We recommend the Record of Decision (ROD) include a commitment to short-term post-project groundwater monitoring to confirm and validate the anticipated isolation of the shallow groundwater at the Class III landfill from the Sacramento River.

Describe potential river temperature effects of continued periods of water impoundment at RBDD. The FEIS provides additional data indicating that Red Bluff Diversion Dam (RBDD) has a warming effect on the Sacramento River. While the causes and timing of these temperature effects are complex, data indicate that gates-in operations can have significant adverse water temperature effects (Thematic Response No. 3 Water Temperature Effects of Gate Operations). The proposed action would reduce but not eliminate the gates-in periods.

> ***Recommendation:***
> We recommend the ROD include an evaluation of the potential effects to river temperatures of continued periods of water impoundment at the RBDD.

Pumping Capacity

Provide the rational for the proposed pumping capacity. We continue to have questions regarding the basis for the proposed pumping capacity of the new pumping facility. The DEIS alternatives proposed increased pumping capacity to 2,000 cubic feet per second (cfs) for the 2-month gates-in alternatives and a maximum proposed pumping of 2,500 cfs under the gates-out alternative. The current proposed action would increase pumping capacity to 2,180 cfs with an ultimate pumping capacity of 2,500 cfs. The basis for the proposed pumping capacity is not clear, especially given the lack of information on the relationship between the proposed pumping capacity, water service contract water allocations, allowable maximum diversions, maximum-capacity diversions, and maximum-volume diversions.

> ***Recommendation:***
> We recommend the ROD describe the rational for the proposed pumping capacity. The ROD should also describe the relationship between the pumping capacity, water service contract water allocations, allowable maximum diversions,

maximum-capacity diversions, and maximum-volume diversions. Providing the definitions for these terms would help in establishing a clear understanding of the relationship between them.

Climate Change

Provide a discussion of potential impacts of climate change on the proposed action and adaptation measures. Appendix A of the FEIS provides a climate change impacts analysis which describes the environmental setting, regulatory background, and analysis of the project's potential impacts on global climate change. Given the project's relatively small emissions the analysis concludes that further evaluation is unwarranted. A change in climate or increased temperatures could reduce the Sierra Nevada's snowpack, cause a rise in sea level, and have a profound effect on California's water supply system and its management.

Recommendation:

We recommend the ROD include a short discussion of potential impacts of climate change on the proposed action and possible adaptation measures to minimize these impacts. For instance, one approach to the possible increased variability in our water supply would be implementation of a comprehensive, integrated approach that includes conservation, efficiency and reuse.

Recreation and Economic Effects

Consider future gates-out operations once recreation and economic effects from loss of Lake Red Bluff are addressed. The environmental documentation demonstrates that the Gates-Out or 2-month gates-in alternatives best meet the purpose and need of improving fish passage, while improving the reliability of agricultural water supply in the Tehama-Colusa and Corning Canal systems. The Fishtastic! Sensitivity Analysis and updated data in the FEIS on average daily water temperatures at RBDD support the conclusion that gates-out operations would likely provide the maximum benefits for fish and water supply reliability. While we acknowledge the potential adverse recreation and economic impacts which could occur with the loss of Lake Red Bluff or reduction of its presence from four months to two months, extensive mitigation measures are described that would help to offset these impacts.

Recommendation:

We recommend continued consideration of future gates-out operation of the RBDD once recreation and economic effects are addressed through a transition from a lake-dependent to river-focused recreation, short gates-in periods to accommodate recreation events, and other mitigation measures.