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

JUL 02 2012

Mr. Brad Hubbard
Bureau of Reclamation
2800 Cottage Way, MP-410
Sacramento, California 95825

Subject: Draft Environmental Impact Statement for the Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority 2014 to 2038, California (CEQ# 20120145)

Dear Mr. Hubbard:

The Environmental Protection Agency has reviewed the Draft Environmental Impact Statement (EIS) for the above referenced document. Our review is pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA submitted scoping comments on the proposed project on July 26, 2011. We commend the Bureau of Reclamation and the Exchange Contractors for proposing to provide water for transfer to improve water supply reliability for areas served by the Central Valley Project. If carefully implemented, this purpose can be carried out while also attending to other issues in the region, notably management of agricultural drainage and water quality to protect beneficial uses. The San Joaquin Basin faces interrelated problems of short water supplies, instream flow deficits, and water quality impairments. For this reason, actions such as the transfer proposal, which could alter the distribution, timing, and quality of water in the Basin, must be carefully designed and coordinated with other water quality, quantity, and drainage programs. Provided that these concerns are adequately taken into account, we support water management practices that increase the reliability of scarce existing water supplies and provide for flexibility in the allocation, management, and use of the water supply.

We note that the Draft EIS provides limited information about water quality issues that the Exchange Contractors and potential in-basin transfer recipients are trying to address and which could affect the transfer proposal. The Final EIS should discuss the relationship between the proposed transfer program and measures currently developed for water quality improvement in the San Joaquin Valley, such as the salt/boron Total Maximum Daily Load (TMDL) program, management of agricultural drainage, and implementation of the Regional Water Quality Control Board irrigated lands conditional waiver requirements. The Final EIS should also explain any potential direct and indirect effects to wetlands from conservation measures (e.g., modification of tailwater recovery ponds and construction of pump stations).

Additionally, given that land fallowing is one source of transfer water, we encourage the Final EIS to explore ways in which fallowing could be encouraged in areas near the San Joaquin River where the direct and indirect effects of San Joaquin River flows, such as an increase in shallow groundwater, have conflicted with farming practices. The water transfer program should seek to avoid any adverse effects on the River or on activities and plans associated with San Joaquin River restoration.

Based on our review of the Draft EIS, we have rated the Proposed Action as Environmental Concerns - Insufficient Information (EC-2). This rating reflects the need for full disclosure of San Joaquin Valley water quality, agricultural drainage, irrigated lands conditional waivers, and restoration issues; as well as our concerns regarding the potential impacts of the proposed project on efforts to resolve these issues, and our concerns regarding potential impacts to wetlands from the proposed conservation measures. Please see the enclosed Summary of EPA Rating Definitions for a description of the rating system. Further discussion of our concerns is provided in the enclosed Detailed Comments.

EPA appreciates the opportunity to provide comments for this project. When the Final EIS is released for public review, please send one hard copy and one CD to the address above (Mail Code: CED-2). If you have any questions, please contact me at (415) 972-3521 or contact Stephanie Skophammer, the lead reviewer for this project. Stephanie can be reached at (415) 972-3098 or skophammer.stephanie@epa.gov.

Sincerely,

Kathleen Martyn Goforth, Manager
Environmental Review Office (CED-2)
Communities and Ecosystems Division

Enclosures: Summary of EPA Rating Definitions
Detailed Comments

cc: Dan Russell, US Fish and Wildlife Service
Joy Winckel, US Fish and Wildlife Service
Rudy Schnagl, Central Valley Regional Water Quality Control Board
Joann White, San Joaquin River Exchange Contractors Water Authority

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

EPA DETAILED COMMENTS FOR THE DRAFT EIS WATER TRANSFER PROGRAM FOR THE SAN JOAQUIN RIVER EXCHANGE CONTRACTORS WATER AUTHORITY 2014-2038, CA, JULY 3, 2012

Relationship of the Proposed Action to Ongoing Efforts to Improve Water Quality

Reaches of the San Joaquin River and tributaries are listed as "impaired" pursuant to Section 303(d) of the Clean Water Act for a number of pollutants. A total maximum daily load (TMDL) has been developed by the Regional Water Quality Control Board (Regional Board) for selenium, salt/boron, low dissolved oxygen, and pesticides. These efforts are complemented by the Regional Board's Conditional Waiver Program (updated March 2012) for managing discharges from irrigated lands. Implementation of monitoring and actions to manage salinity and other pollutants is likely to influence the Exchange Contractors' conservation activities, regardless of the transfer program, although this is not discussed in the Draft EIS. Improving water quality and flows along the San Joaquin River system is a complex problem. Shifts in the timing and intensity of water use, improved conjunctive use of surface and ground water, improved coordination and routing of existing supplies, and water conservation can contribute to solutions.

> ***Recommendations:***
> The Final EIS should address the potential relationships, including any dependencies, between the water transfer program and efforts to achieve water quality goals for the San Joaquin River, including the San Joaquin River Restoration Program, TMDLs and the irrigated lands conditional waiver program.
>
> The Final EIS should disclose actions that the Exchange Contractors have taken (existing conditions baseline) and might expect to take (under future "no project" conditions) to manage their agricultural drainage water. For example, explain whether activities pursuant to the Regional Board water quality programs or drainage management programs would be undertaken in the future, even if the transfer program is not pursued. Discuss possible constraints and issues associated with discharges of agricultural drainage.

Impacts on Salinity and Other Constituents in Receiving Waters

Elements of the transfer program involving groundwater pumping and tailwater recovery may have the potential to alter the quality of water available for irrigated lands, including refuges that receive water by means of the Exchange Contractor conveyance system. For example, the Draft EIS provides a brief description of groundwater water quality (p.5-6), mentioning areas of high salinity, but does not contain enough detail for the reader to understand whether, in blending pumped groundwater with surface supplies, there is potential to introduce additional loads of salts, particularly into water which is transferred to other users in the Basin, such as the San Joaquin Valley refuges (refuges).

Achieving a salt balance that safeguards continued agricultural productivity in the San Joaquin basin is a challenging problem which is being addressed by a number of parties at the local, state, and federal levels. While the transfer proposal could help the Exchange Contractors manage salinity in their area, it is important to ensure that this is not at the expense of transferees, such as the refuges.

We note that the Mendota Pool is listed by the State Water Resources Control Board as "impaired" for selenium associated with agricultural irrigation, agricultural return flows, and groundwater withdrawals [CWA 303(d) list, October 2011], although this is not mentioned in the Draft EIS.

> ***Recommendation:***
> The evaluation of potential water quality impacts of increased inputs of groundwater and recovered tail water should be expanded in the Final EIS. Explain whether the proposed project could increase the proportion of tailwater and groundwater in water reaching refuges (as transfers, or indirectly), streams, the San Joaquin River, or other water users, and, if so, what impact(s) that would be expected to have on the quality of those receiving waters.
>
> The Final EIS should discuss flows in and out of the Mendota Pool as they relate to the water transfer program, and current efforts regarding the Mendota Pool bypass and Reach 2B improvements.

Relationship to Operation of New Melones Dam

The environmental effects of the water transfer program depend, in part, on the relationship between the disposition of transfer water, San Joaquin River flows and water quality, and New Melones Reservoir operations (e.g p. 4-27). For instance, in some transfer scenarios, development of transfer water via reuse of tailwater reduces agricultural return flows to the San Joaquin River, reducing overall San Joaquin River flows that could trigger a release from New Melones Reservoir, reducing the storage level of New Melones Reservoir. The level of storage in New Melones Reservoir is a key component of the Central Valley Project (CVP) because water releases from this reservoir are used to meet flow and water quality requirements at the Vernalis compliance point (p. 4-27-4-28).

> ***Recommendations:***
> The Final EIS should include a diagram and supporting text to describe the operational relationship between the transfer water, San Joaquin River water quality and flows, and the operation of New Melones Reservoir. It should discuss any impacts that the Exchange Program could have on the availability of sufficient water releases from New Melones Reservoir to ensure that downstream flow requirements, water supply needs, and water quality standards at Vernalis are met.

Effects on Mud and Salt Slough, and Upstream of Vernalis

The evaluation of effects focuses on State Water Resources Control Board and CALFED requirements such as the Vernalis flow and salinity objectives, and "Delta supplies" (inflows from the San Joaquin River) under the San Joaquin River Restoration Program (p. 4-8). Potential water quality and flow impacts to other beneficial uses, such as those above and within Mud and Salt Sloughs, and upstream of Vernalis are not addressed.

> ***Recommendation:***
> The Final EIS should provide more information on conditions in, and potential impacts to, reaches of the river above Mud and Salt sloughs, and within those sloughs.

Tailwater Recovery

The methods for developing up to 150,000 acre-feet of water per year involve tailwater recapture, conserved water land fallowing, and potentially deep percolation (p. 2-18). The Draft EIS does not provide sufficient information regarding the elements of the Exchange Contractor's tailwater recapture program to support an assessment of its likely impacts and effectiveness (p. 2-18).

> ***Recommendation:***
> The Final EIS should provide additional information on the features of the tailwater recovery program, including technologies used, implementation sites, and connections to surface and groundwater effects.

Clean Water Act Section 404

Although the Draft EIS describes Executive Order 11990 Protection of Wetlands, it does not describe the requirements of, or compliance with, the Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the Clean Water Act (CWA). Proposed water conservation measures, such as lining of canals, modification of tailwater ponds, and construction of groundwater pumps, could trigger the need for a Section 404 permit.

> ***Recommendation:***
> The Final EIS should clarify whether the conservation actions being considered will require a Section 404 permit. If yes, the Final EIS should address the 404(b)(1) Guidelines and fully disclose compliance with these requirements.

Allocation of Transfer Water

The proposed action would transfer up to 150,000 acre-feet/year (af/yr) of water from the San Joaquin River Exchange Contractors to CVP water service contractors, municipal and industrial (M&I) contractors, and San Joaquin Valley wildlife refuges. Included among the potential recipients are lands on the west side of San Joaquin Valley which may have problems with agricultural drainage and high soil salinity. Some of these lands are also sources of selenium and boron, which are San Joaquin River water quality contaminants of significant concern.

> ***Recommendations:***
> The Final EIS should clearly describe the process and criteria for determining allocations of transfer water. For example, describe who makes the decision (Bureau of Reclamation or Exchange Contractors or both), and how and when the decision is made to allocate transfer water to the refuges, agriculture, and M&I contractors. Describe the criteria for determining the proportion of annual allocation to each type of recipient.
>
> The use of transfer water should maximize beneficial uses and minimize adverse effects of the transfer. The Final EIS should explain whether there are procedures in place to

preclude allocation of transfer water to lands that contribute to agricultural drainage problems or selenium and boron water quality problems.

Given that land fallowing is one source of transfer water, describe the ways in which fallowing could be encouraged in areas near the San Joaquin River where the direct and indirect effects of San Joaquin River flows have conflicted with farming practices.

Sources of Water for Refuges

Suitable water quality must be a component of refuge supplies. We observe that the Draft EIS future "no project" conditions assume that substitute refuge supplies would be purchased. However, there is no information regarding potential sources or quality of these alternative supplies.

Recommendation:
Given the significant beneficial effects of transfer water for the wildlife refuges, the Final EIS should consider permanent dedication of a portion of transfer water of suitable quality to Level 4 water for refuges.

Miscellaneous

Pages 1-12 through 2-2 are missing from the Draft EIS.