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

August 13, 2004

Mr. Bob Eckart
Bureau of Reclamation
MP-150
2800 Cottage Way
Sacramento, CA. 95825

Subject: Draft Environmental Impact Statement for the Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority 2005 - 2014 (CEQ# 040278)

Dear Mr. Eckart:

The 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 Section 309 of the Clean Air Act. Our detailed comments are enclosed.

We commend the Bureau of Reclamation (BOR) and Exchange Contractors for proposing to provide water for transfer to improve water supply reliability for areas served by the Central Valley Project (CVP). 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. In the San Joaquin Basin, because of the interrelated problems of short water supplies, instream flow deficits, and water quality impairments; actions such as the transfer proposal which could alter the distribution, timing, and quality of water in the Basin, need careful design and coordination with other water quality, quantity, and drainage programs. Providing 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 DEIS provides limited information about water quality issues which the Exchange Contractors and potential in-basin transfer recipients are trying to address and which could affect the transfer proposal. The Final EIS (FEIS) should discuss the relationship between the proposed transfer program and measures currently underway in the San Joaquin Valley for water quality improvement, 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 FEIS should also explain if there are potential direct and indirect effects to wetlands from conservation measures (e.g., modification of tailwater recovery ponds and construction of pump stations). Although the

DEIS implies that the CVP purposes for which transfer water is being considered exclude enhancing San Joaquin River instream flows, the FEIS should identify current studies and plans in which BOR is involved or is aware of relating to restoration of the San Joaquin River. Finally, the FEIS should provide additional information on cumulative impacts of past and present water transfer programs and land retirement programs.

Because of the need for full disclosure of San Joaquin Valley water quality, agricultural drainage, irrigated lands conditional waivers, and restoration issues; concerns with impacts to efforts to resolve these issues, and potential impacts to wetlands from conservation measures, we have rated the Proposed Action as Environmental Concerns - Insufficient Information (EC-2). Please see the enclosed Rating Factors for a description of EPA's rating system.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send two copies to the address above (mail code: CMD-2). If you have any questions, please contact me or Laura Fujii, the lead reviewer for this project. Laura can be reached at 415-972-3852 or fujii.laura@epa.gov.

Sincerely,

/s/

Lisa B. Hanf, Manager
Federal Activities Office
Cross Media Division

Enclosures:
Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Dale Garrison, US Fish and Wildlife Service
John Brooks, US Fish and Wildlife Service
Dennis Wescott, Central Valley Regional Water Quality Control Board
Joann Toscano, San Joaquin River Exchange Contractors Water Authority

EPA DETAILED COMMENTS FOR THE DEIS WATER TRANSFER PROGRAM FOR THE SAN JOAQUIN RIVER EXCHANGE CONTRACTORS WATER AUTHORITY 2005-2014, SAN JOAQUIN VALLEY, CA, AUGUST 13, 2004

Water Resources

1. 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 monthly load (TMML) reduction program is in place for selenium, and high priority total maximum daily loads (TMDLs) are now being developed by the Regional Water Quality Control Board (Regional Board) for salt/boron, low dissolved oxygen, and pesticides. These efforts are complemented by the Regional Board's Conditional Waiver Program for managing discharges from irrigated lands, which is currently focused on putting monitoring in place. 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 environmental impact statement (DEIS). 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 (FEIS) should address the potential relationships between the water transfer program and water quality goals for the San Joaquin River (River), including TMML/TMDLs and the irrigated lands conditional waiver program.

The FEIS should disclose actions which 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 if 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 water.

Explain whether implementation actions for water quality and drainage management actions (e.g., TMMLs and Conditional Waiver Program) are directly linked to, and dependent on, the transfer program.

2. Elements of the transfer program involving groundwater pumping and tailwater and spill recovery may have the potential to alter the quality of water available for irrigated lands, including refuges which receive water by means of the Exchange Contractor conveyance system. For example, the DEIS provides a brief description of groundwater water quality, mentioning areas of high salinity, but does not contain enough detail 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 which 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. The Regional Water Quality Control Board's work on a TMDL for salinity/boron has identified excess salt/boron loading in the Basin, although an implementation program to address this problem has not yet been fully developed. While the transfer proposal could help the Exchange Contractors manage salinity in their area, it could be at the expense of transferees such as the refuges. The issue of high salinity levels in refuge supplies and difficulties this poses for refuge salinity management was raised by the Field Supervisor for the Fish and Wildlife Service, Wayne White, in a letter to Robert Schneider, Central Valley Regional Water Quality Control Board this year (January 20, 2004).

We note also 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, July 2003], although this is not mentioned in the DEIS. Providing wetlands with low selenium (maximum 2 ppb) waters is a priority of the US Fish and Wildlife Service.

Recommendation:
The evaluation of potential water quality impacts of increased inputs of groundwater and recovered tail water should be expanded in the FEIS. 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.

3. Water quality monitoring specific to this project, as well as monitoring already conducted by the lead agencies and others, is not discussed in the DEIS. Environmental consequences on surface water resources states that negative effects would occur, but will be mitigable to minimal effects with transfer approval process measures (e.g., Table 4-63, Summary of Effects of Alternative C, pg. 4-81). Existing surface and ground water quality of the region is of concern. Any action which could potentially affect water quality and efforts to improve it, should be carefully monitored Water quality monitoring is also important to validate assumptions of potential effects of the water transfer program.

Recommendations:
The FEIS should describe the monitoring in place or planned to track potential effects of the transfer program and support the finding that negative effects of the action are mitigable. The monitoring program should include monitoring of ground water quality, and monitoring of surface waters, in addition to the Vernalis compliance point.

Provide information on water quality monitoring that will be used to track changes in salinity, boron, and selenium concentrations in "blended" supplies used within the Exchange Contractor area and transferred/conveyed to other users.

4. The environmental effects of the water transfer program depends, 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., pgs 4-22 to 4-26). 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 CVP because water releases from this reservoir are used to meet flow and water quality requirements at the Vernalis compliance point.

Recommendations:
The FEIS 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.

The FEIS should also disclose the ability of New Melones Reservoir to meet water quality standards, flow requirements, and water supply needs, including a short description of past experience with New Melones Reservoir operations.

5. The evaluation of effects selectively 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). Potential water quality and flow impacts to other beneficial uses, such as those above and within Mud and Salt Sloughs, and upstream of Vernalis should also be addressed.

Recommendation:
The FEIS should provide more information on conditions in, and potential impacts to, reaches of the river above and within Mud and Salt sloughs. Additionally, explain whether transfers to parties downstream of the Mendota Pool might be conveyed through the River channel reaches where surface flows are linked to operation of the Mendota Pool.

6. Although the DEIS 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 pursuant to the above 404(b)(1) Guidelines.

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

Allocation of Transfer Water

1. The proposed action would transfer up to 130,000 acre-feet/year (af/yr) of water from the San Joaquin River Exchange Contractors to Central Valley Project (CVP) water service contractors, municipal and industrial (M&I) contractors, and San Joaquin Valley wildlife refuges. Included 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 the sources of selenium and boron, which are San Joaquin River water quality contaminants of significant concern. CVP water should not be committed to areas with serious drainage problems or lands that contribute to the selenium and boron water quality problem (notably, portions of the west side San Joaquin Valley).

Recommendations:
The FEIS 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 FEIS 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.

2. The DEIS states that allocation of transfer water to San Joaquin Valley wildlife refuges for Level 4 refuge water will provide significant beneficial effects (pg. 6-21). Suitable water quality must be a component of refuge supplies (see Water Resources Comment #2). We observe that the DEIS 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 FEIS should consider permanent dedication of a portion of transfer water of suitable quality to Level 4 water for refuges.

3. The DEIS states that water transfers out-of-basin are subject to the reduction in consumptive use/irretrievable loss criteria of the CVPIA, the 1993 Transfer Guidelines, and State law (pg. 2-18). However, these requirements are not well defined. As a result, it is difficult to determine the effect these criteria have on the allocation of transferred water.

Recommendation:

An explanation of "reduction in consumptive use" and "irretrievable loss" criteria should be provided in the FEIS, to supplement the quote provided from the *Interim Guidelines for Implementation of Water Transfers*. It would be helpful to explain the purpose of these criteria; discuss how "reduction in consumptive use" and "irretrievable loss" are defined and measured; and explain how these criteria affect the quantities of water that can be transferred.

4. EPA scoping comments regarding funding, recommendations of the Environmental Water Account Science Review Panel, and impacts on the Environmental Water Account, are not addressed in the DEIS. We recommend the FEIS address these comments, if feasible.

Recommendations:
If feasible, funding needs and funding sources for Exchange Contractors' conservation measures and water users purchase of transfer water should be identified. The FEIS should also document applicable recommendations from the 2002 Environmental Water Account Science Review Panel, and describe how the project affects Environmental Water Account (EWA) assets and operations.

Cumulative Impacts

1. The proposed project is for a 10-year transfer program which transitions the current annual transfer program into a long-term transfer program. The Exchange Contractors have conducted annual transfers since 1999. The DEIS does not appear to incorporate into the environmental effects evaluation the past and present impacts and trends of the current annual transfer program.

Recommendation:
The FEIS cumulative impacts analysis should incorporate information on present and past effects and trends of water transfers by the Exchange Contractors.

2. The Westlands Irrigation District has proposed retirement of up to 200,000 acres and the Bureau of Reclamation has a land retirement program that could retire up to 7,000 acres (pg. 7-18). The proposed 10-year transfer program, which includes temporary fallowing of up to 20,000 acres/year of farm land, could have significant cumulative impacts to agricultural land use and a disproportionate impact on low-income and minority groups (pg. 9-6), if other large-scale land retirement programs were implemented at the same time.

Recommendation:
If there is a disproportionate impact to low-income and minority groups and agricultural land use caused by cumulative impacts of temporary fallowing of agricultural land, the FEIS should describe potential mitigation measures for these impacts.

3. Although the transfer program by itself might not have a significant cumulative effect on flows and sensitive species in Mud and Salt Sloughs, the DEIS states that phase out of the

Grassland Bypass Project and other potential flow reductions could be cumulatively significant (pg. 6-25).

Recommendation:
The FEIS should describe possible mitigation measures for potential cumulative impacts to sensitive species from flow reductions in Mud and Salt Sloughs.

Biological Resources

1. The DEIS describes the regulatory requirement to consult with the US Fish and Wildlife Service (FWS) and National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) pursuant to the Fish and Wildlife Coordination Act. A number of special-status and listed species may occur in the project area.

Recommendation:
The FEIS should disclose the status of consultation with FWS and NOAA Fisheries and issues of concern to these agencies, if any. For instance, describe if there are concerns with potential impacts to riparian habitat and the giant garter snake.

cc:

Dale Garrison, US Fish and Wildlife Service

John Brooks, US Fish and Wildlife Service, California Office, 2800 Cottage Way, West 2605, Sacramento, CA. 95825-1886

Dennis Wescott, Central Valley Regional Water Quality Control Board, 415 Knollcrest Dr., Redding, CA. 96002

Joann Toscano, San Joaquin River Exchange Contractors Water Authority, P.O. Box 2115, 541 H Street, Los Banos, CA. 93635

Summary Paragraph
Draft Environmental Impact Statement for the Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority 2005 - 2014 (CEQ# 040278)

EPA expressed environmental concerns because of the need for full disclosure of San Joaquin Valley water quality, agricultural drainage, irrigated lands conditional waivers, and restoration issues; concerns with impacts to efforts to resolve these issues, and potential impacts to wetlands from conservation measures.