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

MEMORANDUM May 27, 2009

SUBJECT: Review of the Programmatic EIS/R for the San Joaquin River Restoration Program (SJRRP)

TO: Alicia Gasdick, USBR

Cc: Jeff McLain, FWS

FROM: Bruce Herbold, US EPA (WTR-3, 415-972-3460)
Carolyn Yale, US EPA (WTR-3, 415-972-3482)

We appreciate the opportunity to comment on the administrative draft documents for the SJRRP Programmatic EI/R (PEIS). From the sheer extent of analyses for the Restoration area, we also admire the amount of work that has gone into Program planning, and are very impressed with the overall quality and coherence of the documents.

With the short review time, these comments from the EPA Water Division are focused on two areas within our purview as a 'cooperating agency'--fisheries and water quality. We have relied mainly on the *Draft PEIS/R, Draft Fisheries Management Plan, and Monitoring and Management Plan for Physical Conditions*. However, knowing that the Fisheries Management Plan version provided with the PEIS document was under revision, we held off a thorough look at the Fisheries actions per se. The EPA Environmental Review Office (ERO), which reviews NEPA documents pursuant to authorities under Section 309 of the Clean Air Act, was unable to participate at this time but would like to comment on selected sections when the Second Administrative Draft becomes available. Our offices will coordinate to provide you a list of topics in the near future.

Discussions with staff of the Central Valley Regional Board have confirmed interest in coordinating our input to you. However, that will require more time than the current deadline allows. In all, this is a preliminary review that we expect to supplement in discussions with the Boards and your agencies. This memorandum explains our concerns; the attached form links these points to places where the text might be revised.

<u>Viewing the River system as a whole:</u>

Implementation of the Restoration goal of the Settlement is focused on the River upstream of the confluence with the Merced. While this area is critical (and challenging), 'restoration' of the San Joaquin River will depend on understanding and managing conditions along the entire River, including through the Delta. The PEIS too readily skirts both the lower River impairments (considered beyond Program control) and the potential benefits of augmented flows in reducing those impairments. (See for

example, Section 5.5.2, p. 5-38.) Although the SJRRP may have to concentrate its efforts above the Merced, working with other parties on issues outside this focal area will be necessary to achieve the restoration goal.

The SJRRP, as well as a number of other programs affecting the River (the Regional Board TMDL's for salinity, boron, and dissolved oxygen, for example), would benefit from a *strategy for improving conditions on the San Joaquin as a whole.* This would entail coordinating goals and objectives, information on key factors limiting attainment of goals, and implementation to achieve 'cumulative' results. Otherwise, the individual actions are all less likely to succeed. We urge you to work with other parties on identifying conditions needed for a functioning River and addressing impediments to objectives such as salmonid migration. As we discuss later, we do not believe that this necessarily conflicts with actions under the Water Management goal.

> *Recommendations:*
> *1-- Place greater emphasis in the PEIS on identifying and addressing issues in the lower San Joaquin River that are important to the success of the Restoration goal. (This could entail, for example, summarizing current understanding of key conditions needed for salmonid restoration, prioritizing monitoring and assessment needs, engaging in joint planning that takes into account the River system, and where possible using the restoration program to support goals downstream of the Merced.)*
> *2—A proposed alternative that incorporates development of information, better planning, and actions to improve conditions for salmonid restoration along the lower River would be a stronger candidate for the as-yet undetermined "environmentally superior alternative."*

<u>Water quality information and analyses:</u>

From the standpoint of SJRRP involvement, water quality receives limited attention in the PEIS and the technical attachments. Flow-related parameters (particularly temperature) are discussed but less attention goes to addressing chemical pollutants that we believe have great potential to affect restoration success. This applies not only to the Restoration area (recognizing, of course, prevailing 'dry' conditions in some reaches at the present time—for example, Reach 4B), but to the River downstream of the Merced where the water quality will obviously be affected by restoration flows. Given the poor water quality in River reaches affected by the combination of low flow, agricultural return flows and drainage, and (near the Delta) urban discharges there should be concern that these conditions could affect success of the Restoration Goal through direct effects on fish or supporting foodweb.

The PEIS summaries of available information from Regional Board programs are generally thorough; in some cases (for example, through the Irrigated Lands program) more recent monitoring information has been released and reinforces conclusions regarding extensive impairments in the River system. We also appreciate inclusion of references to recent work on chronic and sublethal effects, as well as Fish and Wildlife Service studies. However, the PEIS should be clear about monitoring and assessment gaps. If this information is dealt with in a discussion of another topic in the Fisheries Management Plan or in other section of the Program documents, we didn't find it. If there is limited information available in areas where this water has entered the channel, additional monitoring should be discussed.

> *Recommendation 3:*
> *The SJRRP and PEIS/R should explain how the implementing agencies intend to address the possibility that salmonid success could be affected (directly, or indirectly) by exposure to*

pollutants and potential sublethal effects. Highlight important gaps in water quality monitoring (particularly in reaches where pollutant inputs are known or suspected. Discuss prospects for monitoring.

Recommendation 4:
Because monitoring, assessment, and Program adjustment are at the core of the Interim Flow period, we recommend including a comprehensive and integrated summary of the Program monitoring and questions that the monitoring is designed to address. Explain where water quality fits into this design. Also explain the assessment process (time frame, form and availability of reports). This material could an attachment to the PEIS that covers Recommendations 3-5.

We understand that the implementing agencies expect to rely on information from other programs to evaluate the effect of factors downstream of the Restoration area on salmonid restoration. However, we didn't see in the PEIS (or technical attachments) an explanation of the data that would be available or the process that would be used for assessment. In addition to the possibility of monitoring gaps, we caution against assuming that data are in a form readily suited to assessments for the SJRRP.

Recommendation 5: Prepare an 'attachment' to the PEIS summarizing the questions of interest regarding potential effects outside the Restoration area. (For the River, we recommend that the approach be consistent—to the extent applicable-- between the lower San Joaquin and the Restoration area.) Provide a summary of the monitoring data expected to be available for use in evaluating ecological conditions in the lower San Joaquin and Delta. The CV Regional Water Board is sponsoring a monitoring directory that will prove useful for surface water quality,[1] which would be one component of monitoring spanning biological, physical, and chemical parameters.

<u>Project level documentation for actions outside the Restoration area:</u>

The PEIS states that one of the 'project level' actions being covered by this analysis is "issuing a long-term water right for the downstream protection and diversion of Interim and Restoration flows." (ES- 6) The flows diversion, which is expected to occur on the lower San Joaquin and/or in the Delta, could be as much as "*the full amount of released flows."*[2] Since we did not see a detailed analysis of the potential effects of downstream diversions, it is not clear in what sense the PEIS provides project level impact documentation for this action.

Recommendation 6:
We suggest that you take a closer look at the information that the Board may require for permits related to 'recapture.' At a minimum, the PEIS should discuss whether additional information may need to be developed when recovery proposals are more specific.

A related issue comes up in the context of stipulation 16(a)(1) of the Settlement:

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[1] See a prototype at http://www.sanjoaquinmonitoring.org/index.html.

[2] The PEIS/R should explain whether, at this time, the manner of measuring the "full amount of released flows" has been established. Considering uncertainties regarding channel processes, seepage, and other variables, this would seem to be a difficult accounting task. With respect to seepage and channel infiltration, is there intent to account for, and recover, channel losses that are affected by groundwater use proximate to the River?

"[The plan for recirculation, recapture, reuse, exchange, or transfer of Interim Flows and Restoration Flows...shall] ensure that any recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows shall have no adverse impact on the Restoration Goal, downstream water quality or fisheries;"

Recommendation 7:
This provision [Stipulation 16 (a)(1)] appears to require a level of documentation that is not provided in the PEIS. We suggest that you consider how this stipulation will be addressed in the context of the recapture actions.

The recapture of water released to enhance fish passage risks entraining those fish unless the recapture can be shifted in time. We saw no discussion of how project water might meet flow or use requirements in the Delta such that water could be retained in other reservoirs. This seems to represent a method of later recapture that would have minimal conflict with the primary goal of the project and should be discussed.

Recommendation 8:
The PEIS should evaluate opportunities for operational flexibility in Delta recapture.

Complementing other objectives in the Basin and Delta:

Implemented in a manner that meets the conditions of Settlement stipulation 16(a)(1), recovery of River water in the lower San Joaquin basin could provide benefits that are not mentioned in the PEIS. For example, the PEIS discusses the possibility of providing, in lieu of Delta export supplies, River water to the wetland and refuge complexes by recapturing flows in the Restoration area (2-16). To the degree that the salinity of this water is lower than the Delta supplies this arrangement might assist the managed wetlands in meeting load allocations and would give them greater flexibility to manage habitat. There may also be opportunities for linking floodplain areas to the River in a manner that enhances fishery habitat.

In conclusion, we hope that these suggestions and the more specific comments in the attachment, are useful to you. We would like the opportunity to refine and clarify these comments in the near future through discussions with your agencies and the State and Regional Water Boards. From the perspective of the EPA Water Division, we are especially interested in future coordination of programs and information during upcoming Interim Flow implementation period. We are impressed with the generally exhaustive and conscientious coverage of the Program analysis-- but please consider this an 'informal assessment' given the absence of Environmental Review Office input.

Attachment: Specific comments from EPA.

San Joaquin River Restoration Program Document Comment Form

Comments from USEPA 5-27-09

EPA comments May 26, 2009

Item	Document	Chapter/ Section	Page #	Line Numer(s)	Reviewer	Comments	Response
1	PEIS/R						
2		1			cy	RE various statements that mitigation measures and performance standards will be set out and incorporated as conditions of approval: Presumably, subjects will be not be confined to those explicit in the Settlement-- for example, that water quality-related monitoring might be included where that information is needed to interpret results of SJRRP actions and mitigation measures.	
3	PEIS/R	ES	2	mid-pg	cy	RE, beginning "To achieve the water quality management goal…". This gives the impression that recapture comprises the whole of water management actions. Our understanding is that it is not. We did not see an explanation of the scope of measures pertinent to the 'water management' goal (although not necessarily in this plan).	
4	PEIS/R	2	2-2	20-22	cy	Returning to the subject of monitoring: It would be helpful to explain the extent to which the 'robust monitoring program' will cover water quality-related parameters (e.g., including sediments). In a number of places in the PEIS/R reference is made to the potential effects of water quality impairments below reaches 1 and 2 (into the Delta). Be prepared to discuss uncertainties and information gaps that will not be addressed through the SJRRP or programs of other agencies.	
5	PEIS/R	2	2-7	Tab 2-2	cy	Our memo has suggested considering a broader extent of refuges / managed wetlands that might take water in the action alternatives, a discussion of supply issues by season (e.g., Levels 2 and 4), and consideration of water quality issues. For comparative purposes in no action: To what extent does the third entry (purchase of Exchange Contractor water supplies to refuges) represent Level 2 and 4 supplies to refuges and managed wetlands in the SJR corridor? If there are other "no action" supplies, could this be documented?	
6	PEIS/R	2	2-16	30ff	cy	The text explains that only certain refuge units would be prepared to take recapture water. What are the limitations preventing consideration of other refuges and wetlands (e.g., in the SL complex/ Grasslands). To what extent do channel constraints in the 4B reach affect this issue?	
7	PEIS/R	2	2-35		cy	Environmentally preferable alternative: Logically, a preferable alternative would take account of, and to the extent possible include actions to address, conditions in the Lower River (below the Merced) as well as the formal Restoration area.	
8	PEIS/R	ES	6		cy	The final bullet indicates that State Board permitting is be among the project level actions. It is not evident that the PEIS/R documentation, including specifics of a proposed action, covers the information that would satisfy permit environmental review.	
9	PEIS/R	3	3-19		cy	EPA formally disapproved the Boron objective. This is one of the issues that EPA has flagged to the Central Valley Regional Board in its current Phase 2 work on the salinity/boron TMDL. We will transmit the disapproval letter to you, FYI.	
10	Fish management plan	Exhibit B				See item 9.	
11		2	2-30	17-19	cy	The text reads: "Before projects are completed that would allow release of full Restoration Flows, Interim Flows would be recaptured at diversion points in the Restoration Area under all action alternatives." It is not clear whether this is a descriptive statement (what might happen) or a prescriptive statement (a policy that full restoration flows are contingent on recapture. Please clarify.	