UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

April 21, 2009

Sharon McHale
Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way
MP-730, Room W-2830
Sacramento, CA 95825-1898

Subject: Draft Environmental Impact Statement (DEIS) for the Los Vaqueros Reservoir Expansion Project, Contra Costa County, California (CEQ# 20090051)

Dear Ms. McHale:

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 Contra Costa Water District (CCWD) and Bureau of Reclamation (Reclamation) propose to expand the existing Los Vaqueros Reservoir to store water for environmental water management and to improve water supply reliability and water quality for urban users in the San Francisco Bay Area. The reservoir expansion would involve enlarging the existing reservoir; building a new water intake, pump station, and conveyance facilities; modifying and building new power supply facilities; and replacing and enhancing recreation facilities.

We commend CCWD and Reclamation for the well organized, clear, and detailed DEIS. EPA believes it is important to develop water supply strategies consistent with protective water quality standards for the Sacramento River-San Joaquin River Delta (Delta) and San Francisco Bay, and to protect aquatic resources and endangered species. We support the effort to increase water supply management flexibility to serve environmental purposes and improve water supply reliability, provided this can be accomplished without further adverse effects to the Delta and its resources.

The proposed expansion project would allow CCWD to increase diversions of "excess" Delta flows during the winter and spring months, when those diversions will not adversely impact the operations of the State Water Project and Central Valley Project. We recognize that, at this time, the DEIS/EIR can only characterize potential uses of this project and the associated benefits. Notably, the Bay Delta Conservation Plan process and

reevaluation of Delta water quality control requirements by the State Water Resources Control Board could alter the regulatory and operational context for the proposed project. Nonetheless, we recommend a greater effort to provide assurances that environmental benefits will be incorporated into the project.

We have rated this DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*") because of our concerns regarding environmental assurances for the projected benefits, compensatory mitigation for vernal pools, and climate change effects. We recommend the project design incorporate mechanisms to ensure benefits, and compensatory mitigation for impacts to vernal pools along the Transfer-Bethany Pipeline. The FEIS should include a more in-depth evaluation of climate change effects and adaptation measures. Our detailed comments are enclosed.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one hard copy and a CD ROM to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or fujii.laura@epa.gov.

Sincerely,

Kathleen M. Goforth

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosures:
Detailed Comments
Summary of Rating Definitions

cc: Susan Moore, Sacramento Field Office, US Fish and Wildlife Service
Bill Guthrie, Sacramento District, US Army Corps of Engineers
Robert Solecki, Central Valley Regional Water Quality Control Board
Marguerite Naillon, Contra Costa Water District
Les Grober, State Water Resources Control Board

EPA DETAILED DEIS COMMENTS LOS VAQUEROS RESERVOIR EXPANSION, CONTRA COSTA COUNTY, CA., APRIL 21, 2009

Environmental Benefits

Incorporate environmental assurance mechanisms for projected benefits into the project design. The Draft environmental impact statement (DEIS) contends that the shift of water diversions for South Bay water agencies from the State Water Project (SWP) and Central Valley Project (CVP) diversion pumps to the expanded Los Vaqueros Reservoir, with its state-of-the-art fish screens and multiple intake locations, would provide significant advantages for Delta fish protection due to the increased flexibility to shift water diversions and water conveyance to minimize adverse effects to fish. (This is a "benefit" in the sense of reducing impacts of diverting and supplying water.) Additionally, the project could provide storage for water directed for environmental purposes, such as the Environmental Water Account or refuge water supplies. (These "benefits" depend on a sponsor to fund and manage the supplies.) EPA supports the effort to increase water supply management flexibility for environmental purposes and water supply reliability. We are concerned, however, that the environmental "benefits" are hypothetical and that the needed institutional support and funding are uncertain.

> ***Recommendations:***
> We recommend the project design incorporate assurance mechanisms to guarantee environmental and fishery benefits occur. Describe in the Final environmental impact statement (FEIS) a governance process and incentives or requirements to assure that projected environmental benefits are realized in a timely manner. For example, the Bureau of Reclamation (Reclamation) and Contra Costa Water District (CCWD) could require the establishment of dedicated storage for environmental water as part of the project design, as suggested in the DEIS (p. 1-9).

Evaluate the sensitivity of projected benefits to changes in project design and operational assumptions. The extent of the benefits achieved will depend on factors such as future Delta conveyance and habitat improvements, Delta operations requirements, and the project's precise environmental water management actions as further developed in project permits and agreements with project partners (p. ES- 12).

> ***Recommendation:***
> We recommend the FEIS include a discussion on the sensitivity of projected benefits to changes in the above factors. If appropriate, consider conducting sensitivity analyses to gauge the changes to presumed benefits if project operations and assumptions are changed.

Clean Water Act Section 404

Provide compensatory habitat mitigation for impacts to vernal pools. Alternatives 1 and 2 would each affect 0.86 acres of northern claypan vernal pool habitat along the Transfer-Bethany Pipeline. The project analysis presumes the effect would be temporary because these areas would be restored after construction is completed (p. 4.6-88). It is extremely difficult to re-establish vernal pools once the hardpan has been disturbed. Any

disturbance of the hardpan below vernal pools should be considered a permanent impact and compensatory mitigation should be provided. As proposed, the removed hardpan material should be replaced after construction to minimize indirect impacts to surrounding vernal pools. We note that Alternatives 3 and 4 have no vernal pool impacts and that Alternative 4 has significantly fewer impacts to waters of the United States.

> ***Recommendation:***
> Disturbance of the hardpan below vernal pools should be considered a permanent impact requiring compensatory habitat mitigation.

Mitigation should be consistent with the new Compensatory Mitigation Rule of April 20, 2008. The DEIS proposes compensatory mitigation for permanent, unavoidable losses of sensitive plant communities and jurisdictional wetlands and other waters of the United States. A mitigation and monitoring plan would be developed to outline mitigation and monitoring obligations (p. 4.6-91).

> ***Recommendation:***
> Compensatory mitigation, the mitigation and monitoring plan, and long-term protection and management should comply with the new Compensatory Mitigation Rule of April 20, 2008 (40 CFR Section 230.91-230.98; and Federal Register Volume 73, Thursday, April 20, 2008, p. 19687).

Climate Change

Evaluate the effect of a 3-foot or greater sea level rise and increased tidal surge on Delta water quality and water supply management. The DEIS evaluates the proposed project's contributions to greenhouse gas emissions and the adverse effects of climate change on the project. However, the effects analysis evaluates only the effects of a one-foot sea-level rise on salinity, and does not factor in the influence of tidal incursion (p. 5-11). Moreover, the DEIS contends that Delta water quality standards would still be met by releasing additional water from SWP and CVP reservoirs to offset the projected increases in salinity. There is increasing evidence that sea level rise may be significantly higher than one-foot.[1] We are concerned that the effects of climate change may be much greater than portrayed and would significantly impair the ability to maintain water quality through the release of upstream reservoir water.

> ***Recommendation:***
> We recommend the FEIS update the climate change effect evaluation to analyze a 3-foot or greater sea-level rise and increased tidal surge on water quality (e.g., salinity, organic material). The analysis should evaluate the implications of climate change effects for CVP/SWP operations, water supply reliability, and expanded Los Vaqueros Reservoir operations. Explain the basis for positing that use of stored water upstream would be a feasible way of managing water quality

[1] Climate Change and Water Resources Management: A Federal Perspective, Circular 1331, U.S. Department of the Interior and U.S. Geological Survey, 2009, (http://pubs.usgs.gov/circ/1331/). See also Letter from Phillip L. Isenberg to Gov. Schwarzenegger, March 24, 2008 (Delta Vision Blue Ribbon Task Force adopting, for planning purpose, a sea level rise projection for 2100 of 55 inches).

at the intakes. Discuss other potential management responses, if information is available.

General Comments

Include Federal and State Feasibility Reports in the FEIS. The DEIS states that Federal and State Feasibility Reports are being developed to provide detailed information on the potential project benefits and costs, the allocation of costs to potential project beneficiaries, and project participants (p. ES-6). The identification of final project participants and beneficiaries and potential benefits and costs will influence the final range of alternatives and project design.

Recommendation:

To ensure full public disclosure to support decision-making, we recommend the conclusions of the Federal and State Feasibility Reports be summarized in the body of the FEIS, and the Reports be included as appendices in the FEIS.

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (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

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 these impacts.

EO – Environmental Objections

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

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 potential 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 of 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 analyzed 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 analyzed in the draft EIS, which should be analyzed 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 National Environmental Policy Act 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. February, 1987.