



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION IX**  
75 Hawthorne Street  
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July 13, 2007

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Bureau of Reclamation  
Mid-Pacific Region  
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**Subject:** Draft Environmental Assessment for Conveyance of Refuge Water Supply, South San Joaquin Valley Study Area, Mendota Wildlife Area

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.

EPA urges selection of an alternative which directly provides a year-round reliable water supply to the Mendota Wildlife Area (Mendota WA) while comporting with 1) the restoration of the San Joaquin River, as set out in the recent San Joaquin River Settlement Agreement, and 2) efforts by the Bureau of Reclamation to provide good water quality to wildlife refuges. As stated in the Draft Environmental Assessment (DEA), the Bureau of Reclamation has responsibility under the Central Valley Project Improvement Act Section 3406(d) to provide reliable year-round water supplies for specific wildlife refuges, including the Mendota WA.

The DEA evaluates a Locally Preferred Alternative which entails construction of a new dam in the San Joaquin River channel, replacing the existing Mendota Dam which is owned and operated by the Central California Irrigation District (CCID). Currently, water delivered to the Mendota WA via gravity flow and pumping from Mendota Pool is interrupted when the CCID dewateres the Mendota Pool for maintenance. The occasional reduction of water surface levels in Mendota Pool also restricts the delivery of water to the Mendota WA.

EPA is concerned that there is insufficient detail regarding the alternatives and their potential impacts to support the environmental effects conclusions. EPA is also concerned that, in comparison to construction of a new dam, there may be more direct measures to provide a reliable water supply for the Mendota WA. For example, alternatives which would utilize existing Westland Water District facilities (Alternatives MEN-9B and 12) would provide year-round supplies to the Mendota WA whether or not the Mendota Pool is dewatered or has a lower water surface level. Additionally, these alternatives may more easily accommodate future San Joaquin River restoration goals to

reintroduce anadromous fish. In contrast, the alternatives to replace or rehabilitate Mendota Dam (Alternatives MEN-5 and 7) would still require periodic dewatering for flushing and maintenance and would not immediately include fish passageways (p. III-5). As such, Alternatives MEN-5 and 7 are less environmentally preferable when compared to Alternatives MEN-9B and 12 in terms of meeting the project purpose and need to provide a reliable year-round water supply to the Mendota WA.

One of the purposes of an Environmental Assessment (EA) is to determine whether an Environmental Impact Statement (EIS) is necessary (40 CFR Part 1501.4(c)). If a decision is made to proceed with a dam alternative, the final NEPA document should describe the rationale and information supporting the agency determination of whether or not to prepare an EIS.

The San Joaquin River Restoration Settlement of September 2006 established the San Joaquin River Restoration Program (SJRRP) to restore flows and fish to the main stem of the San Joaquin River between the confluence of the Merced River and Friant Dam and provide water supply certainty for farmers and cities in the Friant service area. As a key component of the regional water supply infrastructure, changes to the operation or features of the Mendota Dam and Pool could have significant effects on the ability to meet these SJRRP goals. We recommend the final NEPA document provide a full evaluation of potential effects of the proposed project on the SJRRP, such as effects on the proposed Mendota Pool Bypass, water supply availability for fish, and short- and long-term fish passage.

We appreciate the opportunity to review this Draft Environmental Assessment. When the final NEPA document is released for public review, please send one (1) hard copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3846 or Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or [fujii.laura@epa.gov](mailto:fujii.laura@epa.gov).

Sincerely,  
/s/ by Laura Fujii for

Nova Blazej, Manager  
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Enclosure: EPA Detailed Comments

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**National Environmental Policy Act Compliance**

*Describe the basis for the agency determination to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS).* One of the purposes of an EA is to determine whether an EIS is necessary (40 CFR Part 1501.4(c)).

***Recommendation:***

If a decision is made to proceed with a dam alternative, we recommend the final National Environmental Policy Act (NEPA) document describe the basis and information supporting the agency determination of whether or not to prepare an EIS.

**San Joaquin River Restoration Program**

*Evaluate the effects of project alternatives on the San Joaquin River Restoration Program.* The San Joaquin River Restoration Settlement of September 2006 established the San Joaquin River Restoration Program (SJRRP) to restore flows and fish to the main stem of the San Joaquin River between the confluence of the Merced River and Friant Dam and provide water supply certainty for farmers and cities in the Friant service area. As a key component of the regional water supply infrastructure, changes to the operation or features of the Mendota Dam and Pool could have significant effects on the ability to meet these SJRRP goals.

***Recommendation:***

We recommend the final NEPA document provide a full evaluation of potential effects of the proposed project alternatives on the SJRRP, such as effects on the proposed Mendota Pool Bypass, water supply availability for fish, and short- and long-term fish passage.

**Alternatives**

*Provide a design-level description of project alternatives.* There is insufficient detail regarding the alternatives to support the environmental effects conclusions. For example, the Draft Environmental Assessment (DEA) does not provide details regarding the specific footprint of the proposed new dam (Alternative MEN-5), equipment staging areas, or borrow sites by which to verify the conclusion of less than significant effects to wetlands (p. IV-51). Additionally, there is no description of the management measures to ensure the security of the water supply for the Mendota Wildlife Area (Mendota WA) associated with any of the proposed alternatives.

***Recommendations:***

We recommend the final NEPA document include a design-level description of the project alternatives. These descriptions should include information on the type of dam construction; construction schedule; Federal/local cost-share agreement; funding sources; the actual footprint of the proposed project, equipment staging areas and borrow sites; and the proposed operation of Mendota Pool and Dam. Potential environmental impacts of construction and operation of the proposed

new or rehabilitated Mendota Dam and Pool should be included in the final NEPA document.

We recommend conclusions regarding environmental impacts be clearly supported by information regarding specific alternative components and their effect on terrestrial and aquatic resources, water quality, and air quality. For instance, the final NEPA document should include sufficient detail to support a determination of compliance with applicable regulatory requirements, such as Section 404 of the Clean Water Act.

The Draft Environmental Assessment (DEA) states that the replacement or rehabilitated dam would be designed to be retrofitted with a fish passage in the future. The final NEPA document should include specific information on the proposed retrofit design, its cost and engineering feasibility, and a commitment to environmental evaluation and documentation for this future project feature.

Because the primary project purpose is to provide a year-round reliable water supply for the Mendota WA, we recommend the proposed alternatives include clear, enforceable measures to ensure continuing water supplies for this purpose.

***For alternatives which replace or rehabilitate Mendota Dam, include an enforceable commitment to dewater for short and infrequent periods.*** The Mendota Pool would continue to be dewatered during flushing and maintenance operations under the replace or rehabilitate Mendota Dam alternatives (Alternatives MEN-5 and 7). The DEA states that dewatering can result in a loss of up to 2,500 acres of wetlands in the Mendota WA (p. II-4), especially when the dewatering period is longer than 4 weeks (p. III-4). To realize the desired water supply and habitat benefits for Mendota WA, there would need to be a clear commitment that dewatering periods will be short and infrequent to avoid adverse effects on desirable plant communities (p. III-5).

***Recommendation:***

If one of the alternatives to replace or rehabilitate the dam is selected as the preferred alternative, we recommend the final NEPA document provide a clear and enforceable commitment to ensure dewatering periods are of short and infrequent duration.

***Evaluate alternative Mendota WA water sources that may be made available as part of an agricultural drainage solution.*** Potential actions to provide a comprehensive agricultural drainage solution for the Westlands Water District (WWD) and the San Joaquin Valley could make additional water available for environmental use.

***Recommendation:***

We recommend the final NEPA document provide more information on potential future refuge water supplies associated with a comprehensive agricultural drainage solution.

## **Water Resources**

***Describe potential measures to control the variability of water quality delivered to Mendota WA.*** Water provided through the WWD facilities (Alternatives MEN-9B and 12) would be similar to the California Aqueduct source. However, this water is subject to mixing with groundwater and irrigation drainage. Thus, the quality of water delivered to Mendota WA would be unknown and likely to vary significantly (p. IV-20). As the largest publicly owned and managed wetland in the San Joaquin Valley (p. II-2) and given the adverse effects of low levels of contaminants, such as selenium, on waterfowl- and wetland-dependent wildlife, it is critical that the delivered water be of the highest quality feasible.

### ***Recommendation:***

We recommend the final NEPA document provide a description and discussion of potential measures to reduce the variability of water quality delivered to the Mendota WA. For instance, describe the feasibility of limiting the mixing of poor quality groundwater and irrigation drainage.

## **Air Quality**

***Provide calculations and general conformity evaluation for particulate matter with an aerodynamic diameter less than 2.5 microns (PM<sub>2.5</sub>).*** The DEA states that PM<sub>2.5</sub> emissions from construction activities were not calculated because PM<sub>2.5</sub> de-minimis thresholds have not been established (p. IV-67). The San Joaquin Valley Air Basin is in non-attainment for the Federal and State air quality standards for PM<sub>2.5</sub> (p. IV-63).

On October 17, 2006, EPA issued a final rule lowering the National Ambient Air Quality Standard (NAAQS) for PM<sub>2.5</sub>, which became effective on December 18, 2006 (71 FR 61144). Specifically, the 24-hour standard for PM<sub>2.5</sub> was lowered to 35 ug/m<sup>3</sup> from the previous standard of 65 ug/m<sup>3</sup>. For conformity evaluations, the revised PM<sub>2.5</sub> standard of 35 ug/m<sup>3</sup> does not apply until one year after the effective date of nonattainment designations that consider that standard (Clean Air Act Section 176(c)(6) and 40 CFR 93.102(d)). However, conformity evaluations must still be completed for current nonattainment areas designated under the previous standard (Clean Air Act Section 176(c)(5)). As stated above, the project is located in a designated nonattainment area for PM<sub>2.5</sub> under the previous standard.

### ***Recommendation:***

The final NEPA document should provide an emission calculation and general conformity evaluation for PM<sub>2.5</sub>. The revised 35 ug/m<sup>3</sup> daily PM<sub>2.5</sub> NAAQS, in addition to the 15.00 ug/m<sup>3</sup> annual PM<sub>2.5</sub> NAAQS, should be used as the threshold for NEPA evaluations and determination.

### **General comments**

***Evaluate the effects of actions to provide agricultural drainage service to WWD on Alternatives MEN 9B and 12, which would use WWD infrastructure for delivery of refuge water.*** It is our understanding that discussions are ongoing regarding actions to provide a comprehensive agricultural drainage solution for the WWD. These actions could significantly modify the operations and infrastructure of WWD.

#### ***Recommendation:***

We recommend the final NEPA document evaluate the effects of proposed agricultural drainage solutions on the WWD facilities that may be used to provide a reliable water supply to Mendota WA.

### ***Provide information on the determination to include this project under the 1999***

***Biological Opinion.*** The DEA states that the action presented in this EA will be covered under the 1999 Biological Opinion (BO) that concluded Endangered Species Act (ESA) Section 7 consultation on refuge water supply conveyance projects in the San Joaquin Valley, including an earlier version of this project. This project would be covered by this BO by a letter appended to the 1999 BO (p. IV-41).

#### ***Recommendation:***

We recommend the final NEPA document provide information on the determination to include this project under the 1999 BO. For instance, describe the 1999 water supply conveyance proposal, 1999 environmental conditions, terms and conditions of the 1999 BO, and the basis for including this project under the 1999 BO. We recommend considering reconsultation for this project, especially if the dam replacement or rehabilitation alternatives are pursued.

***Describe the relationship of this project to the 2002 Draft Environmental Assessment on Conveyance of Refuge Water Supply for the Mendota Wildlife Area.*** In July 2002, EPA received a DEA entitled “Final Conveyance of Refuge Water Supply for Mendota Wildlife Area.” The current DEA does not describe the 2002 DEA or its relationship to the current proposed action.

#### ***Recommendation:***

The final NEPA document should describe the relationship, if any, of this action with the proposal in the 2002 DEA and the outcome of this previous DEA.