



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

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San Francisco, CA 94105-3901

FEB 14 2018

Ben Nelson, Project Manager
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801 I Street, Suite 140
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Subject: Draft Environmental Impact Statement for the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project Yolo County, California (EIS No. 20170246)

Dear Mr. Nelson:

The U.S. Environmental Protection Agency has reviewed the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project Draft Environmental Impact Statement (DEIS) pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. EPA is a cooperating agency for this DEIS.

The U.S. Bureau of Reclamation and the Department of Water Resources are proposing to take steps to improve fish passage and rearing habitat in the Yolo Bypass. The DEIS analyzes the effects of six action alternatives that would put one or more gated notches in the Fremont Weir and increase the volume of water entering the Yolo Bypass to pull more fish onto the bypass, reduce stranding, and create a large floodplain area for foraging and rearing. The proposed project would implement Reasonable and Prudent Alternative actions, as described in the National Marine Fisheries Biological Opinion on the Long-term Operations of the Central Valley Project and State Water Project.

EPA is supportive of restoration actions in the Bay Delta Estuary that contribute to the health and improvement of aquatic resources. The Alternatives Comparison summary in Chapter 8 of the DEIS clearly examines the benefits of this project to salmon and sturgeon. Analytical summaries such as these provide for a meaningful evaluation and alternatives comparison for the public and decisionmakers.

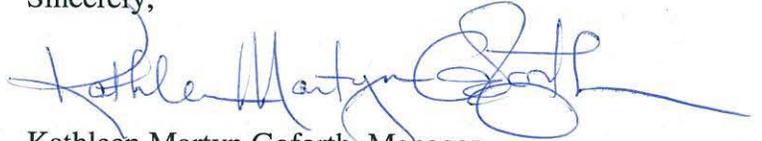
While strongly supportive of aquatic habitat restoration, we advise caution to ensure that it does not result in unintended consequences that adversely affect water quality. In particular, it is critical that the formation and mobilization of methylmercury in wetlands be minimized.

The DEIS does not identify Reclamation's Preferred Alternative. It is EPA's policy to rate each alternative when a preferred alternative is not identified. Based on our review, we are rating Alternatives 1-3 as *Lack of Objections* (LO) and Alternatives 4-6 as *Environmental Concerns- Insufficient Information* (EC-2) (see enclosed "Summary of EPA Rating Definitions"). Alternatives 4-6 would have construction emissions above *de minimis* National Ambient Air Quality Standards thresholds for nitrous oxide and particulate matter, due to the larger construction footprints compared to Alternatives 1-3. The enclosed detailed comments provide recommendations for reducing air emissions and more fully disclosing potential water quality related impacts.

EPA appreciates the opportunity to review this DEIS. When the Final EIS is released for public review, please send one copy to the address above (mail code: ENF-4-2). If you have any questions, please contact me at (415) 972-3521, or contact Stephanie Gordon, the lead reviewer for this project, at 415-972-3098 or gordon.stephanies@epa.gov.

FEB 14 2018

Sincerely,



Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosures: Summary of EPA Rating Definitions
Detailed Comments

cc: Janis Cooke, Central Valley Regional Water Quality Control Board

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.

Water Quality

The DEIS explains that, when the Yolo Bypass is flooded, it becomes the dominant source of methylmercury to the Delta, and that restoration activities are likely to result in increased production, mobilization, and bioavailability of methylmercury in the aquatic system (p. 6-27). It states that monitoring will be conducted, but does not specify the type of monitoring nor how the results would be applied, e.g., to support adaptive management.

The State Water Resources Control Board recently adopted new mercury water quality objectives that apply to tribal and subsistence beneficial uses.¹ These uses are designated for the Delta, but the DEIS does not discuss the impacts that the proposed project actions could have on people who consume resident fish species in the Delta (Table 6-2, p. 6-5).

Recommendation:

In the Final EIS, describe and commit to water column and fish and invertebrate tissue monitoring for mercury and methylmercury in the Yolo Bypass to support adaptive management actions and coordinate with ongoing monitoring for the Delta Regional Monitoring Program.

Include a discussion in the FEIS regarding any impacts that the project would likely have on attainment of the applicable subsistence fishing water quality objective in the Bay Delta.

Wetlands

As disclosed in the DEIS, some of the proposed project activities, such as construction of concrete abutments and rock-lined channels, could result in impacts to waters of the United States, which would require a permit issued by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act. We note that the DEIS states that the Corps' Least Environmentally Damaging Practicable Alternative determination is expected to be attached to the FEIS (p. 23-11).

Recommendation:

- In the FEIS, avoid, minimize, and mitigate impacts to aquatic resources to achieve compliance with the CWA Section 404(b)(1) Guidelines.
- Work with the Corps to obtain a formal jurisdictional delineation of waters of the U.S. in the project area and include, in the FEIS, a map of the delineated waters and the anticipated impacts to those waters, to streamline future Section 404 compliance efforts.
- Conduct a formal and reproducible assessment of the aquatic resources and ecosystem functions in the project footprint, using a scientifically defensible method, such as the California Rapid Assessment Method (CRAM), and include the results in the FEIS.

Sediment

The document states that Alternative 1 is estimated to increase the total amount of sediment entering the Yolo Bypass to approximately 743,000 cubic yards on an average annual basis (an increase of about 13 percent) (p. 12-13). Currently, sediment removal operations occur in the bypass on an as-needed basis and this would change to "at least every five years and as-needed." Reuse of all the project's dredged material would support efforts to protect vital infrastructure from the effects of sea level rise and assist

¹ https://www.waterboards.ca.gov/water_issues/programs/mercury/docs/hg_prov_final.pdf

in restoring habitat. This would also be consistent with the regional interagency dredged material management plan (the San Francisco Bay Region Long Term Management Strategy, or LTMS), which strives to maximize beneficial reuse of dredged sediments and strictly limits annual in-Bay disposal volumes.

Recommendation:

In the FEIS, discuss the feasibility of practical reuse, including possible sites and partnerships, of the sediment material that would deposit in the Yolo Bypass as a result of the project.

Air Quality

Since the proposed project would be in an area that is designated as non-attainment for PM_{2.5} and attainment/maintenance for PM₁₀, and the initial analysis shows that there would be short-term degradation of air quality during construction, it is critically important that impacts to air quality be accurately analyzed, disclosed, and reduced as much as possible. According to the DEIS, Alternatives 1-3 would have mitigated emissions below the National Ambient Air Quality Standards NO_x and PM₁₀ thresholds, but Alternatives 4-6 would have mitigated emissions above the *de minimis* thresholds due to their larger construction footprints.

Recommendations:

EPA encourages Reclamation to work with Yolo-Solano Air Quality Management District (AQMD) and Feather River AQMD to develop the Draft General Conformity Determination for the project and to identify additional mitigation measures that would be necessary. For all the Alternatives, consider the following, as appropriate, to reduce adverse effects during construction of the project:

- Solicit bids that include use of energy and fuel-efficient fleets;
- Solicit construction bids that use Best Available Control Technology, particularly those that would deploy zero-emission technologies;
- Employ the use of alternative fueled vehicles;
- Use lighting systems that are energy efficient, such as LED technology;
- Use the minimum amount of greenhouse gas (GHG)-emitting construction materials that is feasible;
- Use cement blended with the maximum feasible amount of alternative materials (industrial materials designated for re-use, for example) that reduce GHG emissions from cement production;
- Use lighter-colored pavement where feasible;
- Recycle construction debris to maximum extent feasible;
- Plant shade trees in or near construction projects where feasible; and
- Use grid-based electricity for construction activities and/or onsite renewable electricity generation, rather than diesel and/or gasoline powered generators.

Update Table 18-43 and Table 18-51 to indicate that total NO_x emissions for Alternative 5 would be above the *de minimis* threshold.