Reading file

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

June 24, 2008

Christy Smith
Refuge Manager
San Pablo Bay National Wildlife Refuge
7715 Lakeville Highway
Petaluma, CA 94954

Subject: Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the Cullinan Ranch Restoration Project, Solano and Napa Counties, California (CEQ # 20080160)

Dear Ms. Smith:

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. Thank you for agreeing to accept EPA's comments 1-week past the comment deadline. Our detailed comments are enclosed. EPA staff will be attending the site visit on July 9, 2008 and may provide additional input at that time.

EPA supports the project, which proposes to restore tidal influence to the Cullinan Ranch site creating over 1,500 acres of tidal marsh habitat for the benefit of the endangered salt marsh harvest mouse and California clapper rail. While we support the project, the DEIS/EIR lacks key information, especially regarding the management of contaminated sediments, impacts of the project on the larger San Pablo Bay sediment budget, and implementation of the adaptive management strategy. We recommend the Final EIS include this information. We also recommend additional mitigation measures be identified and adopted for reducing construction-related impacts to air quality. We have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions").

EPA appreciates the opportunity to review this DEIS. When the FEIS is released, please send one hard copy and CD to this office at the above address (mail code: CED-2). If you have any questions, please contact me at 415-972-3846 or Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

Nova Blazej, Manager
Environmental Review Office

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

cc: Rob Lawrence, U.S. Army Corps of Engineers
Steve Goldbeck, San Francisco Bay Conservation and Development Commission

EPA DETAILED COMMENTS ON THE CULLINAN RANCH RESTORATION PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT (DEIS/DEIR), SOLANO AND NAPA COUNTIES, CALIFORNIA, JUNE 24, 2008

Contaminated Sediments

The DEIS/EIR identifies contamination present onsite from historic land uses including several metals and pesticides above pollutant criteria levels (p. 123). The Contaminant Sampling Report in Appendix D concludes that the presence of some contaminant levels detected on site may pose unacceptable ecological risk. These include zinc levels at the Pole Barn Area, and nickel, DDT's and total chlordane levels at the Farmyard Area (Appendix D, p. 16-17).

The DEIS/EIR states that as a mitigation measure, selected remediation would be implemented within areas on the Cullinan Ranch Site where dredging and soil-moving would occur during construction (p. 125). No additional information is included; the document does not discuss the locations of proposed dredging/soil movement in relation to detected contamination or how selected remediation will occur.

EPA generally concurs with the information, interpretations and findings presented in Section 3.3 of the impact assessment; however, it is not clear how the criteria used to evaluate contaminant levels (p. 122) were applied to assess significance of impacts, per the significance criteria identified on page 124. Additional clarification of this would be helpful.

> *Recommendation:* Include specific information in the Final EIS (FEIS) regarding plans to address contaminated sediments that will be disturbed. Discuss detected contamination in relation to the locations slated for disturbance for the two action alternatives (we recommend including maps of areas to be disturbed). Identify the methods or protocols to be used for remediation, including the remediation goals/criteria, potential remediation options, responsible parties, and any oversight agencies/authorities.
>
> Provide additional clarification on how the criteria used to evaluate contaminant levels correlates with the significance criteria used in the impact assessment.

Sediment Dynamics

The DEIS/EIR references and states project consistency with the Bay Conservation Development Commission's (BCDC) San Francisco Bay Plan (p. 133). The Bay Plan requires that any tidal restoration project design include an analysis of the impact of the project on the Bay's sediment budget (p. 129). While there is some discussion of sediment dynamics in Appendix A, the discussion primarily regards the restoration site and does not include effects of the project on sediment dynamics across San Pablo Bay.

> *Recommendation:* EPA recommends that the FEIS include a discussion of sediment dynamics which addresses how increasing the tidal prism may affect the overall Bay sediment budget. The discussion should address whether/how much loss of San Pablo Bay mudflat might be caused or accelerated by creation of a large new "sediment sink" at the restoration site and whether this would be significant. EPA encourages USFWS to consult with BCDC and the U.S. Army Corps of Engineers to see what sediment

modeling work may exist to inform this discussion. Existing sediment modeling may be helpful in evaluating project goals and impacts at the Cullinan Ranch site.

Adaptive Management

The DEIS/EIR states that an adaptive management strategy will be used to ensure a fully functioning tidal marsh is established and that the long-term project monitoring component will facilitate this strategy (p. 50). No further information is provided regarding the adaptive management strategy, however. The document states that the impact assessment assumes tidal marsh characteristics will dominate within 70 to 100 years after project initiation (p. 106). More information regarding the monitoring objectives and decision-making strategy in relation to this timeline is needed to fully understand the project.

> *Recommendation:* The FEIS should provide specific information regarding the adaptive management strategy, preferably including the strategy as an attachment to the FEIS. At a minimum, the FEIS should identify the key elements of the strategy including: monitoring objectives and timelines; information needs; needed financial, technical, and human resources; identities of responsible parties; the process for evaluating monitoring results including indicators and criteria; the process for altering management decisions; the data management process; and the process for communicating results.

Air Quality

The site is located in a marginal nonattainment area for the National Ambient Air Quality Standard (NAAQS) for ozone, and nonattainment for the California Ambient Air Quality Standard (CAAQS) for ozone and particulate matter greater than 10 microns in diameter (PM_{10}) (p. 159). The DEIS/EIR indicates that construction related emissions of PM_{10} are expected to total 1.2 tons per year and that mitigation measures are needed to reduce impacts below significance (i.e. to comply with the Bay Area Air Quality Management District (BAAQMD) guidelines regarding construction activities) (p. 162). Several mitigation measures are included to reduce PM_{10} emissions associated with construction, per the BAAQMD California Environmental Quality Act (CEQA) Guidelines.

The DEIS/EIR concludes that the emissions of ozone precursors from the project would have no adverse effect (NEPA determination) and therefore no mitigation is required (p. 17). This conclusion may be consistent with CEQA, however under NEPA, the Council on Environmental Quality (CEQ) has instructed Federal agencies that the:

> "mitigation measures discussed in an EIS must cover the range of impacts of the proposal", and that "all relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies....This will serve to alert agencies or officials who can implement these extra measures, and will encourage them to do so. ...Because the EIS is the most comprehensive environmental document, it is an ideal vehicle in which to lay out not only the full range of environmental impacts but also the full spectrum of appropriate mitigation...."[1].

[1] 40 Most Asked Questions Concerning CEQ's NEPA Regulations, 40 CFR Parts 1500-1508, Federal Register, Vol. 46, No. 55, March 23, 1981, Question #19

We also note that in the NEPA Record of Decision, the Federal agency is required to state whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not (40 CFR 1505.2(c)). As such, all practicable mitigation measures should be identified.

The DEIS/EIR indicates that the project could require almost 15,000 truck trips to and from the site for importing off-site materials (p. 146). The DEIS/EIR estimates that 5.0 tons per year (tpy) of nitrogen oxides and 0.5 tpy of reactive organic gases would be emitted by the project construction. Because the project will occur in an ozone nonattainment area and will emit harmful diesel particulate matter, appropriate mitigation to reduce combustion pollutants from diesel engines should be identified. Additionally, the DEIS/EIR does not include any information as to how the emissions of PM_{10} and ozone precursors were calculated.

Recommendation: In the Final EIS (FEIS), identify how the PM_{10} and ozone precursor emissions were calculated.

EPA recommends that mitigation to reduce combustion pollutants from diesel engines be identified and adopted as part of the project. Examples of such mitigation follow.

- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking.
- Lease new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, only Tier 2 or newer engines should be employed in the construction phase.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. Engine certification data can be found at the EPA Engine Certification Data web page: http://www.epa.gov/OMS/certdata.htm.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

Additional comments / Need for additional information

- The DEIS/EIR states that the augmentation of the Pond 1 levee, the armoring the PG&E tower footings (p. 58), and reinforcement of Highway 37 levee will require the use of over 114,000 cubic yards of off-site materials. The document states that beneficial reuse of offsite material would be consistent with the main goal of the San Francisco Bay Long Term Management Strategy for Dredging (LTMS). The document should elaborate on

what types of off-site materials are contemplated for these functions. EPA encourages beneficial reuse of dredged material for this project as practicable. We recommend that the opportunities and constraints with regard to the use of dredged material be discussed in the FEIS, both in terms of restoration activities and infrastructure reinforcement. In addition, the FEIS should discuss where off-site materials might originate, if known, and the environmental impacts that will occur to these borrow areas, which are connected actions per 40 CFR 1508.25(a). The location of the borrow ditch on the Cullinan site (p. 42) should also be disclosed.

- The DEIS/EIR identifies the existing wetland communities at the site (p. 89) but there is no discussion of Clean Water Act jurisdictional features or the specific regulatory process for construction, which will involve the loss of 853 acres of freshwater seasonal and emergent marsh wetlands (p. 111). The FEIS should address what regulatory processes will occur in relation to the dredge/fill of the existing jurisdictional wetlands.
- The DEIS/EIR references the Napa-Sonoma Salt Marsh Restoration Project (NSRP) (p. 2) but the document provides very little information regarding this project, although it is clear there is interest in coordinating this project with the NSRP. Some additional information regarding this project and how it relates to the Cullinan Ranch project would be helpful. Coordinated monitoring and adaptive management decision-making should also be discussed.