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

February 23, 2015

Thomas R. Kendall
Chief, Planning Branch
Engineering and Technical Services Division
U.S. Army Corps of Engineers San Francisco District
1455 Market St. San Francisco, CA 94103
ATTN: William DeJager

Anne Morkill, Refuge Manager
Don Edwards San Francisco Bay NWR
U.S. Fish and Wildlife Service
1 Marshlands Rd.
Fremont, CA 94555

Subject: Draft Environmental Impact Statement for the South San Francisco Bay Shoreline Study: Alviso Ponds and Santa Clara County Interim Feasibility Study Project, Santa Clara and Alameda Counties, California. (CEQ # 20140371)

Dear Mr. Kendall and Ms. Morkill:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the South San Francisco Bay Shoreline Study: Alviso Ponds and Santa Clara County Interim Feasibility Study Project, pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500 1508) and Section 309 of the Clean Air Act.

The DEIS analyzes proposed restoration strategies for approximately 9,000 acres of former commercial salt ponds in the Alviso pond complex and includes, as the project purpose, both flood risk management and tidal habitat ecosystem restoration. The complex is part of the San Francisco Bay Estuary, which is one of the largest and most important estuarine systems in the western hemisphere. It is a significant component of the Pacific Flyway, supporting a high level of native wildlife diversity and providing a broad range of ecosystem services. The U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service propose to undertake a large scale levee and tidal marsh restoration project that would be resilient to sea level rise for at least the 50 year life of the project.

The DEIS identifies Alternative 3 as the Tentatively Selected Plan and, on February 2, 2015, we received a letter from the Corps clarifying that it is the Preferred Alternative for this EIS (see attached letter). The DEIS also identifies Alternative 3 as the least environmentally damaging practicable alternative for this project. EPA supports the selection of Alternative 3. We recognize that Alternative 3, due to its restoration project design, calls for more fill than do the other action alternatives; however, we believe that "least environmentally damaging" does not mean least amount of fill in this case. Alternative 3 has the potential to provide essential flood protection for the Alviso community, create critical habitat for sensitive species, and allow for the Baylands to migrate over time, thereby providing adaptive capacity for species that need to move to more suitable range elevations as sea level rises.

Although we reviewed all of the alternatives evaluated in the DEIS, our rating of the DEIS is based on our evaluation of Alternative 3. We have rated Alternative 3 and the DEIS document as Environmental Concerns - Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). EPA

would have substantially greater concerns if any of the other alternatives were selected. While we support the selection of Alternative 3, we recommend that the Final EIS include more information concerning when and how restoration of ponds A9 - A15 would occur, as well as how this restoration would be funded. We understand that the Corps is awaiting Water Resources Development Act implementation guidance regarding restoration on U.S. Fish and Wildlife Service lands. We recommend that the FEIS commit to full restoration of all ponds in the project area, explain how it would be funded, and provide a timeline for this tidal restoration. We also recommend that the FEIS provide additional information regarding operation of the Artesian Slough tide gates and any potential impacts of such operation on the San Jose-Santa Clara Water Pollution Control Plant. Regarding air quality, we recommend that the FEIS describe how the project would comply with EPA's General Conformity Rule.

Recognizing that the South San Francisco Bay is a mercury rich environment, EPA recommends that actions associated with the Project be closely monitored to avoid remobilization of mercury laden sediment or the creation of environmental conditions that promote bioaccumulation. We recommend that the lead agencies use the most current information available to evaluate the project's design and construction methods to minimize mercury mobilization.

Given the high flood risk in the Alviso Community, we suggest that the FEIS explain how the proposed design complies with the recent Executive Order 13690 – "Establishing a Federal Flood Risk Management" signed by President Obama on January 30, 2015.

Page 1-1 of the DEIS incorrectly identifies EPA as a Cooperating Agency. Please correct this in the Final EIS. EPA has not received any request to serve as a Cooperating Agency for this project. Please see the attached Detailed Comments for further discussion of our concerns and recommendations.

EPA appreciates the opportunity to review this DEIS. When the FEIS is released, please send one hard copy and three CDs to the address above (mail code: ENF-4-2). If you have any questions, please contact me at (415) 972-3521, or have your staff contact James Munson, the lead reviewer for this project. James can be reached at (415) 972-3852 or Munson.James@epa.gov.

Sincerely,

Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosures: Summary of the EPA Rating System
Corps Preferred Alternative Clarification Letter

cc: Cay Goude, Assistant Field Supervisor, USFWS
Larry Goldzband, Executive Director, BCDC
Bruce Wolfe, Executive Officer, SF Bay Regional Water Quality Control Board
Sam Schuchat, Executive Officer, California Coastal Conservancy
Beau Goldi, Chief Executive Officer, Santa Clara Valley Water District
Napp Fukuda, Deputy Director, Department of Environmental Services, City of San Jose

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.

LEDPA Determination

Page 3-81 of the DEIS identifies Alternative 3 as the least environmentally damaging practicable alternative for this project. While a LEDPA determination is not necessary for authorization of this project, EPA supports the selection of Preferred Alternative 3 as the environmentally preferable alternative, and believes it is fully consistent with the standards of the 404(b)(1) Guidelines, including the LEDPA. To facilitate permitting, we recommend that the Final EIS and the 404(b)(1) analysis (Appendix X) more fully demonstrate that Alternative 3 meets these criteria. While alternatives other than Alternative 3 would involve less fill, EPA believes that they would result in other adverse environmental consequences. A fuller documentation of the reasons Alternative 3 has been identified as the LEDPA would be helpful, as it is important for the public and other stakeholders to understand the greater risk of harm and damage inherent in the other action alternatives.

Recommendations:
In order to better demonstrate the environmental benefits of Alternative 3:

Revise the 404(b)(1) analysis (Appendix X) to address three components of the project: levee alignment, levee height, and ecotone vs bench design. Because these components are theoretically independent from each other, discussing each in turn could be a clear way to demonstrate that the final alternative chosen is composed of the least damaging alignment, height, and transition habitat choices. The revised analysis should include an estimate of the acres of fill and the acres of special aquatic sites provided after construction is complete.

Fully address, in Appendix X, the overall impacts to waters of the U.S., impacts to special aquatic sites (e.g. wetlands and mudflats), non-waters impacts, and whether a given component meets the stated project purpose and objectives.

More clearly describe, in Appendix X, how the project area would be restored to a more natural high quality habitat, such as tidal wetlands and high-tide refugia, and provide benefits to species of concern.

Include, in the FEIS, an estimate of the acres of wetlands likely to form in the ecotone after construction. The DEIS includes restoration estimates for various habitat types; however, it does not appear that these numbers account for wetlands likely to develop in the ecotone.

Benefits of Ecotone Design for Habitat Restoration

Alternative 3 includes the establishment of an ecotone adjacent to the Flood Risk Management levees. It does not appear that that Alternative 2, 4 or 5, each of which relies on a bench design and would not provide an ecotone, would meet the stated goal of restoring ecological function and habitat quantity, quality, and connectivity for special status species. It is not clear from the document that the bench habitat would provide adequate high tide refugia or buffer for salt marsh harvest mouse or clapper rail, which is identified in U.S.

FWS "The Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California" (Recovery Plan) as a necessary component of marsh restoration for these species[1].

> ***Recommendation:***
> Discuss, in the FEIS and Appendix X, the habitat recommendations in the Recovery Plan and clarify whether the bench design would meet high tide refugia and buffer needs for the target species. If not, the FEIS should explain whether/how these alternatives would meet the stated objectives for special status species. Provide a comparative analysis of how the ecotone alternative vs. bench alternatives would meet the stated objectives of restoring special status species habitat.

Alternatives/Levee Height

The DEIS identifies Alternative 2, with a 12.5 foot or 13.5 foot levee height, as the tentative National Economic Development Plan. EPA understands that the NED Plan represents the alternative identified by the Corps as having the most cost effective levee alignment and the levee height that would generate the greatest net benefits. Section 3.5.4 of the DEIS identifies screening criteria for evaluation of the flood protection measures, such as completeness, effectiveness, efficiency, and acceptability. Alternatives carried forward, including the NED Plan, must meet these screening criteria. The acceptability criterion includes consideration of whether an alternative will be consistent with federal laws and codes. Page 3-80 of the DEIS states that a 13.5' levee height would not meet FEMA levee certification criteria at the end of the plan period in 2067. It is unclear how a levee design that does not meet FEMA accreditation requirements would qualify as an acceptable alternative under the Corps screening criteria.

> ***Recommendations:***
> In the FEIS, clarify how FEMA requirements affect the Corps' acceptability screening criteria and explain how the proposed NED Plan levee height of 12.5' or 13.5' would meet the screening criteria, given the apparent conflict with FEMA accreditation requirements.

Water Quality

Sediment Supply
As stated in the DEIS, recent United States Geological Survey research indicates a trend in San Francisco Bay, whereby levels of suspended sediments are steadily decreasing and the Bay is becoming less turbid (p. 3-87). However, it should be noted that these studies also indicate that suspended sediment levels vary in the different regions of the Bay, and perhaps fortuitously for the proposed project, the South Bay still retains high suspended sediment concentrations and generally high sedimentation rates. For example, sedimentation in some locations in Pond A21 accumulated over 220 mm in 2 to 3 years.

> ***Recommendation:***
> Given the beneficial accretion rates seen in similar adjacent projects, we suggest that the construction implementation be designed to maximize marsh sediment deposit, thus utilizing tidal marsh's natural potential to keep up with sea level rise.

[1] http://www.fws.gov/sacramento/es/recovery-planning/tidal-marsh/Documents/TMRP_Volume1_RP.pdf

Nutrients
San Francisco Bay is a nutrient-enriched estuary, but has been buffered from the potential negative consequences of elevated nutrient levels by a variety of factors. In the future, projected increases in water clarity and water temperatures will create conditions that could result in adverse impacts in the Bay as a result of high nutrient concentrations, including the potential proliferation of harmful algal species.

Recommendations:
Discuss, in the FEIS, the benefits of levee designs that incorporate transitional zone features, including the creation of tidal marshes, and the ability of these ecosystems to take up nutrients at a high rate.

Add the following information to Table 4.5-10, entitled, "Likely Future Status of Water Quality Contaminants in the Shoreline Phase I Study Area":

1. For the "Nutrients" block, add the Regional Monitoring Program's Nutrients Strategy: The San Francisco Bay Nutrient Science and Management Strategy is a regional initiative for developing the science needed for informed decisions about managing nutrient loads and maintaining beneficial uses within the Bay in response to the apparent changes in the Bay's resilience to nutrient loading.
2. For the "Algae" block, add the National Coastal Condition Assessment, which will be sampling for harmful algal species in the Bay in 2015.

Monitoring and Adaptive Management
The DEIS includes a thorough monitoring and adaptive management plan developed based upon the 2006 South Bay Salt Pond Restoration Project (SBSPRP). EPA supports the scientific and adaptive management approach adopted by the SBSPRP to manage the phased restoration of the salt ponds, given the uncertainty that exists in the project area. We are pleased to see the same approach is being applied to the Project. However, the DEIS is unclear on who has responsibility to ensure that the monitoring and adaptive management plan is implemented. The functioning of the levee is integral to the restoration of the salt ponds, and the Corps is responsible for restoration of at least Pond A18; therefore, it appears that the Corps bears at least some responsibility for implementing the plan. Yet, it is unclear how the Corps, FWS, State and the local sponsors will share this responsibility.

Recommendation:
Clarify, in the FEIS, who would maintain responsibility, including financial responsibility, for implementing the monitoring and adaptive management plan and ensuring the project's success. The FEIS should clearly state which agencies/stakeholders, such as the Corps, FWS, State of California, and/or local sponsors, would take on which responsibilities throughout the fifty year life of the project.

Artesian Slough Tide Gates and Wastewater Facility NPDES permit
All action alternatives in the DEIS include constructing tide gates across Artesian Slough just downstream from the San Jose-Santa Clara Water Pollution Control Plant (Wastewater Facility) outfall. According to page 4-211 of the DEIS, these gates could be closed "in extreme storm events," but the document does not provide sufficient operational information about the tide gates beyond this vague description. We, therefore, cannot evaluate the impact this component of the project may have on water quality and the Wastewater Facility's ability to comply with its NPDES permit (permit # CA0037842).

Recommendations:
Provide additional information in the FEIS on operation of the Artesian Slough tide gates, including the estimated frequency of closure now and in the future, estimated duration of closure, estimated volume of water the Wastewater Facility would need to hold or otherwise discharge during gate closure, and whether or not gate closure could result in violation of the Wastewater Facility effluent limitations, receiving water limitations, or other permit conditions. Consider identifying how coordination on this project element would be accomplished should extreme storm events occur.

Construction and operation of this project element would require extensive coordination with the Wastewater Facility and, possibly, the Regional Water Quality Control Board. We suggest that the FEIS identify how the Corps and local sponsors would coordinate with these entities on this component of the project.

Air Quality

General Conformity
EPA's General Conformity Rule, established under Section 176(c)(4) of the Clean Air Act, provides a specific process for ensuring federal actions will conform with State Implementation Plans to achieve National Ambient Air Quality Standards. Although the DEIS states; "As the project would not result in population or employment growth there would be no conflict with, or obstruction of, air quality plans" (p. 4-460 and elsewhere), this is not the analysis required by the General Conformity Rule. The rule sets de minimis thresholds, depending on the nonattainment status of the region where a federal action will occur. The Bay Area Air Basin is designated moderate non-attainment for EPA's 1997 1-hour ozone standard. As specified in 40 CFR 93.153, the de minimis threshold for federal actions in moderate ozone nonattainment areas is 100 tons per year for NOx and VOCs. Emissions from any of the alternatives might exceed these de minimis standards. For example, under Alternative 2, emissions in 2017 are estimated as 773 lbs per day of NOx (Table 4.10-7), which converts to 141 tons per year if construction occurs over 365 days a year, or 96 tons if construction occurs over 250 days per year. If annual project emissions exceed the de minimis concentrations, the Corps/FWS are required to prepare a general conformity analysis, demonstrating conformity with the applicable State Implementation Plan by one of the methods specified in 40 CFR 93.158. Additionally, the rule requires public notice of a general conformity determination, as stated in 40 CFR 93.156.

Recommendation:
Determine whether annual project emissions would exceed the de minimus concentrations established for federal actions in moderate ozone attainment areas, thereby requiring a general conformity analysis. If an analysis is required, specify one of the methods provided by 40 CFR 93.158 to demonstrate conformity with the applicable State Implementation Plan. In addition, discuss public participation that may be required.

Construction Mitigation Measures

We are pleased that the DEIS includes air quality avoidance and minimization measures, such as limiting idling to a maximum of 5 minutes, limiting vehicle speeds to 15 mph, and administering traffic control (page: 4-455). Additional measures are available to further reduce air quality impacts.

Recommendations:
Ensure that construction vehicles use newer and cleaner construction equipment (e.g. Tier 4), or diesel particulate filters on older construction equipment.

Use electricity from the grid, rather than portable diesel-powered generators, if possible.

Flood Protection (Executive Order 13690)

On January 30, 2015 President Obama issued Executive Order 13690 – Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, which amends Executive Order 11988 – Floodplain Management. Section 6(c) of Executive Order 13690 requires that, rather than basing the floodplain on the area subject to a one percent or greater chance of flooding in any given year, the floodplain be established using one of the following approaches:

> *(1) Unless an exception is made under paragraph (2), the floodplain shall be:*
> *(i) the elevation and flood hazard area that result from using a climate-informed science approach that uses the best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science. This approach will also include an emphasis on whether the action is a critical action as one of the factors to be considered when conducting the analysis;*
> *(ii) the elevation and flood hazard area that result from using the freeboard value, reached by adding an additional 2 feet to the base flood elevation for non-critical actions and by adding an additional 3 feet to the base flood elevation for critical actions;*
> *(iii) the area subject to flooding by the 0.2 percent annual chance flood; or*
> *(iv) the elevation and flood hazard area that result from using any other method identified in an update to the Federal Flood Risk Management Standards.*

For more information on go to: https://www.fema.gov/federal-flood-risk-management-standard-ffrms

Recommendation:
Clarify how Alternative 3 would meet the goals of Executive Order 13690, and discuss any changes to the project necessary to meet the stated goals. Compare the ability of Alternative 3 to to meet the goals of the EO with that of the other alternatives. For more information on go to: https://www.fema.gov/federal-flood-risk-management-standard-ffrms.

The DEIS identifies a 50 year planning horizon for the project; however, the useful life of the levees could extend well beyond 50 years, if designed appropriately to accommodate expected sea level rise. Because the analysis only extends to 2067, it is not clear how the levees would perform beyond this period, especially given the expected acceleration of sea level rise.

Recommendation:
Discuss the level of flood protection provided by the alternate levee heights (12.5', 13.5', and 15.2') under each of the three sea level rise scenarios out to year 2100.

Species of Concern and Habitat Assessment/Valuation

Transition Zone Habitat

The establishment of an ecotone adjacent to the levee, as proposed in Alternative 3, can be expected to provide substantial ecological benefits, especially for special status species such as the steelhead trout, salt marsh harvest mouse, western snowy plover, california least tern, and california clapper rail, which are identified as possibly using the project site (page 2-7). The DEIS references the Tidal Marsh Recovery Plan, which states that lack of high tide refugia habitat is a threat for both salt marsh harvest mouse and California clapper rail. The Recovery Plan also identifies creation of ecotone habitat as necessary for delisting (see specifically Sections II.b.7, II.e.7, and III.a in the Recovery Plan). The bench habitat described in Alternatives 2, 4, and 5 does not appear to provide suitable high tide refugia or buffer habitat for salt marsh harvest mouse and California clapper rail, as called for in the Recovery Plan. Page 28 of the Recovery Plan states that, "Levees generally are too steep, narrow, and weedy to be high quality high-tidal refugia for tidal marsh animals."

> ***Recommendations:***
> In the FEIS, expand on the habitat restoration recommendations in the Recovery Plan, including the need for high tide refugia and buffer habitat, and explain how they would be supported by Alternative 3 versus the other alternatives
>
> Describe the total width, the width minus the 15' vegetation maintenance zone, and the expected vegetative condition of unmaintained habitat for each alternative.

Habitat Assessment

The DEIS does not clearly explain how the habitat assessment/valuation was performed. Specifically, the Combined Habitat Assessment Protocols Summary in Appendix J does not sufficiently describe the action alternatives, making it difficult to assess how the habitat values of the different alternatives were evaluated. Further, EPA is aware that an assessment using the California Rapid Assessment Method was performed for this project, yet it is not clear how this information was used in the habitat valuation.

It appears that the habitats were scored independently and then summed to provide an estimated benefit for a given alternative. The benefit of the ecotone habitat is not just the value of that habitat type alone. The greater value of this habitat is that its presence increases the value of the adjacent marsh habitat. Many species found within tidal marshes need high tide refugia, including salt marsh harvest mouse and california clapper rail. Without high tide refugia, i.e., ecotone habitat, the marsh habitat is of lower quality for these species. In addition, ecotone habitat can filter pollutants and provide a buffer between urbanized areas and the marsh, thereby increasing the overall quality and functioning of the marsh itself. Therefore, restored marsh habitat in alternatives without ecotone habitat (i.e. alternatives 2, 4, and 5) should have been given lower scores than restored marsh habitat in alternatives with ecotone habitat (i.e. preferred alternative 3). Appendix A references the 1999 Baylands Ecosystem Habitat Goals Report which "presents recommendations for the kinds, amounts, and distribution of wetlands and related habitats". We note that a technical update to the Baylands Ecosystem Habitat Goals Report is expected March 2015.

> ***Recommendations:***
> Expand on the discussion of ecotone habitat value by incorporating habitat restoration recommendations in the Recovery Plan. If the updated Baylands Ecosystem Habitat Goals Report Technical Update is released before the FEIS is completed, the FEIS should reference ecotone habitat recommendations from this report as well. The Baylands Ecosystem Habitat

Goals Report Technical Update is expected March 2015. http://www.sfbayjv.org/about-strategy.php

The FEIS should discuss how the restored marsh habitat was valued for each alternative. The restored marsh habitat in Alternatives 2, 4, and 5 should be scored lower than that of Alternative 3 due to the lack of suitable ecotone habitat.

This comparison should also identify whether the bench and or ecotone habitat will meet high tide refugia and buffer recommendations identified the Recovery Plan.

Update Appendix J to include all action alternatives.

Compensatory Mitigation

The DEIS indicates that the Corps is not proposing compensatory mitigation for wetland impacts because the project will result in the eventual restoration of many hundreds of acres. However, it can take many decades for tidal marsh habitat to develop and the DEIS identifies a time lag between anticipated project impacts and successful habitat restoration. While this impact is identified as less than significant because the project will result in a net increase in wetlands in the long term, the discussion in the DEIS is not adequate to demonstrate that mitigation is not needed for the loss of wetlands in the near-term.

Recommendations:

The FEIS should include additional discussion of likely short-term wetland impacts and further justification for the conclusion that compensatory mitigation is not required. Specifically, the FEIS should identify the acres of wetlands likely to develop within 3-5 years after predicted construction-related impacts. This can be done by estimating the acreage that will fall within the tidal range known to support marsh vegetation. If this acreage of expected short-term wetland development is less than the acreage of wetlands fill, then the FEIS should estimate how long it will take to achieve no net loss of wetlands.

Methylmercury

Page 4-162 of the DEIS states that, as part of the South Bay Salt Pond Restoration Project (SBSPRP), "studies are currently underway to evaluate the long-term effects, recent data suggest that methymercury (MeHg) concentration would decrease after restoration of tidal habitat". These studies also indicate MeHg increases following levee breaches to restore tidal action to salt ponds are temporary. In addition, the South San Francisco Bay is located in a mercury (Hg)-rich environment due to historic and continuing run off from the New Almaden Quicksilver Mine. Given these conditions, management actions associated with the salt pond restoration (e.g. levee breaches) may remobilize mercury laden sediments. This remobilization of mercury could create environmental conditions that increase or decrease MeHg production and bioaccumulation. In order to continue to restore tidal wetlands, the SBSPRP monitors changes in the distribution, speciation and bioaccumulation of Hg that could be caused by project actions.

Recommendations:

Use the most current information from the SBSPRP to evaluate the South Bay Shoreline levee's design and construction to minimize Hg mobilization and bioaccumulation.

The discussion in the DEIS of the potential for increased exposure to methylmercury (MeHg) resulting from the project was focused primarily on construction-related mobilization of MeHg. The document did not

discuss whether fish, birds, and invertebrates using the restored marshes would likely be exposed to higher levels of MeHg than under current conditions.

Recommendations:
Clarify, in the FEIS, whether fish, birds, and invertebrates using the restored marshes would likely be exposed to higher levels of MeHg than under pre-construction conditions. We recommend that the FEIS demonstrate whether restored marshes would have lower rates of MeHg production than under pre-construction conditions.

Aquatic Biological Resources/State Permitting
The Aquatic Biological Resources (ABR) Section identifies consistency with the Recovery Plan as a significance criterion; however, the impact discussion simply states that, since the Recovery Plan does not cover aquatic species, the project will not conflict with its provisions (pag: 4-234). In addition, consistency with the Recovery Plan is not sufficiently discussed in the Terrestrial Biological Resources (TBR) Section. The Recovery Plan clearly addresses habitats covered under the proposed project, and one of the primary objectives of the project is to restore habitat for special status species addressed in the Recovery Plan (i.e. salt marsh harvest mouse and California clapper rail). The impact significance thresholds for the Aquatic and Terrestrial Biological Resources sections should also identify any conflicts with Regional Board and BCDC policies or regulations since the project would require permitting by both of these state agencies.

Recommendations:
Discuss project consistency with the Recovery Plan either in the Aquatic and Terrestrial Biological Resources Sections of the FEIS. This analysis should include discussion of whether the ecotone and bench habitats are consistent with the recommendations for high tide refugia and buffer habitats.

Incorporate Regional Board and BCDC policy and regulation considerations in the impact analysis.

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET ST.
SAN FRANCISCO, CALIFORNIA 94103-1399

2 February 2015

Ms. Kathleen Goforth
Environmental Review Section
U.S. EPA Region IX
75 Hawthorne Street ENF-4-2
San Francisco, CA, 94105

Attention: Mr. James Munson

Dear Ms. Goforth:

I am writing to clarify the terminology used in the South San Francisco Shoreline Phase I Study Draft Environmental Impact Statement/Report (DEIS/DEIR) to facilitate your office's review of the document.

The Draft Interim Feasibility Report/Environmental Impact Statement for the South San Francisco Shoreline Phase I Study (Shoreline Study) is an integrated document to meet the requirements of both National Environmental Policy Act (NEPA) and the US Army Corps of Engineers' (Corps) planning documents. Integrated documents meet all requirements under NEPA, but the terminology is different in some cases. In accordance with the Corps' SMART Planning Guidance, which is available at http://planning.usace.army.mil/toolbox/smart.cfm, we have adopted the term Tentatively Selected Plan (TSP) for Preferred Alternative at the DEIS stage. In a feasibility study, the TSP is the plan that the Corps is recommending as the Preferred Alternative during the draft public review stage, therefore the TSP is equivalent to the Preferred Alternative. Once this document becomes a Final Feasibility Study/EIS, the TSP/Preferred Alternative will become the Selected Plan/Recommended Plan.

For the Shoreline Study, the TSP/Preferred Alternative is Alternative 3, which is also the Locally Preferred Plan (LPP). In the DEIS/DEIR it is referred to as a TSP to reflect the idea that plan selection or features of the plan may change based on public and agency input.

If you have any questions, please contact me at (415) 503-6822 or Thomas.R.Kendall@usace.army.mil. You may also contact William DeJager at (415) 503-6866 or William.R.DeJager@usace.army.mil.

Sincerely,

Thomas R Kendall, P.E.
Chief, Planning Branch