Appendix C:
Response to Comments

401 Water Quality Certification and Waste Discharge Requirements

South San Francisco Bay Shoreline Project

City of San Jose
Santa Clara County

December 2017

Response to Comments on the Tentative Order for the South San Francisco Bay Shoreline Protection Project

On October 2, 2017, we received a comment letter supportive of the Project from State Assembly member Kansen Chu, 25th AD. Although that letter was not commenting on the Tentative Order, we have included it in this package.

Comment Number	Commenter	Topic	Comment	Response
1	Coastal Conservancy (Conservancy)	Discharger Roles and Responsibilities	**Finding 5. Discharger** All clarifying language explaining roles and application of state vs. federal requirement. Suggested additional language is underlined: The Discharger will implement the Project as described in the application materials and herein. As described in the agreement among the Corps and Non-Federal Sponsors, the Corps will be responsible for construction of flood protection, ecosystem restoration, and some recreational elements. Although the Corps works cooperatively with the Non-Federal Sponsors, the Corps is the party directly responsible for project implementation and will follow the provisions of this Order that are applicable to federal agencies. This remains in effect until the Corps deems a project element complete, at which time it will be turned over to the US Fish and Wildlife Service or the Non-Federal Sponsors for operation and maintenance. The USFWS will follow the provisions of this Order that are applicable to a federal agency for operations and maintenance activities on their property. Any construction activities, operations, and maintenance undertaken directly by the Non-Federal Sponsor will follow the provisions of this Order applicable to state and local governments. For example, once the flood risk management (FRM) levee is constructed and fully functional, the Corps will transfer the levee's operation, maintenance, and management responsibility to the District.	Comment noted. The Tentative Order findings are intended to describe the anticipated roles of the Corps, Conservancy, and District, as well as the U.S. Fish and Wildlife Service (USFWS), which would be anticipated to complete future operation and maintenance actions under a different order. Finding 5, paragraph 2, has been revised as follows: 5. The Discharger will implement the Project as described in the application materials and herein. As described in the agreement among the Corps and Non-Federal Sponsors, the Corps will be responsible for construction of flood protection, ecosystem restoration, and some recreational elements. ~~o~~Once the flood risk management (FRM) levee is constructed and fully functional, the Corps will transfer the levee's operation, maintenance, and management responsibility to the District. The Corps and the Non-Federal Sponsors will share financial responsibility for the ecosystem restoration monitoring and adaptive management. However, the Corps' ecosystem restoration cost sharing obligation is restricted to ten years following each pond-breaching event. Once the Discharger's cost-sharing obligation ends, the Non-Federal Sponsors will assume the total cost for each pond's long-term operation, maintenance, and management. Responsibilities for costs, which will also include operation and maintenance costs, will be allocated pursuant to the PPA, when it is finalized. Currently, the Non-Federal Sponsors

Comment Number	Commenter	Topic	Comment	Response
1 (cont.)	Coastal Conservancy (Conservancy)	Discharger Roles and Responsibilities		are negotiating how their respective roles and responsibilities, including cost sharing, will be divided during the ecosystem restoration's long-term operation, maintenance, and management.
2(a)	Conservancy	Mitigation	**Finding 8. Project Construction Phasing** For reasons discussed in cover letter and throughout comments, we request that this Order delete "is intended to provide mitigation for those impacts" in Section 8 and describe the purpose of the project in a manner consistent with project description in Section 6. In other words, the purpose of the wetland restoration in all phases is improve ecosystem habitat and function, not to provide mitigation.	See general response regarding mitigation.
2(b)	Conservancy	Mitigation	**Finding 8. Project Construction Phasing** Please delete (strikeout) as follows: "If Phase I is successfully implemented and the Discharger does not move forward with Phases II and III, the Discharger will submit supplemental information on Project ~~impacts and propose alternative mitigation, as appropriate and~~ as described in the Provisions." For reasons discussed in cover letter and throughout comments, we suggest that the submittal required if Phase II and III do not go forward is consistent with language proposed in comment number 9.	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
2(b) (cont.)	Conservancy	Mitigation	Please also note that since success is not defined in this Order, this could potential [*sic*] create problems in the future over different interpretations. Since the adaptive management process is considering dynamics in the broader landscape of San Francisco Bay, successful restoration of Phase I ponds does not necessarily mean Phase II and III can be implemented. Although highly unlikely, the Project needs to preserve its ability to consider issues outside of the project area that could warrant slowing or halting breaching of additional ponds. This is an additional reason for changing this requirement.	
3	Conservancy	Marsh Planting	**Finding 10. Phase I (2018-2022)**, *FRM Levee* Please delete "will" and substitute "may" in the following sentence: "Marsh vegetation ~~will~~ may be seeded or planted…" and "pickleweed…~~will~~ may be planted". This is generally not done in SF Bay restoration projects as the tidal waters bring in sufficient seed source for marsh species. However, the project will likely plant higher marsh and upland species above marsh plain.	The requested revision has been made. We concur that tidal waters should bring in sufficient seed sources for marsh species, and also that higher marsh and upland species should be planted. We note the Project application submitted to the Water Board stated marsh vegetation "will" be seeded or planted. The vegetation is anticipated to be continuous and serve as erosion protection. Marsh vegetation ~~will~~ may be seeded or planted at the toe of the levee following construction. Peripheral halophytes such as 12- to 18-inch tall pickleweed (*Salicornia pacifica*) ~~will~~ may be planted at the toe of the levee, if necessary.

Comment Number	Commenter	Topic	Comment	Response
4	Conservancy	Ecotone	**Finding 10. Phase I (2018-2022)**, *Ecotone Creation* Please edit this sentence "The ecotones will be constructed with a 30:1 horizontal to vertical slope…" to reflect the discussion at the Sept. 2016 ecotone charrette that acknowledges that there may be variation in the final design of the ecotone and the quantities estimated in this Order are expected to be the maximum amount.	The requested revision to Finding 10 regarding the ecotone slope has been made. The ecotones will be constructed with an average 30:1 horizontal to vertical slope.
5	Conservancy	Monitoring (EPMP)	**Finding 11. Phase II (2027)** The Order refers to both a MAMP and an Ecotone and Pond Monitoring Plan (EPMP). This is confusing since the MAMP already includes a description of pond monitoring. It seems likely that the EPMP is a placeholder for the ecotone monitoring addendum that the Conservancy has already submitted to the RWQCB as part of the Phase 2 permitting for the South Bay Salt Pond Restoration Project. If that is the intent, we request that the language in this paragraph to refer to that ecotone addendum specifically instead of an additional plan which seems to overlap with the MAMP. See comment 20 as well for further discussion of ecotone monitoring requirements.	Comment noted. We are not proposing to make the requested change. We are supportive of the Project's ecotone and pond components and expect the results of the proposed EPMP would both characterize the performance of the implemented Project and significantly inform future implementation of these restoration and adaptive management measures elsewhere in the Bay. If the Conservancy would prefer to include the specific updated restoration targets and monitoring plan, including an ecotone monitoring plan, with future South Bay Salt Pond Restoration Project monitoring plan submissions, or in reference to these submissions, then Water Board staff would find that approach acceptable. The Tentative Order has been revised to allow the use of the South Bay Salt Pond Phase 2 Project ecotone addendum monitoring plan as a model for the EPMP, to the extent the addendum meets the

Comment Number	Commenter	Topic	Comment	Response
5 (cont.)	Conservancy	Monitoring (EPMP)		requirements set forth in the Tentative Order. The Discharger may also incorporate South Bay Shoreline ecotone monitoring into the addendum and complete the required work.
6	Conservancy	Landward Levee Alignment East of Artesian Slough	**Finding 13. Future Project Design Decisions**, *Landward Levee Alignment East of Artesian Slough* The discussion of the Pond A18 Alternative does not note that there are constraints to pursuing this alternative. For the Shoreline proponents to pursue levee alignment alternatives 1) the lands must be provided in a condition suitable for restoration or construction, 2) the project costs cannot increase more than 20% over authorized costs, and 3) the alternative cannot require new NEPA/CEQA analysis or feasibility analysis. Otherwise, the Corps will be required to re-open project planning which [may] delay project implementation and jeopardize Congressional appropriations.	Comment noted. Water Board staff understands the constraints regarding implementing potential changes to the proposed alignment, and we appreciate the extensive discussions we have had on this issue with Project stakeholders. The Tentative Order, including its appendices, appropriately recognizes potential constraints and sets forth specific steps for considering alternative alignments, which we understand Corps staff is now completing. The Tentative Order's language regarding alternative landward levee alignments between Artesian Slough and Coyote Creek reflects the productive discussion between Water Board staff and Project stakeholders including the Dischargers, USFWS, and BCDC. That discussion is already expected to result in the use of a modified San Jose Regional Wastewater Facility levee, rather than construction of what would have been a duplicate new levee immediately adjacent to it, for part of the alignment. This is expected to reduce anticipated Project costs and impacts, including the volume of fill material required to construct the levee. The Landward Levee Alignment Memo described the anticipated benefits of an alternative alignment between Artesian Slough and Coyote Creek, including reduced Project costs. The Tentative Order requires updates regarding work that Corps staff is already doing to reduce Project costs and increase

Comment Number	Commenter	Topic	Comment	Response
6 (cont.)	Conservancy	Landward Levee Alignment East of Artesian Slough		ecosystem restoration opportunities, including evaluating the landward levee alignment alternatives. In addition, future mitigation requirements are not linked to the landward levee alignment in the Tentative Order as the District describes. The Tentative Order authorizes the Project authorized by Congress, but recognizes that an alternative landward levee alignment east of Artesian Slough may be beneficial to the Federal and Non-Federal Sponsors from a cost standpoint as well as reduce the anticipated amount of net loss of waters of the U.S. to zero, or better. Finding 13 discusses the benefits that may result from an alternative alignment. Those include, but are not limited to, reduced Project costs, reduced volume of fill needed to build the Project, reduced fill in jurisdictional waters and opportunities to create new jurisdictional waters, avoidance of future water management issues that would result from building the levee between the Bay and existing wetlands, and opportunities to address cleanup of legacy biosolids ponds at the San Jose Regional Wastewater Facility in coordination with the Project, potentially resulting in reduced cleanup costs for the City of San Jose. Prior discussion with the Conservancy, Corps, and District indicated that they potentially preferred a landward levee alignment east of Artesian Slough for these reasons. The Tentative Order discussion regarding an alternative alignment does not discount the challenges that must be overcome before the design is finalized. Rather, the Tentative Order sets forth a mechanism that would eliminate or reduce obstacles by identifying and authorizing a range of

Comment Number	Commenter	Topic	Comment	Response
6 (cont.)	Conservancy	Landward Levee Alignment East of Artesian Slough		landward levee alignments. Finding 30 notes that any potential significant environmental impacts associated with a landward levee alignment east of Artesian Slough have already been identified in the Joint EIS/EIR. Thus, the Tentative Order facilitates potential landward levee alignments and does not present, or attempt to minimize, obstacles that those alignments may face as designs become finalized.
7	Conservancy	Mitigation	**Finding 15. Authorization Process for Future Project Phases** Please delete this sentence: "In addition, depending on overall Project impacts and tidal restoration success, this Order may be modified to require compensatory mitigation beyond that now required herein." While we appreciate that the Order is deferring some decision-making in order to provide the project with flexibility, the Project proponents will not be able to fulfill this requirement for reasons discussed in cover letter.	Comment noted. See general response regarding mitigation. In addition, the Tentative Order has been revised to clarify that the restoration of Ponds A12 and A18 as part of Project Phase I addresses the Project's temporal impacts associated with fill in jurisdictional waters.
8	Conservancy	Additional Analysis for Levee Alternatives	**Finding 15. Authorization Process for Future Project Phases** We request that the supplemental analysis for Reach 4 and 5 requested on p. 15 be deleted or modified. The differences in environmental benefits between the levee alternatives are primarily in the amount of acreage restored to tidal action. The impacts of the levee alignments to long-term water management, water quality,	Comment noted. The Tentative Order has been revised to delete the requirement for new detailed sediment modeling: This Order requires that the supplemental analysis for Reaches 4 and 5 quantitatively address the impacts of alternative levee alignments on (a) anticipated rates and extent of post-breach establishment of vegetated tidal

Comment Number	Commenter	Topic	Comment	Response
8 (cont.)	Conservancy	Additional Analysis for Levee Alternatives	habitat functions, wave energy, and establishment of tidal marsh plain are likely to be fairly similar or would be difficult to quantify with any precision given the relatively small amount of topographical changes or increased tidal influence (compared to the pond size). This analysis described in the Order are not necessary for the Corps to justify an alternative levee alignment. Rather, the factors that most influence the feasibility of the any levee alignment are: 1) lands provided in a condition suitable for restoration or construction, 2) alternative levee alignment does not increase project costs more than 20% over authorized costs, and 3) the alternative does not require new NEPA/CEQA analysis or feasibility analysis. Since the Shoreline proponents agree that increasing the amount of tidal restoration and decreasing impacts to waters of the U.S. is a desirable goal, we suggest that requiring information or analysis that focuses on addressing the constraints listed above will be more helpful in assessing levee alignment feasibility. Additional modeling or other quantitative analysis (beyond estimating acreage of additional tidal wetlands) is less critical for decision-making in this instance.	marsh; (b) long-term water management operations, water quality, and habitat functions/values in the City and landfill mitigation marshes given anticipated sea level rise (Att. C, Figures 1 and 3); and (c) anticipated attenuation of wave energy by vegetated tidal marsh seaward of the ecotone. However, a basic qualitative assessment that provides sufficient documentation to compare the likely spatial and temporal development of restored tidal marsh is still required for any alternative levee alignment in Provision 37: • Comparison of projected short-term (0 to 10 years post-breach) and long-term (10+ years post-breach) establishment of vegetated tidal marsh plain seaward of the FRM levee under alternate levee alignments east of Artesian Slough~~and suspended sediment concentrations of 100 mg/L and 200 mg/L (consistent with the modeling work performed by ESA PWA in 2012 and cited in the September 2015 South Bay Shoreline Phase 1 Study)~~; The constraints regarding alternative levee alignments have been well documented and communicated. As detailed in Tentative Order Attachment C, the alternative alignment likely will reduce overall Project costs because it utilizes land that has advantages over the land conditions along the currently proposed alignment along Reaches 4 and 5. These advantages include better construction access, reduced need for construction dewatering, and the availability of soil for construction.

Comment Number	Commenter	Topic	Comment	Response
				Furthermore, any alignment would not only have to be justified economically, but also environmentally. Therefore, the requirements for the supplemental analysis, which reflect Water Board staff's discussions with Corps staff, and which we understand Corps staff is already completing, are intended to aid the Discharger in justifying the design. See also response to Comment 6.
9a	Conservancy	EO Approval of Adaptive Management Decisions	**Finding 15. Authorization Process for Future Project Phases**. We request modification or deletion of this language: "In addition to supplemental applications, any changes to the Project that reduce the ecosystem restoration amount, thereby reducing the Project's compensatory mitigation amount, must be approved by the Water Board's Executive Officer before those changes can be implemented (see Findings 21 and 22)." The first sentence conflates all ecosystem restoration proposed by the project with compensatory mitigation, which is problematic for numerous reasons discussed in the cover letter and in the comments. The second sentence requires the EO's approval to implement the recommendations of the Adaptive Management program, which is problematic for reasons discussed in the cover letter.	Tentative Order Findings 21 and 22 have been revised for clarity regarding the Project's fill-based and non-fill based impacts and the related mitigation requirements. Specifically, they have been revised to clarify (1) that the proposed restoration of Ponds A12 and A18 as part of Phase I will address the Project's anticipated temporal impacts to jurisdictional waters; (2) that the restoration work in Phases II and III is anticipated to be self-mitigating; and (3) that proposed creation of jurisdictional waters in Phases II and III is a component of the Project's compensatory mitigation for proposed permanent fill associated with construction during Phase I (See general response regarding mitigation). See also response to Comment 7. We are not proposing to modify the "acceptable to the Executive Officer" language. The Water Board, with the Tentative Order, is approving a proposed Project design. To the extent there are future changes to the design, and they are appropriately framed in the Tentative Order, Executive Officer approval is a relatively efficient mechanism for allowing changes to an approved project. The alternative, review by the Water Board at a regularly scheduled meeting, is more time-consuming and

Comment Number	Commenter	Topic	Comment	Response
9a (cont.)	Conservancy	EO Approval of Adaptive Management Decisions	We would like to propose that the Order focus on process for involving and informing RWQCB staff of Adaptive Management decisions by suggesting the following language (if not in this section of the Order, in another appropriate place). Suggested language is below: The Adaptive Management Plan outlines project risks, a method for evaluating results, and a decision-making process to address or correct problems. One of the potential ways to address problems is to delay or halt the conversion of ponds to tidal wetlands. For example, if a lack of sediment causes newly breached ponds to erode a significant amount of mudflat habitat, which millions of migratory shorebirds depend on, then pond breaching would likely cease. Alternatively, if there is a significant Bay wide decline in pond-specialist bird species (e.g. grebes and phalaropes), then pond conversion would need to be slowed or halted. Scenarios such as these would reduce the Project's ultimate ecosystem restoration acreage, but this would [be] because of regional natural processes beyond the control of the Project. If the Project anticipates that the Phase II and/or III ecosystem restoration is delayed or halted beyond the schedule proposed in the Order, the Project's Adaptive Management Team will present findings and recommendations for delaying or stopping restoration to key stakeholders, including regulatory agencies and a representative appointed by the Executive Director [*sic*] of the RWQCB [or perhaps this is	unnecessary because the Tentative Order specifies the parameters that revisions must meet in order to be "acceptable to the Executive Officer" in Finding 15 and Provisions 1 and 35. Water Board staff intends to continue to be involved in the collaborative adaptive management processes associated with Bay margin tidal restoration. If data is collected during the monitoring period or other sound scientific information developed that justifies implementing adaptive management approaches, including delaying future pond breaches, the Water Board's Executive Officer will review it and any supporting documentation. The Tentative Order includes language intended to allow Executive Officer review of the likely Project outcomes. However, should the information presented to the Water Board propose Project changes that fall outside what the Tentative Order authorizes, then review by and approval from the Water Board may be required. This language is not intended to require tidal restoration that is not supported by data collection and monitoring. Rather, the Executive Officer approval requirement recognizes that a while range of adaptive management techniques could be implemented at the Project site, any significant changes to the Project require Executive Officer or Water Board approval.

Comment Number	Commenter	Topic	Comment	Response
9a (cont.)	Conservancy	EO Approval of Adaptive Management Decisions	the TAC process referred to in the Order]. It is anticipated that delaying or stopping Phase II or III restoration would be a "worst case scenario" after other measures and alternatives had been considered and documented as insufficient to address concerns. If the Project experiences delays in implementation of Phase II and/or III ecosystem restoration due to lack of funding, the Project proponents shall document the funding short fall and prepare a funding strategy for submittal to the Executive Director that shall consider using local and state sources of funding in order to complete implementation.	
9(b)	Conservancy	EO Approval of Adaptive Management Decisions.	**Finding 16. Ecosystem Restoration and Benefits of Tidal Marsh Restoration and Ecotones** As discussed in cover letter and in comments, please either modify as suggested above in comment nine or delete (strikeout) as follows: "This Order requires any modifications to Phase II and III implementation to be submitted to the Water Board Executive Officer for review ~~and approval~~ (see Finding 15 and Provision 1)."	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
10	Conservancy	Mitigation	**Finding 21. Project's Net Loss of Waters of the U.S.** This section notes that the net loss is only 8.76 acres. This section should also point out that the proposed 1,120 acres of wetland restoration proposed in Phase I is outside of any Adaptive Management "risk". We would also appreciate if this Order could reframe the ecosystem restoration as not the same as compensatory mitigation.	See general response regarding mitigation.
11	Conservancy	Mitigation	**Finding 21. Project's Net Loss of Waters of the U.S.** We request that the last two paragraphs on this page requiring "compensatory mitigation" be deleted for reasons discussed in cover letter and throughout comments. As noted above, Phase I alone includes 1,120 acres of wetland restoration (regardless of levee alignments) which should be evaluated against the fill impacts (132 acres permanent fill).	See general response regarding mitigation.
12	Conservancy	Mitigation	**Finding 22. Project Mitigation** Please delete this sentence: "However, the habitat conversion's success and consistency with these policies is contingent upon the completion of all three Project phases, including	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
12 (cont.)	Conservancy	Mitigation	the Project's ecosystem restoration components." It seems unlikely that 8.76 acres of impacts requires 2,900 acres of mitigation.	
13	Conservancy	CEQA	**Finding 30. California Environmental Quality Act (CEQA)** Please note the CEQA lead was the SCVWD, not the Conservancy.	Finding 30 of the Tentative Order has been revised as requested to reflect the correct lead agency. The ~~Conservancy~~District, as the lead agency, certified a combined Interim Feasibility Study and Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) (Joint EIS/EIR) (HDR, July 2015) for the Project on ~~September~~ March ~~24~~22, ~~2015~~2016.
14	Conservancy	Monitoring	**Provision 15. Pond and Ecotone Monitoring** This is monitoring is consistent with what the Project has proposed in the MAMP. We request that the requirement for the EPMP be modified or deleted since we believe it is already covered in the MAMP. If there is concern that the MAMP does not sufficiently include ecotone monitoring, then we suggest this condition include a reference to the SBSP Restoration Project's Adaptive Management's addendum which includes ecotone monitoring parameters and triggers for management.	See response to Comment 5.

Comment Number	Commenter	Topic	Comment	Response
15	Conservancy	Mitigation	**Provision 17. Contingency Mitigation and Monitoring Plan (CMMP)** Please delete the requirement for a preparation of a Contingency Mitigation and Monitoring Plan. This Plan would be impossible to implement for reasons discussed in cover letter and throughout comments.	See mitigation response. Further, Water Board permits for projects that require mitigation for impacts to waters of the State include performance standards that are to be used in assessing the success of the mitigation project, as well as provisions for contingency measures to be implemented in the event that a mitigation project does not attain its performance standards. The requirement for a CMMP was included in the Order because of the significant uncertainties associated with full implementation of tidal marsh restoration (e.g., long time lag between fill and the first breaching of outer levees, uncertainties with respect to sediment availability, uncertainties associated with the relative rates of sediment accretion and sea level rise, the possibility that the AMT may recommend that some salt ponds be maintained as open water ponds, and the uncertainties related to federal funding for future project phases). The CCMP is initially, and potentially primarily, an accounting mechanism that tracks Project fill impacts and allows the gradual resolution of what are now areas of uncertainty. Requirements for contingency measures are a standard component of Water Board permits that require mitigation. The MAMP is not sufficiently flexible to address contingency measures, which is inconsistent with standard Water Board permit development procedures. Dischargers usually submit draft MAMPs to the Water Board, and those draft MAMPs are revised in consultation with the Water Board to provide a high

Comment Number	Commenter	Topic	Comment	Response
				level of certainty that sufficient mitigation will be provided for unavoidable impacts that are authorized by Water Board permits. Since the Corps did not incorporate Water Board input into the MAMP, it is necessary to address unresolved issues in the CMMP.
16	Conservancy	Monitoring	**Provision 24. Photo-Documentation Report** The requirement for a minimum of 20 photo-documentation sites may be excessive for some phases of the project such as Phase I, Reach I, which involves less than a mile of levee. Is there a way to add language to decrease the number, if appropriate?	Comment noted. The photo-documentation provision has been revised as follows: To document levee and Pond conditions immediately at the Project site, the Discharger shall establish a minimum of ~~20~~ 4 photo-documentation points at the Phase I Reach I location, 8 photo-documentation points at locations for future Phase I construction events that include ecotone creation, and 8 photo-documentation points at locations for each Project construction event for which berms are lowered and tidal action is restored, including the last Phase I construction event. ~~Each Project component, including all Phase I construction events, Phase II, and Phase III.~~
17	Conservancy	Mitigation	**Provision 26. Notice of Mitigation Completion** Since the project has not proposed any compensatory mitigation, we would interpret this condition as not applicable and ask that the Order please delete this paragraph. We expect to provide results of ecosystem restoration monitoring consistent with the MAMP as required elsewhere in the Order.	See general response regarding mitigation. The Notice of Mitigation Completion is appropriate.

Comment Number	Commenter	Topic	Comment	Response
18	Conservancy	Monitoring Requirements	**Provision 36. Mechanism for approval of subsequent Project work** The conditions outlined under "mechanism for approval of subsequent Project work" conflates all the proposed ecosystem restoration with compensatory mitigation requiring a more detailed level of monitoring to demonstrate that "the Project's compensatory mitigation" is avoiding "a loss in existing functions, values, or habitat". Since this is an ecosystem restoration project, not a mitigation project, we request that the second and fifth bullets be deleted in order to not characterize the ecosystem restoration as mitigation. To address the RWQCB's concern about ecotone monitoring, we would then suggest under that, consistent with comment 6, section iii (p. 47) add the ecotone addendum proposed as part of the SBSP Restoration Project's Phase 2 instead of a separate EPMP plan.	See general response regarding mitigation and response to Comment 5.
19	Conservancy	MAMP	**Provision 36. Mechanism for approval of subsequent Project work** ["]Consistent with Section 3.1 and 3.3 of the MAMP[…"] Please delete reference to updating the MAMP since the MAMP has been adopted by the Corps' Civil Works Review Board and it is not feasible to update this document. The additional information listed in bullets under iii could still	The request for update is specific to ecotone monitoring and to the referenced MAMP sections, which themselves call for more-detailed work. Water Board staff communicated to the Conservancy and other Project stakeholders in our collaborative meetings that ecotone monitoring needed further development because it was not fully addressed in the MAMP. We understand that with the MAMP reviewed and approved by the Corps, the ability to make changes to the MAMP may not be

Comment Number	Commenter	Topic	Comment	Response
19 (cont.)	Conservancy	MAMP	be provided as we develop the details of implementation of the MAMP, but not as part of a formal modification of the MAMP.	possible without delaying Project construction. As such, in part to facilitate the Project's construction and internal Corps processes, that work has been specified as a separately-named plan. Therefore, the EPMP is a supplemental document that eliminates the need to revise the MAMP and serves to complete the MAMP's recognition that a more detailed monitoring plan should be developed prior to the start of monitoring. For instance, the EPMP requirement is intended to fulfill the need for additional quantitative restoration targets, as referenced in MAMP Section 3.1[1]: "Targets include both long-term goals and intermediate conditions as the ecosystem changes. Quantitative targets, such as minimum numbers or ranges of variability, do not yet exist for all restoration targets. These targets will be developed using existing data or regulations and many are expected to evolve as monitoring and assessments are conducted." The EPMP requirement is also consistent with the recognition in the MAMP that more detailed monitoring methods would be needed outside the general approach that was used in the MAMP, as stated in Section 3.3: "The monitoring method summaries in Table 3 (Monitoring Cost Estimate) are described in enough detail to make the approach clear, but do not fully describe the monitoring regime. A monitoring plan

[1] *South San Francisco Bay Shoreline Study, Monitoring and Adaptive Management Plan for Ecosystem Restoration* (September 2015)

Comment Number	Commenter	Topic	Comment	Response
19 (cont.)	Conservancy	MAMP		with detailed methods, protocols, timing, and responsible parties will be developed prior to the start of monitoring as each monitoring study is contracted." These sections in the MAMP acknowledge the necessity of a more detailed monitoring plan and assume the plan will be developed prior to the start of monitoring. Therefore, the requirements and reference to these MAMP sections in Provision 36 are necessary.
20	Conservancy	Additional Analysis for Levee Alternatives	**Provision 37. Impact Reduction and Environmental Benefit Optimization** As stated in comment 9, we [request] the first and second bullets requiring additional analysis for Reach 4 and 5 in Provision 35 be deleted or modified. We would also like to clarify that requiring extensive additional modeling or other quantitative analysis could jeopardize the project's eligibility for Congressional appropriations (because this extent of additional technical analysis would trigger a new feasibility analysis, making the project ineligible for construction funding).	See Response to Comment 8.

Comment Number	Commenter	Topic	Comment	Response
Conservancy Cover Letter (CL)-1	Conservancy	Voluntary Ecosystem Restoration vs. Mitigation	Most of our comments have to do with a misunderstanding of the purpose of the project. The Tentative Order initially correctly describes the project (pp. 2-3) as a multi-benefit project that seeks to restore former salt evaporation ponds, protect adjacent communities from flooding, and provide recreational opportunities. However, on p. 4, there is a different interpretation of the project purposes: "Phase I is expect to result in Project impacts and the ecosystem restoration work in Phases I, II, and Ill is intended to provide mitigation for those impacts." This description sets the stage for requirements that are extremely problematic. The Conservancy would like to restate that the restoration options were selected for their own value in order to meet the project's ecosystem restoration goals. The Conservancy is involved in the Shoreline Project because it will implement the goals of the South Bay Salt Pond Project in an area where restoration is impossible without flood protection infrastructure. This project is not an infrastructure project with some mitigation elements - as is demonstrated by the vast amount of restoration proposed, much more than would be required to offset impacts. Furthermore, since the fill impacts from the flood protection measures (132.2 acres permanent fill or 8.76 acres net fill) are relatively minor when compared to the tremendous benefits from just the first phase of proposed restoration (restoring 1120 acres of existing ponds to tidal action), the Conservancy	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
Conservancy Cover Letter (CL)-1	Conservancy	Voluntary Ecosystem Restoration vs. Mitigation	would expect that this project is self-mitigating by the end of Phase I. However, the Conservancy proposes to continue to restore ponds in Phases II and Ill, adding up to an additional 1780 acres of tidal restoration (pursuant to the adaptive management framework), because that is the goal of the project and the purpose of our agency, not to secure unnecessary, additional mitigation.	
Conservancy CL-2	Conservancy	Infeasibility of Mitigation	The Tentative Order currently states that if the restoration proposed in Phase II (900 acres) and Phase Ill (880 acres) is not implemented, then the project must provide compensatory mitigation elsewhere. This requirement could adversely impact the ability of the Project to implement its Monitoring and Adaptive Management Plan (MAMP). The MAMP outlines project risks, a method for evaluating results, and a decision-making process to address or correct problems that arise while implementing the project. As described on p. 18 of the Tentative Order, the MAMP states that one of the potential ways to respond to adverse results to is to delay or halt pond breaching. (Indeed, having this ability to delay or stop the project is a primary reason that the restoration will be phased.) The grounds upon which the Adaptive Management team might recommend that restoration be delayed or stopped are the same reasons that would make mitigation impossible elsewhere in San Francisco Bay. For example, if	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
Conservancy CL-2 (cont.)	Conservancy	Infeasibility of Mitigation	lack of sediment causes newly breached ponds to erode a significant amount of mudflat habitat, which millions of migratory shorebirds depend on, then pond breaching would likely need to stop in all of San Francisco Bay. Alternatively, if there is a Bay wide decline in pond-specialist species (e.g. grebes and phalaropes), then pond conversion in all of San Francisco Bay would need to be slowed or halted. Obviously, the Shoreline Project expects to be successful; not implementing the wetland restoration proposed in Phase II and Ill is an extreme scenario. However, we are entering an era of greater uncertainty. The Conservancy and the other Project proponents have created a process through the MAMP to address uncertainty as much as possible. However, if the Project proponents are not able to implement all of the proposed restoration, there are not going to be alternatives at this scale available elsewhere. Since mitigation is infeasible, the current language in the Tentative Order could create a scenario where the project will have no choice but to restore all the ponds, regardless of the input from the Adaptive Management monitoring and applied studies, undermining this carefully crafted program. For these reasons, the Conservancy requests changes to the Tentative Order language in the attached comments.	

Comment Number	Commenter	Topic	Comment	Response
Conservancy CL-3	Conservancy	RWQCB and Adaptive Management Decision-Making	The project fully intends to communicate adaptive management decisions to our stakeholders and including the RWQCB. However, requiring the RWQCB's Executive Director approval for not implementing the restoration in Phase II and Ill essentially gives Executive Director "veto power" over the decision-making process outlined in the MAMP. The Adaptive Management decision-makers have to consider a broad suite of issues that include, but are not limited to, enhancing the resources overseen by the RWQCB. Making an adaptive management action subject to RWQCB approval (except to the extent that a proposed action requires a permit) would give the RWQCB a role not shared by any other stakeholder. The Conservancy suggests an alternative approach in comment number nine. We propose that the Order should describe a process (e.g. the Technical Advisory Committee) for involving and informing RWQCB staff in the Adaptive Management decision-making process. The Order should clarify that the RWQCB shares the understanding of the Shoreline Project that there may be valid reasons that the Adaptive Management decision-makers recommend halting or delaying pond restoration and that the Project would not be held responsible for natural processes beyond anyone's control.	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
21	USFWS	Mitigation	**Finding 8. Project Construction Phasing** p. 2-3 "The draft Order initially correctly describes the Project (pp. 2-3) as a multi-benefit project that seeks to restore former salt evaporation ponds, protect adjacent communities from flooding, and provide recreational opportunities. However, on p. 4, there is a different interpretation of the project purpose: "Phase I is expected to result in Project impacts and the ecosystem restoration work in Phases I, II, and III is intended to provide mitigation for those impacts." The restoration components of the project were not presented under NEPA/CEQA or the federal Clean Water Act as being mitigation for project impacts; therefore that interpretation is incorrect and should be revised appropriately. It is our position that the Project as described in the NEPA/CEQA document does not need nor require mitigation."	See general response regarding mitigation.
22	USFWS	Mitigation	The Refuge is involved in this Project because it will implement a portion of the South Bay Salt Pond Restoration Project, consistent with the Refuge's Comprehensive Conservation Plan that fulfills the purposes for which the Refuge was established for the protection and restoration of habitat for fish and wildlife, including federally listed species such as the California Ridgway's rail and salt marsh harvest mouse. The wetland restoration would be impossible without the construction of flood risk management infrastructure, and in turn, the flood risk	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
			management levee as integrated with the proposed wetland restoration features will be more resilient and sustainable in the face of climate change. The project description fully describes the considerable amount of restoration proposed, an amount in our opinion much higher than would be required as mitigation to offset impacts. For example, during Phase I the net fill impacts from the flood protection measures (8.67 acres) are minor when compared to the tremendous benefits from just Phase I of proposed restoration (restoring 1120 acres of existing ponds to tidal action). In addition, as the Project continues to restore additional ponds in Phases II and III, it will be adding up to an additional 1780 acres of tidal restoration, as described in the project description.	
23	USFWS	Mitigation	The draft Order further states that if the restoration proposed in Phase II (900 acres) and Phase III (880 acres) is not implemented, then the Project must provide compensatory mitigation (CNMP) elsewhere. This requirement as stated in an order could adversely impact the ability of the Project to implement the USACE's approved Monitoring and Adaptive Management Plan (MAMP). The MAMP outlines project risks, a method for evaluating results, and a decision-making process to address or correct problems that arise while implementing the Project. As described on p. 18 of the draft Order, the MAMP states that one of the potential ways to respond to adverse results is to delay or halt pond breaching so that we can apply the best	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
			available science, address uncertainty, and inform future phases in an adaptive management framework. We respectively request and concur with the USACE that references to CMMP be removed from the draft Order accordingly.	
24	USFWS	Monitoring	We all certainly expect the Shoreline Project to be successful in achieving the multi-benefits of flood risk reduction, ecosystem restoration, and recreation opportunities. The MAMP was prepared to address uncertainty as much as possible, and indeed the South Bay Salt Pond Restoration Project has a proven track record of using adaptive management as described in the MAMP and provides a mechanism through technical working groups and stakeholder forums to keep RWQCB staff updated and part of the decision-making process should uncertainties arise throughout the project. We recommend that the Order describe a process for how RWQCB staff wish to be engaged and informed through the USACE's adaptive management decision-making process. The Order should clarify that the RWQCB shares a similar concern of the Shoreline Project that there may be valid reasons that the project team may recommend halting or delaying pond restoration elements due to natural processes beyond anyone's control in furtherance of the Project as described.	See responses to Comments 5 and 9a.

Comment Number	Commenter	Topic	Comment	Response
25	Santa Clara Valley Water District (District)	Mitigation	**Finding 22. Project Mitigation** The tentative order, in finding 22, treats the 2,900 acres of restored tidal marsh proposed by the Project as mitigation for the project's net fill of 8.76 acres of waters. The Project's tidal marsh restoration is not proposed to be mitigation for the fill; rather, the fill is necessary in large part because of the tidal marsh restoration. The fill is being placed on the landside of the restored tidal marsh to construct new flood protection that becomes necessary in large part because the dikes that currently provide an incidental measure of flood protection have to be breached in order to restore the tidal marsh. The Regional Board has previously-and correctly-recognized, for the South Bay Salt Pond Restoration Project (SBSPRP), that tidal marsh restoration is not mitigation for the fill that may be necessary for the restoration. The Regional Board's findings for that project (R2-2008-0078) recognized that restoring tidal marsh should not be viewed as mitigation: finding 96 of the SBSPRP order found that "[n]o penalties will be imposed for a failure to achieve the interim and final habitat goals; since this is a restoration (not a mitigation) project", and finding 16 found that "[n]o compensatory mitigation is required for impacts to existing wetlands and waters of the State, since this restoration project will result in many more acres of restored and enhanced habitats than the acres of habitat that are impacted."	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
25	Santa Clara Valley Water District (District)	Mitigation	Although the Tentative Order, in finding 9, states that it is modeled after SBSPRP, it treats the restoration component of this Project very differently than restoration was treated in SBSPRP. The Regional Board should be consistent: the Tentative Order should not treat the restoration component of the Project as mitigation for fill, just as the Regional Board treated the fill necessary for the restoration component of SBSPRP. No compensatory mitigation should be required here.	
26	District	No Net Loss Policy	**Finding 32. Basin Plan Wetland Fill Policy** **Finding 33. California Wetlands Conservancy Policy** The Tentative Order, in findings 32 and 33, cites the California Wetlands Conservation Policy (Executive Order W-59-93), often called the "no-net-loss policy", and the Basin Plan (which incorporates the no-net-loss policy), as the principal basis for requiring 2,900 acres of mitigation for 8.76 acres of net fill here. As described below, the Tentative Oder misapplies the no-net-loss policy. The policy focuses on a programmatic approach to preserving and enhancing wetlands: it requires State agencies to "encourage partnerships to make restoration, landowner incentive programs, and cooperative planning efforts the primary focus of wetlands conservation." The Project is developed through a cooperative partnership between agencies and landowners to restore	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
26 (cont.)	District	No Net Loss Policy	wetlands and waters. The policy "is not meant to be achieved on a permit-by-permit basis". Yet the Tentative Order tries to apply the policy to this individual permit, without regard to the broader partnership represented by this Project, contrary to the policy's direction that it is to be implemented on a programmatic, rather than permit-by-permit, basis. The Regional Board should read the no-net-loss policy as encouraging approval of the Project as-is, rather than as requiring conditioning the Project on thousands of acres of mitigation.	
27	District	Mitigation	**Finding 31. Water Quality Control Plans.** Water Code section 13263(a) requires waste discharge requirements to implement relevant water quality control plans, and to take into consideration the beneficial uses to be protected. The water quality control plan here-the Basin Plan-incorporates the no-net-loss policy, but, as just discussed, that policy supports approval of the Project as is, rather than with thousands of acres of mitigation. Nor does the Tentative Order justify its conditions as necessary to promote beneficial uses: in fact, the Tentative Order recognizes that the Project as-is will provide significant benefits to beneficial uses. No additional mitigation is necessary. The Tentative Order, in finding 31, lists a number of beneficial uses in the Project area, but the Tentative Order identifies no beneficial uses that will be adversely impacted by the Project.	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
27 (cont.)	District	Mitigation	Finding 16 goes on at length, and in great detail, about how the Project as-is is expected to "result in a significant contribution to tidal wetland restoration", providing water quality and associated habitat and vegetation benefits "on a spatially significant scale". In the SBSPRP, the Regional Board recognized that salt pond restoration projects promote beneficial uses and require no compensatory mitigation: in Finding 16 in its order for that project (R2-2008-0078), the Regional Board found that "[n]o compensatory mitigation is required for impacts to existing wetlands and waters of the State, since this restoration project will result in many more acres of restored and enhanced habitats than the acres of habitat that are impacted." Similar benefits would be generated by the Project, and thus the same approach should be used here. Because the Project as-is significantly promotes beneficial uses, no additional mitigation is required.	
28	District	Mitigation (Ratio)	Even if mitigation were required for the 8.76 acres of net fill, the Tentative Order would require 2,900 acres of mitigation-a ratio of nearly 330:1. That kind of ratio is unprecedented and unjustified. Compensatory mitigation requirements must be roughly proportionate to a project's impacts. (*Dolan v. City of Tigard* (1994) 512 U.S. 374, 391.) A 330:1 mitigation ratio, for a project that	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
28 (cont.)	District	Mitigation (Ratio)	is largely a restoration project, is also not roughly proportionate to any impacts this project may have. Requiring a mitigation ration of 330:1, or anything close to that, would set an unfortunate precedent. It would signal that the Regional Board wants to stand in the way of restoration projects by imposing onerous conditions, rather than promoting such projects by blessing them with streamlined approvals. The Regional Board should rethink the Tentative Order's excessive and unjustified mitigation for this Project.	
29	District	Mitigation (CCMP)	**Finding 8. Project Construction Phasing** **Finding 22. Project Mitigation** The ecosystem restoration component of the Project will occur in three phases (Phases I, II, and III) of pond breaches to establish tidal connection. The Tentative Order requires all phases of the restoration to be completed, and requires additional mitigation to be proposed for approval if not all phases are implemented (Findings 8, 22). Phase [I] of the restoration is scheduled to be constructed in 2022, and completion of this phase would result in restoration of up to over 1,000 acres of tidal marsh habitat. The design and construction of Phases 2 and 3 restoration will be guided by the Project's Monitoring and Adaptive Management Plan. Phases II and Ill of the Project are likely to be built, adding many hundreds of acres of restored tidal marsh to the Project. Only in the	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
29 (cont.)	District	Mitigation (CCMP)	unlikely event that Phase I causes unavoidable but undesirable outcomes would Phases II and III be reconsidered. Even if Phase I does not result in all of the restoration benefits predicted, no additional mitigation should be required. Finding 96 of SBSPRP (Order No. R2-2008-0078) stated that "No penalties will be imposed for a failure to achieve the interim and final habitat goals, since this is a restoration (not a mitigation) project"; that order instead envisioned a collaborative process to achieve the desired results. A similar approach should be used here.	
30(a)	District	Whether Discharge is a "Waste"	If the Regional Board revises the Tentative Order's current approach of treating the restoration component of this Project as mitigation for the fill necessary for the Project, then the following discussion becomes less important from a practical perspective. Nevertheless, the District is compelled to raise these issues until the Tentative Order is revised to drop its objectionable mitigation conditions. As the District and USACE have explained to the Regional Board in other contexts, the Regional Board's authority to impose waste discharge requirements is limited to discharges of "waste". (Water Code section 13260(a)(1); see *Lake Madrone Water District* (1989) 209 Cal.App.3d 163 (flushing unwanted sediment	Dredge and fill discharges causing discharges of sediment involve discharges of "waste": "There is no doubt that concentrated silt or sediment associated with human habitation and harmful to the aquatic environment is 'waste' under the statute." (*Lake Madrone Water District v. State Water Resources Control Board* (1989) 209 Cal.App.3d 163, 169. See also, State Water Board Resolution No. 2004-0030 [favorably citing the *Lake Madrone* finding that accumulated sediment was a discharge of waste and noting the impact of sediment on steelhead habitat].) The State Board has determined that discharges "produced by dredging or filling operations" involving "the discharge of earth, rock, or similar solid materials" are properly regulated by WQCs and WDRs.[2] The State Board reasoned that such regulation is necessary because:

[2] State Board Order 2004-0004 (*Statewide General WDRs for Dredge and Fill Activities in Waters of the State*), p. 2.

Comment Number	Commenter	Topic	Comment	Response
30a (cont.)	District (cont.)	Whether Discharge is a "Waste" (cont.)	accumulated behind dam was a discharge of waste).) The term "waste" is commonly understood as meaning "something discarded 'as worthless or useless.'" (*Waste Management of the Desert v. Palm Springs Recycling Center, Inc.* (1994) 7 Cal.4th 478, 485.) But constructing a beneficial project is not a discharge of something worthless or useless. (See *Tahoe-Sierra Preservation Council, Inc.* v. *Tahoe Reg'/ Planning Agency* (D.NV 1999) 34 F.Supp.2d 1226, 1254 (distinguishing Lake Madrone to hold that "building a house" is not a discharge of waste under Porter Cologne), rev'd in part on other grounds, 216 F.3d 764, aff'd, 535 U.S. 302.) This Project—restoring tidal marsh and constructing flood protection—is beneficial; it is not a discharge of waste subject to waste discharge requirements.	Discharges of fill can directly or indirectly destabilize the channel or bed of a receiving water by changing geomorphic parameters, including hydrologic characteristics, sediment characteristics, or stream grade. Such destabilization diminishes the ability of the water body to support designated beneficial uses.[3] Dischargers cite *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Reg'/ Planning Agency* (D.NV 1999) 34 F.Supp.2d 1226 (note subsequent negative treatment omitted in Dischargers' comment). The court in that case noted facts that distinguished the case from *Lake Madrone*, specifically, that the activity in question – building a house – was not expected to result in discharges of concentrated silt or sediment. (*Id.* at pp. 1253-1254.) In this case, all parties anticipate that there will be discharges of sediment to the receiving waters, as demonstrated in the Joint EIS/EIR that states: "Construction activity would be conducted consistent with waste discharge requirements (WDRs) prescribed for compliance with the State's Porter-Cologne Act and BMPs outlined in the required Stormwater Pollution Prevention Plan (SWPPP) for the Shoreline Phase I Project (AMM-GEO: Prepare SWPPP)…Applying these measures would reduce any potential impacts to a less-than-significant level."[4]

[3] *Id.* at pp. 3-4.

[4] Joint EIS/EIR at pg. 4-47.

Comment Number	Commenter	Topic	Comment	Response
30a (cont.)	District	Whether Discharge is a "Waste"		"Construction of the FRM levee would involve soil disturbance along the levee alignment, adjacent areas, and staging areas, thereby temporarily exposing the soil in these areas to erosion. The Project's WDRs and SWPPP would include measures to control erosion during construction (AMM-GEO-6: Prepare SWPPP). In addition, as work in areas is completed, disturbed areas would be stabilized consistent with the SWPPP…"[5] "Operation and Maintenance actions that result in soil disturbance are likely to temporarily increase turbidity and suspended sediment; these activities include placement of dredge material on levee tops, dredging of ponds and stockpiling of dredge materials, and gaining access to excavation sites…However, avoidance and minimization measures would be implemented to minimize temporary increases in turbidity and suspended sediment (AMM-ABR-1, AMM-ABR-2, AMM-ABR-4, AMM-ABR-6, AMM-ABR-10), as well as spills or other chemical contamination form construction equipment."[6] "Table 1.5-1, Regulation Summary: Authority to regulate discharges of waste into waters of the State, which are defined as "any surface or groundwater, including saline water, within the boundaries of the State" (California Water Code, Section 13050). This definition includes, but is broader than, waters of the United States.

[5] Joint EIS/EIR at pg. 4-47.
[6] Joint EIS/EIR at pg. 4-227 and 4-228

Comment Number	Commenter	Topic	Comment	Response
30a (cont.)	District	Whether Discharge is a "Waste"		Primarily implemented through waste discharge requirements (WDRs). Table 1.5-1, Applicability to Shoreline Phase I Project: WDR Order No. R2-2008-0078 established limitations on the discharge of waste associated with the SBSPRP activity for restoration of 3,069 acres of former salt ponds and ongoing maintenance. Either this WDR would be amended to apply to the Shoreline Phase I Project or the Shoreline Phase I Project would have a similar WDR order." Therefore, the Tentative Order is consistent with the Project's Joint EIS/EIR in that it implements the requirements in its provisions that were anticipated therein as related to discharges of waste (i.e., sediment). Provisions 4, 5, 6, 7, 8, 9, 10, 12, and 13 all facilitate waste disturbance management by requiring construction BMPs that limited waste disturbance and discharge, or plans that outline methods to limit waste disturbance and discharge. The San Francisco Bay Water Board's Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Sediment is regulated by Basin Plan Discharge Prohibition 9, which prohibits the discharge of "[silt, sand, clay, or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity or discoloration in surface waters or to unreasonably affect or threaten to affect

Comment Number	Commenter	Topic	Comment	Response
30a (cont.)	District	Whether Discharge is a "Waste"		beneficial uses."[7] The intent of prohibiting such discharges "is to prevent damage to the aquatic biota by bottom deposits which can smother non-motile life forms, destroy spawning areas, and, if putrescible, can locally deplete dissolved oxygen and cause odors."[8] In this case, the discharge will be entirely associated with human activities as opposed to natural deposition. The harmful effects of the fill on the aquatic environment are described extensively in the Joint EIS/EIR. The Impacts section of the Order (See Findings 20 to 22 and Finding 31) have been revised to discuss the impact fill has on beneficial uses. Water Code section 13263 authorizes the regional water boards to regulate discharges of dredge and fill materials with WDRs to protect the beneficial uses of waters of the State.
30(b)	District	Application of Water Code Section 13376	Nor would Water Code section 13376 authorize the Regional Board to issue a permit to the District for dredge-and-fill discharges. Water Code section 13372(b) unambiguously makes Water Code section 13376 operative "only to discharges for which the state has an approved permit program" under Section 404 of the Clean Water Act. California does not have an approved permit program under Section 404, and thus section 13376 cannot give the Regional Board authority.	The operation of the Water Code is not contingent upon the State having an approved program to issue 404 dredge and fill permits under the Clean Water Act. The District provides no authority to support such an assertion. The Legislature added Chapter 5.5 to the Water Code in 1972 to provide the State Board with adequate statutory authority to implement the federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit program.[9] In 1978, Chapter 5.5 was amended to authorize a state

[7] Basin Plan, Table 4-1.
[8] *Ibid.*
[9] Stats. 1972, ch. 1256.

Comment Number	Commenter	Topic	Comment	Response
30(b) (cont.)	District	Application of Water Code Section 13376		permit program to permit discharges of dredged or fill material.[10] Nothing in the 1978 amendments or subsequent changes to Chapter 5.5 should be construed as preventing the State from protecting water resources against unpermitted discharges, regardless of whether it has obtained approval to issue dredge or fill material permits implementing the Clean Water Act section 404 permit program. A careful reading of the provisions in Chapter 5.5, particularly sections 13372 and 13376, supports this conclusion. Water Code section 13372 establishes that Chapter 5.5. shall be construed to ensure consistency with the implementation of the Clean Water Act.[11] Section 13376 requires a person discharging or proposing to discharge dredge and fill material to waters of the United States to file a report of waste discharge with the State. Water Code section 13377 requires the State Board or regional boards to, as required or authorized by the Clean Water Act, issue dredge and fill materials. Read together, these Water Code provisions establish the framework for state authority to assume the federal permitting program under Clean Water Act section 404. Nothing in the express language of these provisions operates to prevent the San Francisco Bay Water Board from issuing WDRs for discharges to waters of the State. Moreover, as explained below, the practical effect of sections 13376 and 13377 is limited because California has not taken over the 404 permitting program.

[10] Stats. 1978, ch. 746.

[11] Wat. Code § 13372, subd. (a).

Comment Number	Commenter	Topic	Comment	Response
30(b) (cont.)	District	Application of Water Code Section 13376		Subdivision (b) of Water Code section 13372 limits the authority of the State to issue section 404 permits and to require reports of waste discharge until the State actually takes over the program. It states, in part, that "[t]he provisions of Section 13376 *requiring the filing of a report* for the discharge of dredged or fill material and the provisions of this chapter relating *to the issuance of dredged or fill material permits by* the State Board or a regional water board shall be applicable only to discharges for which the state has an approved permit program."[12] This provision only seeks to eliminate the confusion and inconsistency that would arise from a scenario in which the Corps and the State concurrently issued 404 permits; it does not bar the implementation of all other provisions in Chapter 5.5 related to dredge or fill activities, or any other section of Porter-Cologne. This interpretation is supported by the plain language of section 13376, which states "[t]he discharge of […] dredged or fill material […] *except as authorized by* […] *dredged or fill material permits, is prohibited*."[13] Section 13376 explicitly notes the potential circumstance where a regional water board may require a report of waste discharge for discharges in waters of the State: *Unless required by … a regional board*, a report need not be filed under this section for discharges that are not subject to the permit application requirements of the

[12] Wat. Code § 13372, subd. (b) (emphases added).

[13] Wat. Code § 13376 (emphases added).

Comment Number	Commenter	Topic	Comment	Response
30(b) (cont.)	District	Application of Water Code Section 13376		Federal Water Pollution Control Act, as amended.[14] Section 13372 is silent on the provision of section 13376 that prohibits the unauthorized discharge of dredged and fill material, and is otherwise silent on other sections of Porter-Cologne, requiring the San Francisco Bay Water Board to issue WDRs for discharges of waste to waters of the State. Had the Legislature intended to limit the State's authority to regulate dredge and fill discharges in State waters until such time that the State has an approved permit program, the Legislature would have also done so explicitly in section 13376.
30(c)	District	Application of Water Code Section 13270	**Finding 4. Local-Federal Partnership** Even if this Project were a discharge of waste, the Tentative Order, in finding 4, recognizes that this project will be built on the District's property. Water Code section 13270 precludes issuing waste discharge requirements to one public agency for discharges of waste on that agency's property by another public agency. Because this Project will be constructed by USACE on the District's property, and both are public agencies, Water Code section 13270 prohibits issuing waste discharge requirements for the construction of the Project to the District.	Water Code 13270 states: Where a public agency as defined in subdivision (b) of Section 13400 leases land for waste disposal purposes to any other public agency …, the provisions of Sections 13260, 13263, and 13264 shall not require the lessor public agency to file any waste discharge report for the subject waste disposal, and the regional board … shall not prescribe waste discharge requirements for the lessor public agency as to such land…. To the extent section 13270 has any application, the State Board construed section 13270 in State Water

[14] *Ibid.*

Comment Number	Commenter	Topic	Comment	Response
30(c)	District	Application of Water Code Section 13270		Board Order WQ 90-3 (*San Diego Unified Port District*). In that order, the State Board considered whether it was appropriate to name the Port District as a discharger on National Pollutant Discharge Elimination System (NPDES) permits held by various ports and boatyards. The State Board first noted that Water Code section 13270 "supports the conclusion that it is appropriate to name non-operating landowners in waste discharge requirements."[15] The State Board ultimately remanded the NPDES permits to the San Diego Water Board with instructions to specify more clearly that the Port District was not responsible for monitoring or day-to-day operations, "or at most it should be held only secondarily liable for permit obligations."[16] *San Diego Unified Port District* states: "The Regional Board has the discretion to name non-operating landowners in waste discharge requirements/NPDES permits because landowners may properly be considered "dischargers" under the Clean Water Act and the Water Code."[17] This is not a situation like the *San Diego Unified Port District*, where there was an entity who only held title to the land, but was not actively involved in the discharge. District staff has completed Project actions including identifying potential sources of sediment for the Project's levee and sites where that sediment could be stored, negotiating with site landowners regarding that storage, and coordinating with City of San Jose staff on aspects of Project design, including Pond A18 acquisition. In addition,

[15] *San Diego Unified Port District* at p. 4.
[16] *Id.* at pp. 4 and 5.
[17] *Id.* at p. 15.

Comment Number	Commenter	Topic	Comment	Response
30(c)	District	Application of Water Code Section 13270		the District's responsibilities include Project monitoring and oversight, as evidenced in the approval of the Joint EIS/EIR (see response to Comment 30(d)). The District and the Conservancy are partners with the Corps in the Project, as further evidenced in the Design Agreement between these parties that outlines the partnership's design roles and responsibilities, including a 35/65 percent Non-Federal Sponsor to Federal Sponsor cost-sharing ratio, and the eventual Project Partnership Agreement (PPA) that will provide similar details regarding Project construction and O&M responsibilities and cost-sharing percentages. The Joint EIS/EIR further details the District's specific responsibilities in overseeing the construction contractor and other duties with respect to protecting water quality, including monitoring/oversight. When the Joint EIS/EIR was approved by the District, each Project partner's responsibility and duties, as it pertains to Project implementation, were detailed in the Mitigation Monitoring and Reporting Program (MMRP). The MMRP stated the following: "…The USACE is responsible project design, construction, and initial maintenance of the improvements. The District is responsible for partially funding the Project, acquiring real property interests needed for the project, and operating and maintaining the Project's flood risk management elements after construction is complete. "…The table below provides a summary of the AMMs and mitigation measures proposed for the Project and for each measure identifies the timeframe for implementation, the entity/entities

Comment Number	Commenter	Topic	Comment	Response
30(c)	District	Application of Water Code Section 13270		responsible for implementation, and the entity/entities responsible for monitoring oversight." The table referenced in the MMRP goes on to list the District as the party responsible for monitoring/oversight on nearly every AMM and mitigation measure. The following AMMs had shared implementation responsibility for all Project partners, including the District: GEO-5, HYD-1A. HYD-1B, HYD-1C, WAT-17, ABR-11, TBR-2C, and REC-2. In this case, there is a discharge that could affect water quality. The District's Board Agenda Memoranda (March 22, 2016) acknowledges that "the Project would result in significant impacts on hydrology, water quality, biological resources...." Impact Wat-01 (violate any water quality standard or waste discharge) lists 24 mitigation measures the District deemed necessary. A person discharging waste that could affect the quality of waters of the State must file a report of waste discharge.[18] In cases where a discharger proposes a discharge that will impact waters of the State, Water Code section 13263 states that the regional board "*shall* prescribe requirements as to the nature" of the proposed discharge.[19] The Order appropriately identifies the District as a discharger.

[18] Wat. Code § 13260.

[19] Wat. Code § 13263 (emphasis added).

Comment Number	Commenter	Topic	Comment	Response
30(d)	District	Application of CWA Section 401	Nor may the Regional Board issue a Section 401 certification to the District. Section 401 applies only to persons who apply for a federal license or permit. (33 U.S.C. 1341(a).) The District has not applied for a federal license or permit, and thus Section 401 does not apply to the District.	The Water Board may regulate the District's dredge and fill activities in the absence of an application. As U.S. EPA explains in the "Clean Water Act Section 401 Water Quality Certification: A Water Quality Protection Tool For States and Tribes" (401 Handbook), however, the Corps (the applicant in this case) does not permit its own dredge and fill activities pursuant to Clean Water Act section 404, but will still apply for section 401 water quality certification.[20] This is codified in the Code of Federal Regulations: > Although the Corps does not process and issue permits for its own activities, the Corps authorizes its own discharges of dredged or fill material by applying all applicable substantive legal requirements, including public notice, opportunity for public hearing, and application of the section 404(b)(1) guidelines. The CWA requires the Corps to seek state water quality certification for discharges of dredged or fill material into waters of the U.S.[21] The State Water Board is authorized to administer water quality certification in California[22] and has promulgated Title 23 of the California Code of Regulations, section

[20] 401 Handbook, https://www.epa.gov/sites/production/files/201611/documents/cwa_401_handbook_2010.pdf, at p. 4.
[21] 40 C.F.R. § 336, subd. (a)(1).
[22] Wat. Code § 13160.

Comment Number	Commenter	Topic	Comment	Response
30(d) (cont.)	District	Application of CWA Section 401		3855, which requires that an "application for water quality certification shall be filed with the regional board executive officer in whose region a discharge may occur." The requirement to apply for certification under is inherent in Clean Water Act section 301, prohibiting discharge without a permit, and explicitly required by section 3855, requiring submission of an application for certification before discharging. There is no question that certification is required for the Project, which the District and Corps agree involves dredge and fill activities that impact waters of the United States.[23] There is also no question that the District is appropriately named as a discharger in a certification for this Project, given the District's involvement in key aspects of the project, as described in the response to Comment 30(c). Staff construed the Corps' application for certification and the District's Joint EIS/EIR to be an application that covered both the District's and the Corps' activities. The only alternative interpretation is that the Corps and District failed to comply with requirements that parties apply for water quality certification for dredge and fill activities. Moreover, proceeding without certification would violate the Clean Water Act, leaving both the Corps and the District vulnerable to the Clean Water Act's citizen suit provisions, so it is to the District's benefit that the Water Board has acted to issue a WDR/WQC.

[23] *Clean Water Action Section 404(b)(1) Determination* (July 1, 2015), Section 8.0 Waters of the United States Impact Estimates.

Comment Number	Commenter	Topic	Comment	Response
30(d) (cont.)	District	Application of CWA Section 401		Finally, the State's authority to protect waters focuses on the protection of beneficial uses and is broader than the Corps' authority under Clean Water Act section 404. The Water Board has independent authority under the Water Code to regulate discharges of waste to waters of the State, including wetlands, that would adversely affect the beneficial uses of those waters, through waste discharge requirements or other orders.[24] Water Code section 13263(a) requires the Water Board to "implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241." The Water Board has statutory authority under Porter-Cologne to adopt WDRs requiring mitigation, independent of Clean Water Act section 401.

[24] Basin Plan § 4.23.4.

Comment Number	Commenter	Topic	Comment	Response
31	District	Landward Levee Alignment East of Artesian Slough	**Finding 13. Future Project Design Decisions.** Finding 13 discusses an alternative, more landward, levee alignment east of Artesian Slough for Reaches 4 and 5 that the Tentative Order describes, in finding 21 and elsewhere, as having greater environmental benefits with fewer impacts. The District and its Project partners considered suggestions for alternative alignments in the EIR/EIS process, including the Regional Board's suggestion of the alternative alignment raised in the Tentative Order. The District has considered, and will consider, alternative alignments, though the District is mindful that alternative alignments need to be feasible. Different alternative alignments raise various feasibility constraints, including enduring that any alternative is within the scope of the Project authorized for the USACE by Congress, avoiding interference with the City of San Jose's current plan for the San Jose-Santa Clara Regional Wastewater Facility, maintaining adequate buffers against a nearby San Jose Police Department bomb facility, and achieving consensus among stakeholders for the inclusion of legacy biosolid lagoons on the bayside of the proposed levee. The District and its Project partners expect to continue assessing whether these constraints can be overcome by the alternative alignment discussed in the Tentative Order, or by some	See response to Comment 6.

Comment Number	Commenter	Topic	Comment	Response
31 (cont.)	District	Landward Levee Alignment East of Artesian Slough	variation of that alternative alignment. While Attachment C to the Tentative Order acknowledges some of these constraints, that appendix and those constraints are not clearly acknowledged in, or incorporated into, the Tentative Order itself. The Tentative Order should more clearly acknowledge that alternative alignments may not be achievable, and the Regional Board should not be linking possible future mitigation requirements to alternatives that may not be achievable.	
32	District	Mitigation	**Finding 30. California Environmental Quality Act (CEQA)** The main impact identified in the Tentative Order-filling of waters of the United States-was analyzed in Section 4.6.5 of the EIR/EIS. The EIR/EIS concluded, in Section 4.6.6, that the fill of waters associated with the Project would have only less-than-significant impacts. Because impacts from fill would be less-than-significant, CEQA does not allow the Regional Board to impose additional mitigation for fill-related impacts. As for other impacts identified in the EIR/EIS, the Tentative Order, in finding 30, correctly notes that the EIR/EIS found that the mitigation measures proposed in the EIR/EIS "would mitigate all of these impacts to less than significant levels". The Regional Board does not have authority to second-guess the conclusion of the EIR/EIS that no additional mitigation is	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
32 (cont.)	District	Mitigation	necessary for these impacts that will already be mitigated to less-than-significant levels. (See *Ogden Envt'l Serv. v. City of San Diego* (S.D. Cal. 1988) 687 F.Supp. 1436, 1450-1452 (responsible agency does not have authority over impacts mitigated to less-than-significant levels).)	
33	District	TAC	**Provision 22. Technical Advisory Committee (TAC)** Provision B.20 [22] requires the formation of a technical advisory committee (TAC) to assess, review, and suggest adaptive management strategies. The Mitigation and Adaptive Management Plan (MAMP), included as Attachment B to the tentative Order, in Section 5, already prescribes a process for how decision-making will occur as part of the adaptive management process. While the District does not object to receiving suggestions and advice from the TAC, the ecosystem restoration activities would be undertaken through the MAMP's adaptive management process, and the Tentative Order should make clear that the TAC has no actual decision-making authority in the adaptive management process.	Comment noted. The use of technical advisory groups is a common and appropriate practice and means by which project proponents can take advantage of significant expertise in an efficient way, to a project's benefit. The Water Board's involvement in the TAC would be focused on providing our staff expertise to assist in the collaborative scientific discussion, rather than a regulatory oversight involvement. The TAC would be organized and convened through a public process by the Discharger. TAC members would include the Water Board, BCDC, Conservancy, Corps, USFWS, and the NMFS. The TAC's purpose is to assess the Project's ecosystem restoration success. The goal of the TAC is facilitate discussions about the most recent monitoring data. While the TAC may not have decision-making authority, the TAC would still provide input regarding adaptive management decisions. The TAC would have the same decision making authority as the MAMP's adaptive management team (AMT), as evidenced in MAMP Section 5.0, "The AMT would report the results of the vetting process to the USCE, who will decide whether to take action."

Comment Number	Commenter	Topic	Comment	Response
34	District	Fees	**Finding 41 and Provision 48** Finding 50 [41 and Provision 48] prescribes fees that the District would be responsible for. But Government Code section 6103(a) exempts the District from having to pay any fees.	We disagree. The Board has required named sponsors who are partnering with the Corps to pay fees that would otherwise be due Section 6103.4, subdivision (g), specifically notes that section 6103, subdivision (a) does not apply to any fees required by Division 7 of the Water Code. Issuance of WDRs falls within the services described in Division 7.
35	District	Maintenance	**Finding 5. Discharger** Finding 5 states that, after 10 years, the Non-Federal Sponsors will assume the costs of the ponds' operation, maintenance, and management. This finding should be changed to make clear that responsibilities for costs, which will also include costs of operating and maintaining the new flood protection structures, will be allocated pursuant to the Project Partnership Agreement, which has not yet been completed.	The requested change has been made to the Tentative Order. See response to Comment 1.
36	District	Project Site Description	**Finding 7. Site Description and Background** Finding 7 states that Alviso has over 2,000 residents and 500 structures. It would be more accurate to state that Alviso has over 2,500 residents and 1,100 structures.	Comment noted. The language regarding Alviso was taken from the application materials. The Tentative Order has been revised as follows: The community of Alviso has over 2,500 residents, 1,100 structures, and 3,000 commuters who work and travel through the area each day.

Comment Number	Commenter	Topic	Comment	Response
37	District	Union Pacific Railroad	**Finding 8. Project Construction Phasing** Finding 8 could be read to suggest that the Project is intended to allow the Union Pacific railroad tracks to continue functioning over Artesian Slough. Keeping the railroad functioning has nothing to do with Artesian Slough. The reference to Artesian Slough should be deleted as it relates to the railroad.	Comment noted. The Tentative Order has been revised to clarify that Finding 8 addresses the railroad's continued operation. "Appropriate infrastructure construction where the Project crosses the Union Pacific railroad tracks ~~and Artesian Slough~~ to ensure the Project can provide effective flood protection while still allowing the railroad to function effectively. This Order does not authorize a separate project to modify the railroad line to address the effects of anticipated sea level rise."
38	District	Landward Levee Alignment East of Artesian Slough	**Finding 10. Phase I (2018-2022)** Finding 10, among other findings, refers to Reaches 4 and 5 of the FRM levee as being a "proposed conceptual" alignment. That alignment is not conceptual; it is the Congress-authorized alignment. All references to the "proposed conceptual" alignment for Reaches 4 and 5 should be changed to "authorized" alignment.	Comment noted. Since the currently-proposed alignment along Reaches 4 and 5 is only at a 30 percent design stage and may change, in order to minimize costs and maximize ecosystem restoration opportunities, prior to its construction, then the current "proposed conceptual" description is accurate.
39	District	Artesian Slough Crossing	**Finding 10. Phase I (2018-2022)** Finding 10 states that "Where the levee crosses an existing water feature, such as a slough, structures will be installed to allow flow during normal conditions and during flood conditions." As described in the Project EIR, a tide gate closure structure is being designed to be placed	Comment noted. The Tentative Order's existing language appropriately reflects expectations regarding discharges and flows at Artesian Slough. The requested edit would not significantly modify its meaning.

Comment Number	Commenter	Topic	Comment	Response
39 (cont.)	District	Artesian Slough Crossing	across the Artesian Slough to prevent water from overtopping existing levees along the slough during future high-tide events. The tide gate structure will be designed in coordination with the City of San Jose to allow for the city's wastewater treatment plant's discharge during storms. It is expected that the tide gate structure would remain open during normal and flood conditions, but that the opening would be regulated depending on flow conditions. The District suggests that the word "allow" be revised to "regulate".	
40	District	Other	**Finding 10. Phase I (2018-2022)** Finding 10 discusses planting or seeding of marsh vegetation at the toe of the levee following construction. Generally, in the San Francisco Bay it is not necessary to seed marsh plain species because tidal waters have sufficient seed source. Active planting and seeding of marsh vegetation will be done as an adaptive management measure only as necessary.	The requested change has been made in the Tentative Order. See response to Comment 3.
41	District	Other	**Finding 10. Phase I (2018-2022)** Finding 10 (in the section on "Ponds A12 and A18 Tidal Restoration") gets the descriptions of Ponds A 12 and A 18 reversed. The finding currently suggests that the bottom elevation of Pond A 18 is lower than the bottom elevation of Pond A 12. In fact, as noted in Section 3.8.3.2 of	The descriptions of Pond A12 and A18 were taken directly from the application materials. The revisions requested in this comment have been made in the Tentative Order. *Ponds A12 and A18 Tidal Restoration*: Ponds A12 and A18 are proposed for the first phase of

Comment Number	Commenter	Topic	Comment	Response
41 (cont.)	District	Other	the EIR/EIS, Pond A12 has the lowest bottom elevation of all the ponds. The Tentative Order should reverse the descriptions of Ponds A 12 and A 18.	restoration because they have experienced the greatest degree of subsidence, and ~~their~~ Pond A12's bottom elevation is too low to support intertidal marsh vegetation. Restoring tidal action to Ponds A12 and A18 maximizes the potential for the sites to accrete sediment transported from the Bay on flood tides. ~~After Pond A12 is breached, the anticipated sediment deposition is expected to raise its bottom elevation sufficiently to support colonization by intertidal marsh vegetation.~~ Pond A~~18~~12's bottom elevation is so low that, after it is restored to tidal action, several feet of sediment deposition from sediment transported on flood tides will be needed before the pond bottom reaches a sufficient elevation to support colonization by marsh vegetation. The sedimentation process is expected to proceed at rates determined in part by suspended solids concentrations in the South Bay as well as factors causing re-suspension of sediment, such as wave action and tidal currents, in the South Bay and breached pond (ESA PWA 2012; HTH 2012). After Pond A12 is breached, the anticipated sediment deposition is expected to raise its bottom elevation sufficiently to support colonization by intertidal marsh vegetation. Internal pond dike breaches will be conducted to reconnect historical channels and restore hydrologic connections to the innermost ponds in the Project footprint.

Comment Number	Commenter	Topic	Comment	Response
42	District	CEQA	**Finding 30. California Environmental Quality Act (CEQA)** Finding 30 incorrectly identifies the CEQA lead agency as the California State Coastal Conservancy. The Tentative Order should indicate the Santa Clara Valley Water District as the lead agency under CEQA. The Tentative Order also incorrectly identifies the Environmental Impact Report (EIR) certification date as September 24, 2015. The District certified the EIR for the project on March 22, 2016.	See response to Comment 13.
District CL-1	District	Mitigation	While the District appreciates that the Tentative Order would approve the Project, the District shares the concerns of USACE and the Coastal Conservancy that the Tentative Order, if adopted, would impose unprecedented, onerous, and unwarranted conditions on a Project the Regional Board should be unreservedly supporting. The fundamental problem with the Tentative Order is that it treats the up-to 2,900 acres of tidal marsh restoration as mere mitigation for 8.76 acres of net fill needed for the flood protection, rather than as a key element of the Project. The tidal marsh restoration is key to the Project, as the Region Board previously recognized for the South Bay Salt Pond Restoration Project; The main reason why the new flood protection system needs to be built is because the Project will be breaching the salt-pond dikes to create new tidal marsh. Nor is the	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
District CL-1 (cont.)	District	Mitigation	Tentative Order's proposed mitigation ratio of approximately 330:1 reasonable. The District request that the Regional Board revise the Tentative Order to incorporate the comments below.	
43	Corps	Project Purpose and Mitigation Requests	**Finding 22. Project Mitigation.** The Shoreline Project is a multipurpose project that includes substantial ecosystem restoration in addition to flood risk management and recreation. The ecosystem restoration components of the project were formulated to take advantage of restoration opportunities resulting from construction of flood risk management features to protect adjacent floodplains. They were not formulated by assessing mitigation needs. In addition, the restoration components of the project were not presented under NEPA, CEQA, or the federal Clean Water Act as being mitigation for project impacts. Including habitat mitigation in a restoration project is contrary to national USACE policy and jeopardizes the project. REQUEST: The restoration components of the project should not be treated as mitigation.	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
44	Corps	Project Phases	Due to concerns over potential side effects of breaching ponds, such as effects on water birds and erosion of mudflats, the project includes an adaptive management plan to govern breaching of the second (A9, A10, A11) and third (A13, A14, A15) sets of ponds. The RWQCB and other agencies will have members on the Adaptive Management Team (AMT) and will have input into AMT decisions. If breaching of these additional ponds is effectively required by the Order, this would negate the science basis This plan will use a science-based approach, informed by monitoring data, to decide whether and when to breach ponds beyond the initial breaches at ponds A12 and A18. The plan balances trade-offs between aquatic habitat types and their respective benefits as the restoration progresses. The project sponsors expect that all the ponds will be breached over time, but safeguards are needed to ensure that impacts of breaching are acceptable and to respond to unexpected events should they occur. This adaptive management process will help implement the restoration program for the South Bay adopted by the South Bay Salt Pond Restoration Project. Finding #15 implies that Executive Officer approval is indicated to implement the recommendations of the Adaptive Management Team. Since the additional acreage in Phases II and III are not necessary to offset FRM levee impacts (see Comment #1), the Order should	The Tentative Order recognizes and supports the use of a science-based approach to inform future actions at the second and third sets of ponds. This is consistent with the Water Board's long history of support of such approaches. This is shown, for example, in our work to participate in the Regional Monitoring Program, the Long-Term Management Strategy for the management of dredged sediment, and the Habitat Goals project, among other efforts. As such, and as recognized in the Tentative Order, we intend to participate in and significantly rely on the work of the adaptive management team to inform Project decisions. At the same time, the Water Board is a regulatory agency responsible for ensuring the Project meets applicable State water quality standards. As such, the Tentative Order appropriately sets forth a discussion of Project impacts and necessary mitigation for those impacts. Significant changes to an authorized project will require appropriate review, and the Tentative Order sets for efficient mechanisms for such review, delegating more-minor reviews to the Executive Officer. It is standard practice in Water Board permitting for the Water Board to approve acceptable impacts to waters of the State and to determine the sufficiency of mitigation for those impacts. Since we are responsible for ensuring that sufficient mitigation is provided for impacts authorized by Water Board permits, it is inappropriate for us to delegate oversight of that mitigation to other agencies. Although other agencies, such as the Corps and the California Department of Fish and Wildlife (CDFW)

Comment Number	Commenter	Topic	Comment	Response
44 (cont.)	Corps	Project Phases	focus on process for involving and informing Water Board staff in the Adaptive Management process rather than having these decisions be subject to Executive Officer approval. The Adaptive Management Team, which will include the Water Board, will make the decision to breach or not breach ponds in Phases II and III based on available science. of the Monitoring and Adaptive Management Plan as well as its intended role in mitigating potential impacts under NEPA and CEQA. REQUEST: Revise text to indicate that the base project includes the FRM actions plus tidal restoration of ponds A12 and A18. Additional tidal restoration (ponds A9-A11, A13-A15) is likely but the timing is not certain. Tidal restoration of these ponds should not be required by the Order (directly or indirectly) as these restoration decisions will be governed by the Monitoring and Adaptive Management Plan. The decision on whether and when to breach should not be subject to Executive Officer approval.	also require mitigation for impacts, it is very rare for the Water Board, or its Executive Officer, to require mitigation that is contrary to the requirements of the Corps Regulatory Division or the CDFW. The Water Board is committed to making decisions that are consistent with the best available science, and to considering the recommendations of the AMT with respect to any necessary modifications to project mitigation. If data obtained in the future supports not breaching some Phase II or Phase III ponds, the Water Board is committed to working with all parties to revise the project in a manner that is consistent with good science, as well as conformance with Water Board regulations and policies. If significant revisions are necessary to allow for less conversion of salt ponds to tidal marsh, the permittees will have a full opportunity to present alternative project designs to the Water Board for consideration. See response to Comment 9a. In addition, Water Board policies allow for more flexibility in using the best available science than is possible for Corps projects. The Basin Plan incorporates references to acting in conformance with the most recent versions of the Habitat Goals Reports (*Baylands Ecosystem Habitat Goals* (1999) (*Habitat Goals*), and the *Baylands Ecosystem Species and Community Profiles* (2000)). The Corps is constrained by the need to use federally-approved habitat assessment protocols. For example, in the *Final Integrated Document for the South San Francisco Bay Shoreline Phase I Study* (See pages ES-16 through ES-23), the Corps determined that it

Comment Number	Commenter	Topic	Comment	Response
44 (cont.)	Corps	Project Phases		could not fund the creation of ecotones along the new FRM levee because the only federally approved habitat assessment method, the Combined Habitat Assessment Protocol (CHAP), could not demonstrate a net habitat benefit associated with creating ecotones. Text on page ES-22 of the *Final Integrated Document* acknowledges that the results from the CHAP model "contradicts the current scientific understanding of the value of upper marsh transitional habitats in tidal marshes." The Water Board is committed to making decisions that are consistent with the current scientific understanding of marsh habitats. We do not agree that there is complete certainty at this time that the additional acreage of tidal marsh restoration proposed in Phases II and III will not be necessary to offset FRM levee impacts. As is noted in Sections S.3.11.1 through S.3.12.4 of the *Final Integrated Document*, there is a delay of many years between the first impacts associated with the FRM levee and the initiation of tidal marsh restoration, there is uncertainty with respect to the availability of sufficient sediment in the South Bay to support the restoration of tidal marshes when the levees are eventually breached, and the rate of sediment accretion in tidal marshes may not occur at a rate that is sufficient to sustain tidal marshes as sea level rises. As noted in the general response regarding mitigation, the comment's stated net fill of less than 8.76 acres described for the Shoreline Project is based in part on giving the Project credit for all tidal marsh creation that will be associated with lowering

Comment Number	Commenter	Topic	Comment	Response
44 (cont.)	Corps	Project Phases		internal levees to marsh elevations in Phases II and III of the Project. If Phases II and III, and their associated lowering of internal levees, are not implemented, then the net fill for the Shoreline Project will increase to approximately 50 to 77 acres. In addition, when we determined that the complete Shoreline Project would have net fill of less than 8.76 acres, we gave the project credit for 28 acres on levees and ecotones that would be uplands at the time of project construction, but would become wetlands after 50 years of sea level rise. Without this allowance for sea level rise, the project's net fill would have been on the order of 35 acres. We believe that the commenter's concerns can be sufficiently addressed in the context of the wording in the Tentative Order, and have assured the Corps of this in several meetings.
45	Corps	Mitigation Requests	**Finding 22. Project Mitigation** **Provision 17. Contingency Mitigation and Monitoring Plan (CMMP)** Finding #22 and Provision #15 describe portions of the project as constituting "mitigation" for project impacts. The ecosystem restoration components of the Shoreline Project can only occur with the provision of flood risk management. To comply with both national USACE policy and the Bay Conservation and Development Commission Bay Plan, the flood risk management provided	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
45 (cont.)	Corps	Mitigation Requests	must go beyond merely current levels of flood protection and must provide for future sea level rise. This inherently involves placing more fill than if we were merely maintaining current levels of flood protection. that the Bay is facing a future of accelerating sea level rise and declining sediment concentrations. The Water Board should reconsider imposing mitigation requests on projects like this one, as this may discourage these kinds of projects in the future. REQUEST: We ask that that the word mitigation be replaced with restoration throughout the document. Phase I alone (FRM features, ecotone, plus breaching of ponds A12 and A18) makes the entire project self-mitigating. The approach of requesting mitigation in multipurpose projects like the Shoreline project sets a poor precedent for tidal marsh restoration projects and integrated FRM/tidal marsh projects around the Bay. As been noted by various stakeholders in the region, including the Water Board, these types of projects are urgently needed given	
46	Corps	CMMP	**Provision 17. Contingency Mitigation and Monitoring Plan (CMMP)** Provision #15 states that "The CMMP shall provide for a minimum mitigation amount sufficient to ensure no net loss of area and function, including temporal loss, of waters of the U.S. resulting from the Project."	See response to Comment 15.

Comment Number	Commenter	Topic	Comment	Response
46 (cont.)	Corps	CMMP	This backup mitigation plan is beyond the scope of the authorized project. The Monitoring and Adaptive Management Plan should not require any contingency or compensatory mitigation. The studies requested would also be outside of the scope of the authorized project. If for any reason Congress ceases to appropriate construction funds after only the FRM portion of the project has been completed, this would constitute a major project change and would cause the project team would apply for an amendment to the Order. REQUEST: Delete the CMMP in Provision 15.	
47	Corps	Northern Legacy Ponds (Stairstep)	**Provision 37. Impact Reduction and Environmental Benefit Optimization** Provision 35 [37] and Attachment C address potential levee alignment changes along the southern edge of Pond A18. The project team is committed to fully evaluating and implementing an optimized FRM levee alignment at the location of the northernmost set of legacy lagoons, located within the easternmost stairstep of the south berm of pond A18. This is subject to three practical conditions: 1. The lands are made available to the project in a condition suitable for project use. 2. The alignment change can be supported via value engineering.	Comment noted. We appreciate and recognize Corps staff's commitment to complete an evaluation of the alternative levee alignments identified in the Tentative Order. The Tentative Order's language reflects extensive discussions with the Corps and other Project stakeholders to identify the work needed to consider alternative alignments. The current language addresses expectations regarding the completion of that work. As a result, we are not proposing changes to the Tentative Order's current language. See responses to Comments 6 and 31 for further clarification regarding the Tentative Order's inclusion of alternative levee alignments.

Comment Number	Commenter	Topic	Comment	Response
47 (cont.)	Corps	Northern Legacy Ponds (Stairstep)	3. No significant new environmental compliance work will be required by the project sponsors. REQUEST: USACE wishes to work out language that would facilitate future inclusion of this area in the project.	
48	Corps	Landward Levee Alignment East of Artesian Slough	**Finding 15. Authorization Process for Future Project Phases** **Provision 37. Impact Reduction and Environmental Benefit Optimization** Provision #35 [37] and Finding #15 are intended to memorialize the process that has been established between the Water Board and the project team for refining the designs and optimizing the benefits in Reaches 4 and 5. Pursuant to USACE policy, any alignment changes would take place through the USACE Value Engineering Process. This means that any change needs to save cost or increase environmental benefits for the same cost. To make these decisions, the team is first looking at the real estate and engineering feasibility, and environmental benefits for each alignment change. If the alignment changes are found to be infeasible for reasons in any of the above categories, USACE will be unable to make them and will proceed with the authorized alignment. Some of the submittals that the Water Board requires in Provision 35 are out of step with USACE policy and beyond what is required to	See response to Comment 8. As noted, the requirement for submittal of sedimentation modeling has been removed.

Comment Number	Commenter	Topic	Comment	Response
48 (cont.)	Corps	Landward Levee Alignment East of Artesian Slough	make the alignment change decision. This includes the sedimentation modeling requested in Provision #35, which would be a major undertaking and would delay FRM and subsequent tidal restoration due to the time required. REQUEST: This Provision should be revised so that the list of technical documents to be submitted is not as prescriptive we will provide sufficient documentation to prove that any decision to change or not change the alignment is justified).	
49	Corps	Roles and Responsibilities	**Finding 5. Discharger** Finding #5 describes the Applicant/"Discharger," as USACE and the 2 Non-Federal Sponsors, despite the fact that USACE was the only entity to apply for a Water Quality Certification. USACE has not waived sovereign immunity relative to state law. Therefore characterizing USACE as a discharger is not appropriate. REQUEST: If the Water Board insists on naming multiple "Dischargers," we ask that you please add clarifying language explaining roles and application of state vs. federal tasks stated in the Order. Suggested additional language is underlined. "The Discharger will implement the Project as described in the application materials and herein.	See response to Comment 1, further describing the responsibilities of the various dischargers, as represented by the dischargers. See response to Comments 1 and 32(d) regarding why naming the Corps, District, and Conservancy as dischargers is appropriate. Also, the Corps applied for Water Quality Certification. As such, it has requested to be named as a Discharger under the Certification.

Comment Number	Commenter	Topic	Comment	Response
49 (cont.)	Corps	Roles and Responsibilities	As described in the project partnership agreement between the USACE and Non-Federal Sponsors, USACE will be responsible for construction of flood protection, ecosystem restoration, and some recreational elements. Although USACE works cooperatively with the Non-Federal Sponsors, USACE is responsible for project implementation and will follow the provisions of this Order that are applicable to federal agencies. Pursuant to the project partnership agreement, this remains in effect until USACE deems a project element complete, at which time it will be turned over to the US Fish and Wildlife Service or non-federal sponsors for operation and maintenance. The USFWS will follow the provisions of this Order that are applicable to a federal agency for operations and maintenance activities on their property. Any construction activities, operations, and maintenance undertaken directly by the non-federal sponsor will follow the provisions of this Order applicable to state and local governments. For example, once the flood risk management (FRM) levee is constructed and fully functional, USACE will transfer the levee's operation, maintenance, and management responsibility to the District…."	

Comment Number	Commenter	Topic	Comment	Response
50	Corps	Revegetation	**Finding 10. Phase I (2018-2022)** Finding #10 describes the revegetation of the project area. REQUEST: We ask that you rephrase this so it says that vegetation may be seeded or planted. This is because tidal waters in the Bay have a sufficient amount of seed for vegetation to be established below MHHW without necessitating active planting, as documented by successful tidal marsh establishment without planting at a number of projects.	See response to Comment 3.
51	Corps	Ecotone	**Finding 10. Phase I (2018-2022)** Finding #10 describes the ecotone slope as 30:1. REQUEST: We ask that you change this to be "an average 30:1 horizontal to vertical slope" to allow for undulation and topographic variation.	See response to Comment 4.
52	Corps	Pond Description	**Finding 10. Phase I (2018-2022)** Finding #10 switches the descriptions of Ponds A12 and A18. A12 is the deepest and most-subsided pond. REQUEST: Correct pond description.	See response to Comment 41.

Comment Number	Commenter	Topic	Comment	Response
53	Corps	Approvals and Submittals	Some approvals and submittals are described under the findings. REQUEST: We ask that you make sure that any requested approval and submittals are listed in the Provisions section of the Order.	Comment noted. We were unable to identify instances where submittals were inadvertently required in the Findings, but not in the Provisions. Based on further discussion with Corps staff regarding this comment, we understand it was intended as a request to create a "punch list" of required submittals. We will work with Corps staff to create that list leading up to or following the Board meeting at which the Tentative Order is heard.
54	Corps	Earthen Materials	**Prohibition 3.** Prohibition #3 says that the discharge of earthen materials is prohibited. REQUEST: We ask that you revise this to say "except where authorized by this Order."	Comment noted. Prohibition 3 has been revised as follows: 3. The discharge of silt, sand, clay, or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited, except as otherwise described herein.
55	Corps	Directional Drilling	~~**Prohibition 7.**~~ Prohibition #7 disallows the use of directional drilling. REQUEST: We ask that you move this to the Provisions and state that directional drilling is allowed with the condition of a directional drilling plan approved by the Water Board's Executive Officer.	Comment noted. The directional drilling prohibition has been removed. The following provision that conditionally allows directional drilling after acceptance of a plan by the Water Board's Executive Offer, has been added to the Tentative Order: 12. **Directional Drilling Plan**. If directional drilling is necessary at the Project site, the Discharger shall prepare a Directional Drilling Plan acceptable to the Water Board's Executive Officer. The plan shall be submitted

Comment Number	Commenter	Topic	Comment	Response
55 (cont.)	Corps	Directional Drilling		to the Water Board's Executive Officer at least 30 days prior to each Project phase in which directional drilling is proposed or may be needed. The Directional Drilling Plan shall contain boring plans that include the following items: a sketch of the approximate locations of drill entry and exit points; the proposed depth of bore and a statement of waterbody conditions that supports the proposed depth of the bore; approximate length of the proposed bores; type and size of boring equipment to be used; estimated time to complete the bore; list of lubricants and muds to be used; name(s) of contractor and cell phone numbers of the construction supervisor(s)and monitor(s); name(s) of the environmental and biological monitor(s); site-specific monitoring conditions; monitoring protocols; and a containment and clean-up plan. The drill mud pressure and volume shall be monitored at all times during drilling to ensure that hydrofracture or other loss of drill muds has not occurred. In the event of a sudden loss in pressure or volume, the Discharger shall take appropriate steps, including immediately halting the drilling operation to ensure that drilling muds are not discharged to waters of the U.S. All drilling muds, slurries, oils, oil-contaminated water, and other waste materials removed from the bore hole or otherwise used during the Project shall be disposed of at a permitted landfill, other appropriately permitted site, or at an upland site approved in advance by the Water Board's Executive Officer.

Comment Number	Commenter	Topic	Comment	Response
56	Corps	Fueling and Equipment	**Prohibition 9.** It will not be possible to refuel construction equipment only on sites that cannot drain to State waters. REQUEST: Change text to allow refueling in areas that may drain to State waters only under an approved refueling plan.	Comment noted. Prohibition 9, formerly 10, has been revised accordingly. The following provision that requires submittal of a refueling plan has been added to the Tentative Order: 11. **Spill Prevention and Containment Plan.** The Discharger shall prepare a Spill Prevention and Containment Plan (SPCP) acceptable to the Water Board's Executive Officer. The SPCP shall be submitted to the Water Board's Executive Officer no later than 90 days prior to start of any construction event in which construction equipment is planned or needed. The plan shall describe the preventative spill measures that shall be implemented, including equipment leak prevention, and what actions shall be taken in the event of a spill. In the event of a containment spill, the Discharger shall take appropriate steps, including immediately halting the construction work, containing and mitigating the spill, and immediately notifying appropriate authorities, including Water Board staff. Containers for storage, transportation, and disposal of containment absorbent materials shall be provided on-site.

Comment Number	Commenter	Topic	Comment	Response
Corps CL-1	Corps	Project Purpose	First, the project's flood risk management and ecosystem restoration features are interdependent; the latter were not formulated by assessing mitigation needs. The ecosystem restoration components of the project were formulated to take advantage of restoration opportunities resulting from construction of flood risk management features. Without construction of these features, tidal habitat restoration would not be feasible in the project area due to the resulting increased flood risk. In addition, the restoration components of the project were not presented under NEPA, CEQA, or the federal Clean Water Act as being mitigation for project impacts. The entire project was evaluated as an integrated whole and was determined to have an overall positive effect on habitat, fish and wildlife, and water quality. It is our position that the project as described in the NEPA/CEQA document does not need mitigation.	See general response regarding mitigation.
Corps CL-2	Corps	Project Purpose	Second, the adaptive management process proposed for the project has been a vital element in alleviating concerns and securing support for the project from a wide variety of stakeholders, as well as in addressing potential impacts of breaching ponds that were discussed in the NEPA/CEQA document. This process, to be administered by a broad-based adaptive management team, is intended to be science-based and responsive to the results of the project's proposed monitoring program.	See general response regarding mitigation.

Comment Number	Commenter	Topic	Comment	Response
Corps CL-2 (cont.)	Corps	Project Purpose	However, the draft Tentative Order would effectively mandate tidal restoration of all the managed ponds on the project site, voiding this collaborative process and negating the scientific foundation of the proposed adaptive management process. To avoid this outcome, in the event that tidal restoration needs to slow or stop, the project sponsors would need to assume onerous off-site restoration burdens that likely would not be technically feasible.	
Corps CL-3	Corps	Mitigation (CMMP)	Finally, the draft Tentative Order's proposed Contingency Mitigation and Monitoring Plan (CMMP) would be problematic for several reasons. As explained earlier, USACE restoration projects cannot have habitat mitigation as a component and the project as described should not require mitigation. Also, the conditions that would result in a delay or cessation of pond breaching, such as excessive impacts to water birds or a shortage of sediment in the Bay, would also apply to tidal restoration in alternate locations. In addition, the required offsite habitat restoration plan is not a part of the Congressionally-authorized project and USACE cannot spend federal funds on developing such a plan. For all these reasons, we request that the CMMP be removed from the draft Tentative Order. USACE has reviewed the comment letter and comments from the State Coastal Conservancy and concurs with their comments as well.	See general response regarding mitigation and Comment 15.

General Response Regarding Mitigation

This general response is intended to address Comments 2(a), 2(b), 7, 9, 10, 11, 12, 15, 17, 18, CL-1, CL-2, CL-3, 21, 22, 23, 25, 26, 27, 28, 29, 32, SCVWD CL-1, 43, 45, and Corps CL-1, all of which address mitigation, and many of which have overlapping issues.

Water Board staff views the Project as an important one that will both improve flood protection for Alviso and the nearby area of San Jose, and implement a key part of the larger South Bay Salt Pond Restoration. In part as a result, staff has worked diligently to support Project permitting, including submitting comments on the Project CEQA/NEPA document in early 2015, providing a letter of support to the Corps in 2016 to assist the Corps' internal approval process, meeting regularly over the past year with the SCVWD, Corps, and Conservancy, and providing them and other interested stakeholder with two administrative draft orders to review prior to circulating the Tentative Order for formal public comment. The Tentative Order would authorize the entire Project and sets forth mechanisms facilitate its timely construction, taking into account numerous uncertainties. That work reflects the Water Board's commitment to promoting and facilitating both this Project and projects with large-scale restoration components.

Revisions to the Tentative Order

The Tentative Order has been revised to clarify that the restoration of Ponds A12 and A18 as part of Project Phase I addresses the Project's temporal impacts associated with fill in jurisdictional waters. The Tentative Order has been revised to clarify that while it allows the construction of Project Phases II and III, there are circumstances, relating to the need to avoid to-be-identified adverse impacts to water quality and beneficial uses, where such construction may not be completed.

In response to comments, the Tentative Order has been revised as follows:

Finding 20. Project's Fill of Waters of the U.S.

> "…The Project work will also ~~cause permanent non-fill-based impacts to~~ modify waters of the U.S~~.,~~. without permanent placement of fill, including berm excavation, outboard dike breaches and lowering, ~~and~~anticipated habitat conversion from former salt ponds to tidal marsh after tidal action is restored to the ponds, and establishment of a permanent FRM levee maintenance area (see Table 6)."

Table 1: Summary of the Project's Non-Fill-Based Impacts, Including Restoration Actions.

Feature	Permanent Non-Fill Impacts		
	Area (Acres)	Length (Linear Feet)	Fill (Cubic Yards)
Phase I: Pond A12 southeastern berm excavation	0.740	19,607	
Phase I: Pilot Channel	7.8	4,373	-62,920
Phase I: Pond A12 and A18 outboard dike breaches and internal berm lowering	18.5	16,050	-89,105
Phase I: Restoration of tidal action to Ponds A12 and A18	1,120	--	--
Phase II: Ponds A9-A11 outboard dike breaches and internal berm lowering	20.0	--	0
Phase II: Restoration of tidal action to Ponds A9-A11	900	--	--
Phase III: Ponds A13-A15 outboard dike breaches and internal berm lowering	20.0	--	0
Phase III: Restoration of tidal action to Ponds A13-A15	880	--	--
Phases I to III: Permanent FRM Maintenance Easement	5.32	19,451	0
Total	**~~72~~2,972.36[1]**	**35,657[2]**	**-152,025**

[1] This amount includes overlapping areas.

[2] Since the ecotone will run parallel to the FRM levee, the stockpile impact length overlaps with the FRM levee impact length.

Finding 21. Project's Net Loss of Waters of the U.S.

"…The phasing will result in a net loss of waters ~~during~~starting in Phase I due to the lag time between the initiation of construction activities and the eventual return of tidal action to the ponds, ecotone creation, and anticipated tidal marsh restoration. ~~There~~After Phase I is completed, including Ponds A12 and A18 breaching, there will be an approximate 76.96-acre net loss of waters of the U.S., not including sea level rise mitigation credit. After the 14-year Project is completed, there will be an approximate 8.76-acre net loss of waters of the U.S~~.~~., with the currently proposed FRM levee alignment, although the currently projected loss could turn into a net gain of waters of the U.S. with an alternative landward alignment along Reaches 4 and 5 (see Att. C) (see Table 7)."

Table 2: Summary of the Total Net Loss of Waters of the U.S. by Project Phase.

Created waters of the U.S.		Total Net Loss of waters of the U.S. after creation (acres)[3]
Description	**Area (Acres)**	
Pond A12 southeastern berm excavation	0.740	131.5
Ecotones ~~-~~below high tide line[4]	36.0	95.46
Phase I Pond A12 and A18 outboard dike breaches and berm lowering	18.5	76.96
Phase II Ponds A9-A11 outboard dike breaches and berm lowering	20.0	56.96
Phase III Ponds A13-A15 outboard dike breaches and berm lowering	20.0	36.96

This Order specifies minimum required mitigation the Discharger is required to complete to compensate for Project impacts, and deadlines for completing the mitigation (see Finding **Error! Reference source not found.**). Due to the need to phase construction activities and the uncertainty in the final levee alignment and associated impacts, final mitigation amounts may be greater or less than the minimum specified~~. The~~ herein. To facilitate Project construction, the Order sets forth a process to determine final mitigation requirements as plans for future Project phases are further developed.

[3] The values in this column reflect the running net-loss total starting with 132.2 acres of fill-based impacts.
[4] This area is being counted as new created waters because it has not historically existed in this area.

If there is a minimal net loss of waters of the U.S. from the final FRM levee alignment, then the tidal restoration and ecotone creation, if fully implemented consistent with the deadlines in this Order, will serve as sufficient compensatory mitigation for the impacts from Project construction activities. If there is a net loss of waters of the U.S. from the final FRM levee alignment that is greater than the amount described above in Table 7, the Order requires the Discharger to update the Project's impact quantities, and propose and implement additional compensatory mitigation as described in the Provisions. (see Provisions 17, 35, and 36). Pursuant to an agreement between the Corps, District, and Conservancy, the Coastal Conservancy is responsible for complying for the requirements of Provision 17, regarding preparation and implementation of a Contingency Mitigation and Monitoring Plan.

When the Discharger submits supplemental applications for future Project work, total Project impacts will be taken into account to calculate the impacts to waters of the U.S., including temporary and permanent losses."

Finding 22: Project Mitigation

"In total, the Project will restore up to 2,900 acres of tidal marsh by 2032 and create approximately 91.52 acres of ecotone by Year 2022, if the proposed restoration is successfully implemented.The Discharger will mitigate the Project's fill-based impacts by restoration actions that include creating jurisdictional waters of the U.S. and restoring tidal action to existing jurisdictional waters. As detailed in Finding 21 and summarized below, the Project will create approximately 59 acres of new jurisdictional waters from lowering and removing berms, and 36 acres of created ecotone habitat will be immediately below the high tide line, while another 28 acres of created ecotone will become jurisdictional by 2067 from sea level rise. The anticipated restoration of tidal action to the Project's ponds is expected to provide water quality improvements, habitat for rare and endangered species and resident and migratory shorebirds and waterfowl, more and higher-quality estuarine-upland transitional habitat (ecotone) along the proposed levees in Ponds A12, A13, and A18 than is currently available, protect beneficial uses, and increase the shoreline resiliency to sea level rise. In addition, restoring tidal marsh and creating estuarine-upland transitional habitat is consistent with the Goals Report and CCMP. However, the mitigation requirement may change as designs for the FRM levee alignment east of Artesian Slough are further developed, which may reduce the Project's fill-based impacts. As discussed in Findings 13 to 15, the Discharger is evaluating an alternative FRM levee alignment east of Artesian Slough that would reduce the Project cost and maximize ecosystem restoration opportunities. The other uncertainty in the final mitigation requirement is the ecosystem restoration's degree of success. The anticipated tidal marsh habitat acreage may not be successful if observed sediment accretion rates in the South Bay are significantly less than anticipated rates, or mitigation and monitoring results from the first set of breached ponds do not lead to a recommendation to breach Ponds A9-A15. ThusSince berm lowering and removal in Phases II and III are expected to create jurisdictional features that will reduce the Project's net fill

amount to the currently projected 8.76 acres, there is uncertainty associated with future tidal marsh restoration and its sufficiency as mitigation for Project impacts. Therefore, the mitigation for the Project's total impacts will become more certain as the designs for future Phases are further developed and the monitoring results provide more information about the likelihood of success for the restoration activities. To account for the uncertainty in the Project's ecosystem restoration success and FRM levee alignment east of Artesian Slough, the Order sets forth a mechanism to account for, and, as needed, adjust the Project's impacts and compensatory mitigation amounts authorized by this Order (see Provisions 17, 31, 35, and 36).

… ~~The remaining 8.76~~In addition, the Project will restore up to 2,900 acres of ~~net fill will be mitigated by conversion of existing pond habitat to restored~~ tidal marsh by 2032 and ~~created~~ create approximately 91.52 acres of ecotone~~.~~ by 2022, if the proposed restoration is successfully implemented. The anticipated tidal marsh and ecotone habitat are regionally scarce and their restoration and creation, respectively, are recommended in the Habitat Goals report (see Finding 16). The ecotone area will convert approximately ~~95.1~~91.52 acres of current salt pond habitat to wetland-upland transitional habitat. The conversion will facilitate a tidal wetlands restoration that mimics historical San Francisco Bay landforms. The net benefit is an increase in tidal marsh habitat and its associated beneficial uses and functions, and a corresponding decrease in salt ponds. This habitat conversion is consistent with the Water Board's Basin Plan Wetland Fill Policy and California Wetlands Conservation Policy (see Findings ~~32 and 33).~~**Error! Reference source not found.** and **Error! Reference source not found.**). However, the habitat conversion's success and consistency with these policies is contingent upon the completion of all three Project phases, including the Project's ecosystem restoration components. The remaining temporal loss of waters of the U.S. from fill-based impacts will be mitigated by the anticipated 1,120 acres of converted habitat (i.e., tidal marsh and ecotone) in Ponds A12 and A18 at the end of Phase I (see Table 8).

Table 8: Summary of Restored Tidal Marsh and Ecotone Creation by Project Phase.

Phase	Maximum Anticipated Tidal Marsh Habitat Restored	Ecotone Created (Acres)	Anticipated Construction (Year)

	(Acres)[5]		
I	1,120[6]	91.52[7]	2022
II	900	0	2027
III	880	0	2032
Total	**2,900**	**91.52**	--

Mitigation for Non-Fill-Based Impacts: The Project's non-fill-based impacts will be mitigated by the corresponding conversion of pond habitat to restored tidal marsh and created ecotone, similar to the mitigation for the remaining ~~net~~ fill-based temporal impacts (see above). The restored tidal marsh and created ecotones will mitigate the Project's non-fill based impacts because the ~~size of the habitat conversion is~~habitat's expected quality and associated benefits are sufficient to offset ~~the net fill amount,~~ non-fill based impacts that may result from loss of managed pond habitat, and any temporal loss of functions and values that will occur from the time fill-based impacts occur to when the restoration is implemented~~.~~ and becomes fully established. Similar to the fill-based impact mitigation, the non-fill-based mitigation ~~is~~in each phase is associated with and contingent upon completion of ~~all three~~the respective Project ~~phases~~phase, including the proposed tidal and wetland restoration~~.~~ (i.e., Phase I pond conversion impacts are mitigated by the anticipated tidal and wetland restoration in the Phase I ponds, and similarly, impacts associated with the restoration in Phases II and III are mitigated by the restoration in Phases II and III)."

The Tentative Order requirement for a Contingency Mitigation and Monitoring Plan (CMMP) has been revised to include submittal of an analysis of the Project's consistency with the Basin Plan Wetland Fill Policy.

Provision 17. Contingency Mitigation and Monitoring Plan (CMMP).

> **"**The Discharger shall prepare a Contingency Mitigation and Monitoring Plan (CMMP) acceptable to the Water Board's Executive Officer. The CMMP shall be submitted not later

[5] These amounts are for the converted habitat on-site, not created jurisdictional waters. Mitigation credit for this conversion is only being given for the temporal loss of waters of the U.S. and functions and values of existing beneficial uses that result from the Project's fill-based impacts.

[6] Under the FRM levee landward alignment for Reaches 4 and 5, this amount would be increased by a maximum of 70 acres to approximately 1,190 acres, which would bring the total anticipated tidal marsh restoration amount to 2,970 acres.

[7] Approximately 55.52 acres of the created ecotone will initially be above the high tide line after construction. After 50 years of the sea level rise, about 27.32 acres will be above the high tide line. The ecotone above the high tide line will enhance beneficial uses associated with tidal marshes by providing high tide refugia for special-status species.

than January 31, 2020 (the year that construction along Reaches 4 and 5 is anticipated). If the Project is delayed and construction along Reaches 4 and 5 does not occur in 2020, the CMMP shall be submitted in the same year that construction along Reaches 4 and 5 is rescheduled to occur. The CMMP shall provide for a minimum mitigation amount sufficient to ~~ensure~~demonstrate consistency with the Basin Plan Wetland Fill Policy and the California Wetlands Conservation Policy (Findings 32 and 33). This shall include an analysis of issues such as ensuring no net loss of area and function, including temporal loss, of waters of the U.S. resulting from the Project. Updates to the CMMP shall be submitted if all or a portion of the Project's ecosystem restoration components is not implemented. Any updates to the CMMP shall be submitted to the Water Board's Executive Officer no later January 31 in each year that changes to the Project described in the Order are proposed. ~~The~~If the Project's impacts described herein are reduced or increased, a description of the impacts and the difference in acreage from the quantities described herein shall be submitted to the Water Board's Executive Officer. If the updated impacts reflect a net loss of zero acres of jurisdictional waters, then the CMMP shall consist of the Project described herein. Otherwise, the CMMP shall include the following:

a. ~~A~~An analysis of the Project's consistency with the Basin Plan Wetland Fill Policy and the California Wetlands Conservation Policy, as described above, and including a description of any changes to Project components or impacts as compared to the Project description in this Order.

~~a.~~b. Consistent with the analysis, a mitigation proposal, workplan, monitoring plan, performance standards, and other information, as appropriate, sufficient to ~~ensure providing~~provide appropriate mitigation of permanent and temporal losses of functions and values of waters of the U.S. resulting from Project implementation~~, and to ensure that the Project results in no net loss, and a long-term net gain, in wetland and waters area, functions, and values~~.

At a minimum, the CMMP shall propose ~~the creation of an area of waters equivalent to the net loss of area resulting from the Project. In addition, the CMMP shall propose~~ additional mitigation to address delays of greater than 5 years between the timing of impacts and construction of restoration from the schedules listed in the Findings in implementation of the Project's tidal restoration."

Project Impacts

Several commenters suggest that the project is a multipurpose project, self-mitigating, and requires no additional mitigation.

We recognize that the proposed Project is both a flood management and an ecosystem restoration project. The Tentative Order would conditionally authorize construction of all Project phases – both construction of the levee and the ecosystem restoration. The Tentative Order would

conditionally authorize, but does not require, restoration of tidal action to 2,900 acres of diked Baylands. The mitigation provisions of the Tentative Order are therefore drafted to recognize expected adaptive management actions and account for uncertainties associated with the Project.

As Water Board staff stated in our written comments on the *Draft Interim Feasibility Report and Environmental Impact Statement/Report for the South San Francisco Bay Shoreline Phase I Project, Santa Clara County, CA, SCH No. 2006012020* (Water Board, February 23, 2015) (Joint EIS/EIR), the Project will result in a large amount of fill of waters of the U.S. The large fill amount is due to the FRM levee, which has independent utility, and its associated ecotones, which are aspects of levee design that reduce the levee's expected long-term impacts and provide a restoration benefit with respect to anticipated sea level rise, while also reducing anticipated costs for levee operation and maintenance.

The FRM levee has impacts to waters of the State of up to 58 acres. Even if the restoration elements of the Shoreline Project were not being proposed, the FRM levee would be necessary because: the Alviso area has experienced subsidence in response to historic over drafting of groundwater aquifers; the existing salt pond levees were not designed or constructed to provide FEMA-approved flood protection, and are in a state of poor repair; and sea level rise is likely to result in Bay waters overtopping the existing salt pond levees. If the FRM levee were proposed as a stand-alone project, then compensatory mitigation would be required.

The ecosystem restoration component could not move forward without sufficient flood risk management, which the levee is intended to provide. The restoration is an efficient means to provide necessary compensatory mitigation for the permanent and temporary impacts of fill placement associated with the levee. As the Conservancy and other Project stakeholders have noted in meetings, finding alternate mitigation is likely to be difficult and expensive.

The Order considers, generally, two types of fill-based impacts to jurisdictional waters: first, potential net loss of waters associated with the permanent fill of jurisdictional waters, including wetlands; and, second, temporal losses associated with a delay of 10 to 25 years between initial impacts and the completion of the restoration (i.e., the anticipated establishment of the associated mitigation). For the latter (temporal impacts), the Order has been revised to clarify that they would be fully addressed by completion of the restoration of tidal action to Ponds A12 and A18 during Project Phase I, and that the Phase II and III restoration work, by itself, is considered a self-mitigating restoration project (see above discussion of revisions).

For the former (permanent fill), current Basin Plan Wetland Fill Policy, while flexible, requires, in essence, no net loss and a long-term net gain in the quality, permanence, and area of jurisdictional wetlands. In part as a result, the Revised Tentative Order identifies proposed work in Phases I, II, and III that would mitigate for fill impacts in Phase I, with the goal of achieving no net loss of areal extent. Phase I includes an estimated 132 acres of permanent fill-based impacts that would be mitigated, by a combination of: being placed below the high tide line as ecotones (36 ac); anticipated sea level rise over the next fifty years (28.2 ac); creation of new jurisdictional area in Phase I through a combination of dike breaches, berm lowering, and excavation (19.24 ac); and by approximately 40 acres of new jurisdictional habitat created from berm breaching and lowering during the Phase II and Phase III restoration. If Phases II and III are not completed, there would be a net loss of waters of the U.S. of up to 77 acres immediately following Phase I completion in 2022 and approximately 50 acres in 2067, after subtracting out

the credit given for expected new jurisdictional area that will be created by anticipated sea level rise.

The Tentative Order includes a requirement for a Contingency Mitigation and Monitoring Plan (CMMP)—a key part of the mechanism that allows the Project as a whole to be authorized while still addressing areas of uncertainty about Project design, timing, and impacts. That requirement has also been revised to incorporate an analysis of the developing Project's consistency with the Basin Plan Wetland Fill Policy. As such, the revision both requires and allows the Discharger to use the analysis to provide the then-most-up-to-date information about Project impacts and benefits to address any potential inconsistencies with the Policy. In addition, as we noted in our response to Comment 1, the Corps' description of the Project as a multipurpose project does not establish a minimum threshold for tidal marsh restoration that would be necessary to demonstrate that the project is self-mitigating. That approach, however, could be developed in the CMMP's consistency analysis.

The Interim Feasibility Study and Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) (Joint EIS/EIR) (HDR, July 2015) presents the Shoreline Project as a self-mitigating project because of the tidal marsh restoration component. However, this document does not establish how much restoration is necessary, at a minimum, to provide adequate mitigation for the project impacts to waters of the State associated with the FRM levee. The Order has been written to support the full implementation of the restoration activities. The Order also provides flexibility for modifying mitigation requirements in response to changing circumstances within the project area (e.g., insufficient sediment for tidal marsh restoration, recommendations to delay levee breaching to prevent excessive loss of tidal mudflats, recommendations to retain more managed ponds for water fowl).

In addition, there is no guarantee that the breached ponds will actually accumulate sufficient sediment to support tidal marsh vegetation. As is noted in Sections S.3.11.1 through S.3.12.4 of the Joint EIS/EIR: there is a delay of many years between the first impacts associated with the FRM levee and the initiation of tidal marsh restoration; there is uncertainty with respect to the availability of sufficient sediment in the South Bay to support the restoration of tidal marshes when the levees are eventually breached; and the rate of sediment accretion in tidal marshes may not occur at a rate that is sufficient to sustain tidal marshes as sea level rises. The U.S. Environmental Protection Agency (EPA) also expressed concern in their comment letter [8]on the Joint EIS/EIR about the time delay between the Project's first impacts and the tidal marsh restoration:

> "…it can take many decades for tidal marsh habitat to develop and the DEIS identifies a time lag between the 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."

[8] *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)* (U.S. EPA, February 23, 2015).

> "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."

The Tentative Order Contains a Flexible Mechanism for Determining If Any Additional Mitigation Is Necessary.

Several commenters assert that the Tentative Order requires a 330:1 mitigation ratio. That is incorrect. That ratio assumes the Project will be constructed, as proposed, in its entirety, that the only Project component requiring mitigation will be about 9 acres of permanent fill, and it equates the benefits from the conversion of existing jurisdictional waters to tidal action with the impacts from the permanent fill of jurisdictional waters. It is a simplified analysis that does not consider the range of potential impacts associated with the Project, the Water Board's Wetland Fill Policy and associated Basin Plan policies, or suggest how potential shortcomings in those policies might be addressed in the face of climate change and anticipated sea level rise. The Tentative Order, including the revisions discussed here, is intended to provide a more-nuanced approach that allows the Discharger to play a significant role in describing Project benefits and, in a more thoughtful way, balance issues like the benefits of conversion with the impacts of fill.

The restoration activities will likely provide sufficient mitigation for impacts to waters of the State associated with constructing the Project. The 2,900 acres of anticipated tidal restoration proposed in Phases I, II, and III would mitigate the loss, through conversion, of 2,900 acres of former salt ponds, which is a permanent non-fill based impact. The Tentative Order recognizes that 2,900 acres of tidal marsh restoration, if successful, are consistent with Bay-wide collaborative science-based guidance including the Baylands Habitat Ecosystem Goals Project, and will provide enhanced beneficial uses over the existing beneficial uses on-site and provide further shoreline resiliency. The use of an ecotone levee design adds to the resilience over time of the proposed restoration design, while improving the range of habitat types present and the beneficial uses those types support. The anticipated enhanced beneficial uses are being counted towards mitigation for the temporal loss of functions and values of beneficial uses and waters of the U.S. that is associated with the time lapse between fill and pond breaching until a fully functional tidal marsh becomes established.

Changes to the required compensatory mitigation may be necessary, however, should there be significant changes to the anticipated Project design or implementation. The Tentative Order recognizes there is uncertainty around both the area of impacts and the area of proposed mitigation. As described in the Order, the Discharger is evaluating alternative landward levee alignments that may reduce the Project's total net fill. Furthermore, the area of waters to be gained by berm breaching and lowering is a rough estimate that will be informed by design work and adaptive management review that are yet to be completed. Water Board staff expects a portion of the levee alignment to move at least somewhat landward. This, in combination with the restoration project's beneficial impacts, would result in a Project that is at least roughly fully

self-mitigating. Finally, as noted by the commenter, adaptive management review may determine it is inadvisable to complete all or part of the proposed Phase II and III tidal action restoration.

To address the uncertainty associated with aspects of the Project, including the amount of fill associated with the levee alignment between Artesian Slough and Coyote Creek, the amount of creation that will be accomplished as part of all Project phases, including whether Phases II and III are constructed, the Tentative Order incorporates the CMMP. The CMMP is, in part, an accounting mechanism, describing impacts and proposing, as necessary, changes to mitigation. The CMMP is necessary to account for the potential loss of compensatory mitigation credit that may result if Phases II and III are not completed and, as noted above, to take into account the more-certain information about the Project that will be available the design has been finalized and then once it has been built. The CCMP also provides a means for reporting on progress and modifying the Project's compensatory mitigation, as appropriate. Order Provisions 18, 36, and 37 establish a mechanism by which the Discharger may present all relevant technical information to determine how much, if any, compensatory mitigation is necessary. Any modifications to the compensatory mitigation requirement and relevant technical information will require review and acceptance either by the Executive Officer or the Water Board, with appropriate public review and input.

The CMMP allows the Water Board to revisit the Project's consistency with the Basin Plan Wetland Fill Policy in the future, based on the ongoing performance of restoration elements and on evolving State policies with respect to climate change and sea level rise adaptation. The text of the Order allows the Discharger to implement the Shoreline Project in conformance with Corps policy, while ensuring consistency with Water Board policies.

The Tentative Order defines success in reference to the Discharger's submitted Mitigation and Adaptive Management Plan (MAMP). Monitoring reports and a continued agency collaboration through implementation of a Technical Advisory Committee (TAC) will further define ecosystem restoration success. This approach is taken because the Water Board recognizes that large-scale ecosystem restoration includes uncertainties that require an adaptive management approach. Water Board staff supports and intends to continue participating collaboratively in adaptive management efforts to identify the progress of and appropriate future changes to tidal restoration efforts in the Bay. As such, we support adaptive management efforts as an effective approach to ensure the success of Bay restoration efforts. Based on our ongoing collaborative meetings with the Discharger and other Project stakeholders, we understand that an adaptive management approach was preferred for the reasons stated in the Conservancy's comment. We concur that it is a better, more flexible approach than specifying prescriptive success measurements in the Tentative Order.

Legal Bases for Requiring Mitigation

The Tentative Order identifies the uncertainty around anticipated Project impacts, restoration actions, and expected creation of jurisdictional waters, including wetlands. Given the uncertainty, the Project's expected net fill may best be described as a range running from net creation of waters (should the FRM levee alignment be shifted to the landward-most alternative between Artesian Slough and Coyote Creek and all three Project phases be constructed) to 50-

77[9] acres of net fill, should Phases II and III not be completed and should there be no changes to the levee alignment.

Compensatory mitigation is required pursuant to the California Wetlands Conservation Policy ("No Net Loss Policy") and the State's Anti-Degradation Policy (all part of the San Francisco Bay Water Quality Control Plan). In addition, mitigation is necessary to comply with the California Environmental Quality Act, Clean Water Act and the Porter-Cologne Water Quality Control Act.

The Basin Plan

The Basin Plan incorporates by reference the No Net Loss Policy,[10] the Antidegradation Policy[11] and the Corps' 404(b)(1) Guidelines. These require compensatory mitigation for the fill-based and non-fill based impacts to waters of the U.S. and beneficial uses. The Tentative Oder's compensatory mitigation requirement for the Project's fill-based impacts and associated temporal impact is consistent with the findings in the Joint EIS/EIR and applicable State regulations.

The commenters correctly note that there are significant uncertainties with respect to the availability of sufficient sediment to support the predicted amount of tidal marsh restoration, in additional to uncertainties with respect to the ability of restored tidal marshes to survive as marshes as sea level rises. These comments support our concern that the project may not actually be self-mitigating over the long implementation period of the complete project, especially if the proposed levee lowering to tidal marsh elevations in Phases II and III does not occur, and net fill of waters of the state increases to approximately 50 to 77 acres.

As such, the Tentative Order appropriately applies the No Net Loss Policy. Findings 32 and 33 cite the No Net Loss Policy and Basin Plan, respectively, and Findings 21 and 22 discuss the Project impacts and the required compensatory mitigation. The comment describes the Project as having 8.76 acres of net fill. However, the Project's total fill amount, without compensatory mitigation, is more than 132 acres. The difference between those two numbers results from the Water Board staff's evaluation of the Project as a whole under the No Net Loss policy, as reflected in the Tentative Order. Aspects of that evaluation are summarized in Tentative Order Table 7 and include identifying compensatory mitigation opportunities such as the areas of ecotone-related fill that will provide habitat and remain below the high tide line (36 ac), planned outboard dike breaches and berm lowering associated with Phases I, II, and III (18.5 to 58.5 ac in total), and the areas of fill that will immediately be above the high tide line following fill placement, but will be below the high tide line after 50 years of anticipated sea level rise in 2067 (28.2 ac).

Executive Order W-59-93 is the California Wetlands Policy, more commonly known as the "No Net Loss" Policy. The first objective of the Policy is "[t]o ensure no overall net loss and long-term gain in the quantity, quality, and permanence of wetlands acreage and values in

[9] As referenced earlier herein, the low end of this range takes into account mitigation credit for anticipated sea level rise over the next 50 years, while the high end is the net fill amount immediately following Phase I construction.

[10] Basin Plan, section 4.23.1 (citing Calif Wetland Conservation Policy Exec Order 59_93).

[11] Basin Plan, at 2.1.7 (incorporating Res. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California).

California…."[12] The No Net Loss Policy has been incorporated into Basin Plan chapter 5, Plans and Policies, and also appears in Chapter 4, Implementation Plans (section 4.23), which states: "The Water Board will refer to [the Policy] for guidance when permitting or otherwise acting on wetland issues." The Basin Plan states that the "Water Board will evaluate both the project and the proposed mitigation together to ensure that there will be no net loss of wetland acreage and no net loss of wetland functions."[13] Mitigation is appropriate to ensure compliance with the No Net Loss Policy.

As a part of considering Project compliance with the No Net Loss Policy, the Tentative Order appropriately takes into account programmatic efforts to maintain, restore, and enhance wetlands. These include the 1999 Baylands Habitat Goals project and its associated Habitat Goals Update, as well as the Comprehensive Conservation and Management Plan for the Bay, recently updated by the San Francisco Estuary Partnership. Those planning documents, referenced in the Basin Plan, set forth the reasoning for why restoration of tidal action to historically diked Baylands is desirable, as well as limits to that restoration (e.g., the need to maintain former salt ponds in order to support the bird populations and associated species that have developed there over time). The existing diked former salt ponds are jurisdictional waters of the U.S., and converting the salt ponds to tidal marsh is a permanent impact that will affect the ponds' existing beneficial uses. The planning documents above help explain why the Project's proposed conversion is an appropriate and desirable step.

The Antidegradation Policy commits to maintaining higher quality waters of the state to the maximum extent possible.[14] These policies apply to waters of the State, including wetlands, like those at issue here.[15]

The Basin Plan also incorporates by reference the Corps' own regulations,[16] which similarly require mitigation for impacts:

> [N]o discharge shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.[17]
>
> [T]he district engineer will issue an individual section 404 permit only upon a determination that the proposed discharge complies with applicable provisions of 40 CFR part 230, including those which require the permit applicant to take all appropriate and practicable steps to avoid and minimize adverse impacts to waters of the U.S. Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. Compensatory mitigation for unavoidable impacts may be required to ensure that an activity requiring a section 404 permit complies with the Section 404(b)(1) Guidelines.[18]

---

[12] Executive Order W-59-93 (Aug. 23, 1993), at p. 1.
[13] Basin Plan, § 4.34.4.
[14] *Ibid.*
[15] Classification of Wetlands, USGS (2013).
[16] Basin Plan, § 4.34.4.
[17] 40 C.F.R. § 230.10, subd. (d).
[18] 40 C.F.R. § 230.91.

CEQA, Clean Water Act and Porter-Cologne

When adopting the Joint EIS/EIR, the District identified three environmental impacts that would remain significant after implementation of feasible mitigation measures, including the following:

> "2) The Project will result in the loss of a substantial amount of human-created managed pond habitat that is used by managed-pond-specialist waterbirds (such as eared grebe, Wilson's phalarope, red-necked phalarope, and Bonaparte's gull) for foraging and roosting. Over time all the ponds in the study area would be converted. The South Bay Salt Ponds Restoration project and other tidal restoration projects in south bay have been restoring other managed ponds to tidal influence. Cumulatively there would be substantial loss of managed ponds in the Alviso pond complex. Due to the scale of the Project relative to other projects, the incremental impact of the Project would be considered cumulatively considerable. This impact could only be mitigated by replacing pond habitat being converted to tidal marsh. The conversion of other habitat to pond would be inconsistent with the objectives of the project, so no measure are available to lessen this impact. Adaptive management plans are designed to minimize significant impacts to pond-specialist birds, but given the long-term uncertainty of population trends the impact is still considered significant."

The District's Board Agenda Memorandum (March 22, 2016) concedes that "the Project would result in significant impacts on hydrology, water quality, biological resources...." Impact Wat-01 (violate any water quality standard or waste discharge) lists 24 mitigation measures, further establishing the numerous Project impacts. Similarly, the Joint EIS/EIR notes the following significant impacts requiring mitigation that are within the Water Board's jurisdiction: hydrology and water quality, aquatic biological resources, terrestrial biological resources, geology and soils, and hazardous materials. The compensatory mitigation required in the Tentative Order mitigates the significant impact that was identified by the SCVWD that would "…remain significant despite implementation of feasible mitigation measures."[19]

The 404(b)(1) Analysis recognized that the increase in jurisdictional waters may be classified as mitigation from a regulatory standpoint:

> "The USACE does not consider the increase in jurisdictional waters mitigation, but does recognize that, from a regulatory standpoint, they may be classified as mitigation."

Consistent with the Discharger's own findings regarding the Project's significant impacts to waters of the U.S. and their existing beneficial uses, and the need for mitigation, the Tentative Order recognizes the conversion of pond habitat to tidal marsh (anticipated) will result in permanent, significant impacts to waters of the United States, which are also waters of the State, and their existing beneficial uses. The Tentative Order simply clarifies that the habitat conversion, while still a non-fill based permanent impact, is considered, by the Water Board, to be mitigated by the eventual success of significant tidal marsh restoration. This approach is consistent with the SCVWD's own CEQA findings and SBSPRP's Order Water Board policy

[19] *Board Agenda Memorandum, South San Francisco Bay Shoreline Phase I Study – Resolution Certifying the Final Environmental Impact Report and Adopting Findings of Fact, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program; and Approving the Project* (March 22, 2016) (File No. 16-0113).

requires mitigation for impacts to waters of the State. For this reason, Water Board staff commented on the Joint EIS/EIR's findings regarding fill of waters of the U.S. and stated compensatory mitigation would be required. Water Board staff commented on the mitigation issue in the Water Board's EIR comment letter. The letter noted that the mitigation proposed for the Project's significant impacts to waters of the State consists of restoring open waters (former salt production ponds) to tidal marsh and outlined the issues with that approach, including uncertainty with respect to restoration success:

> "The Project presents permitting challenges, in that it would place fill into up to about 137.6 acres of waters of the State, consisting of 16.8 acres of wetlands and 120.8 acres of other waters. This is a significant amount of Bay fill. The Project would facilitate salt marsh restoration and would be part of a long-term adaptive management strategy to address the potential impacts of sea level rise in the Bay. However, the current proposal could have a significant delay between the placement of levee fill (i.e., the impacts) and the salt marsh restoration work (i.e., the mitigation), and other factors lead to uncertainty regarding the timing and potential success of the restoration."

One comment suggests that converting the existing pond habitat to tidal marsh habitat should serve as mitigation for the Project's fill-based impacts. This conversion is considered out-of-kind mitigation for permanent fill-based impacts because it does not create habitat (i.e., it results in a net loss of jurisdictional area), as the existing jurisdictional habitat is being converted into a different type of jurisdictional habitat. Therefore, as Water Board staff has noted on several occasions, and documented in the Project's CEQA record, the conversion of habitat in Ponds A9 to 16 and A18 may not serve to fully mitigate for the Project's significant fill impacts to waters of the State. However, the anticipated tidal marsh and areas of restored tidal action will serve as mitigation for the lost former salt pond habitat, the ponds' existing beneficial uses, and the temporal loss of function and values related to the time lapse between the beginning of Project construction and full tidal marsh establishment.

The Water Board has a duty as a responsible agency to require mitigation where necessary, pursuant to CEQA Guidelines 15096, subdivision (g), and 15126.4, subdivision (a)(1)(B). Once the Discharger identified potential impacts within the San Francisco Bay Water Board's jurisdiction, it triggered the Board's duty to evaluate the project and add any necessary mitigation. *Riverwatch v. Olivenhain Mun. Water Dist*. (2009) 170 Cal.App.4th 1186, 1207 holds that a responsible agency has an independent duty to review the EIR and "issue its own findings regarding the feasibility of relevant mitigation measures or project alternatives that can substantially lessen or avoid significant environmental effects."[20]

The CEQA Guidelines, the California Code of Regulations, the Clean Water Act, and Porter-Cologne affirm that a responsible agency may require additional mitigation and, in fact, imposes a *duty* to do so upon the responsible agency to do so if there are significant effects. The CEQA Guidelines provide:

---

[20] Citing Remy et al., Guide to the Cal. Environmental Quality Act (CEQA) (11th ed.2007) ch. III, subd. (B)(2), p. 53; Pub. Res. Code § 21081; and 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (Cont.Ed.Bar 2d ed.2008), § 3.22, p. 126.

• "When considering alternatives and mitigation measures, a responsible agency has responsibility for mitigating or avoiding the direct or indirect environmental effects of those parts of the project which it decides to approve."[21]

• "When an EIR has been prepared for a project, the Responsible Agency *shall not* approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."[22]

In addition to the CEQA Guidelines, Title 23 of the California Code of Regulations, Section 3742, provides additional regulations specific to regional water boards when acting as responsible agencies:

> The Board, when acting as a responsible agency may … condition the discharge of waste … for any project subject to CEQA to protect against environmental damage to water resources, to minimize adverse environmental impacts on water resources, or to ensure long-term protection of water resources….[23]

Clean Water Act section 401(d) similarly requires that the regional water boards "*shall* set forth" limitations to ensure the permit will comply with "any other appropriate requirement of State law" in the certification. The Corps' section 401(b)(1) guidelines similarly require mitigation where the Project will have adverse effects, or will degrade the existing aquatic ecosystem including fish.[24]

Finally, Water Code section 13263(a) requires that regional water boards "(i)mplement any relevant water quality control plans that have been adopted." As discussed below, the Basin Plan requires mitigation for impacts to beneficial uses to ensure no net loss of wetlands.[25]

These above authorities consistently require the San Francisco Bay Water Board to act affirmatively to ensure mitigation measures are included in the Order.

The District suggests that once it had adopted mitigation measures in its EIR, there was no role for the Water Board to play, citing *Ogden Environmental Service v. City of San Diego* (S.D. Cal. 1988) 687 F.Supp. 1436, 1450-1452 (*Ogden*). In *Ogden*, the issue was more fundamental: whether an EIR was required at all. The lead agency made the determination that an EIR was not required; a responsible agency (the City) believed that an EIR was necessary and denied approval of the project because there was no EIR.[26] The court held that the City had not properly challenged the lead agency's CEQA determination.[27] In doing so, the court construed sections 15096, subdivision (e) and 15162 of the CEQA Guidelines, pertaining to the steps a responsible agency must take to challenge the lead agency's determination where the responsible agency

---

[21] Cal. Code Regs., tit. 14, § 15096, subd. (g) (1).
[22] *Id*. at § 15096, subd. (g)(2) [emphasis added].
[23] Cal. Code Regs., tit. 23, § 3742.
[24] 40 C.F.R. § 230.12, subd. (a).
[25] Emphasis added.
[26] *Ogden, supra,* 687 F.Supp. at p. 1441.
[27] *Id.* at pp. 1451-52.

believes the final EIR or negative declaration is not adequate for use by the responsible agency.[28] *Ogden* does not squarely address the situation here, however, where the District has prepared an EIR, identified significant impacts, and a responsible agency is identifying mitigation measures to address those impacts. Here, where the findings in the EIR determine that mitigation is necessary to reduce impacts, the Water Board "shall not" approve the project where, as here, there are feasible alternatives or mitigation measures within its powers that will substantially lessen or avoid significant effects.[29]

Consistency With Prior Orders

As noted above, the FRM levee is necessary to protect Alviso against current flooding risks and against the additional flooding risks associated with sea level rise. The FRM levee and ecotone creation will result in net fill of a minimum of 8.67 acres of waters of the State if the Project is constructed, as proposed, in its entirety. They may result in net fill of about 50 to 77 acres of waters of the State if levee lowering associated with tidal marsh restoration is not implemented in Phases II and III. The precedent of the Water Board requiring mitigation for such fill is well established. Not requiring mitigation for fill would be contradictory to long-established Water Board precedent.

Some of the comments suggest that the Tentative Order is inconsistent with Order No. R2-2008-0078 and R2-2005-0034. We disagree. Findings 16 and 74 of Order R2-2008-0078 noted, in essence, that the authorized restoration project was self-mitigating. Finding 96 reflected that order's requirements to timely complete adaptive management actions necessary to achieve restoration goals. The lack of a penalty refers to the absence of a typical time-based penalty (e.g., a 10 percent increase in mitigation for a specified amount of delay), imposed for failure to timely complete required compensatory mitigation. However, that order did set forth deadlines and related requirements to implement restoration actions, including adaptive management actions, necessary to maximize the restoration's success and ensure the project's self-mitigating nature. Additionally, fill associated with the portions of the SBSPRP authorized by Order No. R2-2008-0078 did not include significant amounts of fill associated with providing flood protection for developed areas inland of the former salt ponds. Such fill likely would have been referenced separately in that order, similar to the approach in the Tentative Order.

Separately, Order No. R2-2005-0034, adopted for the Hamilton/Bel Marin Keys wetland restoration project, evaluated the restoration project's impacts and mitigation together, stating "[t]his project is consistent with the Basin Plan Wetland Fill Policy that establishes that there is to be no net loss of wetland acreage and no net loss of wetland value when the project and any proposed mitigation are evaluated together…" (Finding 37).

The Tentative Order's compensatory mitigation requirements are consistent with Water Board practice at other sites and take into consideration anticipated sea level rise over the coming 50 years. There are significant differences between a typical mitigation site and the Project's anticipated tidal marsh restoration. These differences are recognized in the Tentative Order, and the Tentative Order requires compensatory mitigation for the Project's fill based impacts and associated temporal loss. Consistent with other projects that fill waters of the U.S., the new

---

[28] *Ibid.*

[29] Cal. Code Regs., tit. 14, § 15096, subd. (g)(2).

jurisdictional waters created in Phases I to III, which provide similar or increased habitat value, will serve as compensatory mitigation. At most tidal wetland mitigation sites, the elevation of the mitigation site is set at an elevation appropriate to the desired type of tidal marsh vegetation in the same year that authorized impacts to waters of the State are implemented. These mitigation sites usually attain final performance criteria for tidal marsh vegetation and hydrology within five years of authorized impacts to waters of the State. In the Project, however, there will be a significant lag between when the Project's impacts take place and when work is completed on the associated mitigation components. The former salt ponds will not be breached to tidal action until at least five years after the Project places fill in waters of the State. After levee breaching, 10 to 20 years (or more) of sediment accumulation will be necessary before the pond bottom elevations are high enough to support the growth of tidal marsh vegetation. In other words, it will take the restoration ponds at least 15 to 25 (or more) years after initial impacts to get to the physical condition that most tidal marsh mitigation sites attain in their first year. As noted in the Tentative Order, Project impacts are associated significantly with a beneficial public purpose: reducing flood impacts to Alviso and shoreline infrastructure.

As discussed above, there is some uncertainty as to the benefits to be gained by restoring tidal action. These include uncertainty in the time required for sediment to accrete to mud flat or tidal marsh levels in deep ponds (and uncertainty as to whether it will ever accrete to such levels), whether accretion will keep pace with anticipated sea level rise, potential water column chemistry impacts, and other issues. The MAMP speaks to this uncertainty in that it provides the framework for making adaptive management decisions, including discontinuing or delaying future pond breaches, which are based on not only sediment dynamics and wetland vegetation establishment, but also bird use of changing habitats, non-avian species, invasive and nuisance species, and ecotones.[30] In addition, although the anticipated tidal marsh restoration is expected to result in habitat that is regionally scarce, provides beneficial uses, and increases shoreline resiliency, the long-term success of tidal marsh restoration and funding mechanism to sustain long-term marsh restoration and monitoring are unclear at this point. Although there is uncertainty in the long-term success of tidal marsh restoration, the Tentative Order recognizes the increased habitat value from the anticipated tidal marsh habitat and allows it to serve as mitigation for the temporal loss of waters of the U.S beneficial uses from permanent fill-based impacts. This approach is consistent with the SBSPRP's Order requirements with respect to the restoration components. In addition, the Tentative Order allows the anticipated tidal marsh restoration enhancement to beneficial uses and shoreline resiliency to mitigate the substantial temporal impact associated with the time lapse between the fill-based impacts' implementation and the anticipated tidal anticipated tidal marsh establishment (see response to SCVWD Comment 28 and Corps Comments 43 and 44). Therefore, the Tentative Order is consistent with the requirements set forth in the SBSPRP's Order and with Basin Plan policy. It goes a step further in that it recognizes the anticipated potential range of Project benefits to offset the Project impacts to the maximum extent that can be allowed by Water Board's governing regulations and policies.

[30] *South San Francisco Bay Shoreline Study, Monitoring and Adaptive Management Plan for Ecosystem Restoration* (September 2015).