



August 18, 2016

Ms. Felicia Marcus, Chair  
State Water Resources Control Board  
P.O. Box 100  
Sacramento CA 95812-0100

Dear Ms. Marcus:

The State Coastal Conservancy appreciates the opportunity to provide the following comments on the Preliminary Draft Procedures for Discharges of Dredged or Fill Materials to Waters of the State (June 17, 2016 Version).

The State Coastal Conservancy is a state agency charged with protecting and enhancing the California coast and San Francisco Bay, with several objectives including restoring and enhancing coastal wetlands. The Coastal Conservancy has funded and/or been involved in most of the major wetland restoration projects along the coast of California and San Francisco Bay in the last 40 years.

The Conservancy supports the State Water Board's efforts to update its former "Wetlands Policy" in order to comply with the State's "no net loss" of wetlands policy. As an agency focused on the voluntary conservation and enhancement of wetlands, we appreciate the importance of having a strong regulatory environment to protect natural resources and facilitate their restoration. However, we do have some concerns about the new draft regulations. The primary concerns are discussed in more detail below and include 1) lack of attention to latest scientific consensus around incorporating sediment reuse (i.e. upland transition zones) into wetland projects, 2) an inappropriate definition of "restoration", 3) potentially onerous monitoring requirement imposed on landscape-scale restoration projects, and 4) the definition of adaptive management.

Our primary concerns are listed below:

- 1) Regulations do not address the benefits of using fill for restoring and/or increasing wetland areas in appropriate locations, including creating upland transition zones around coastal wetlands and estuaries.

Several science-based regional plans for wetland protection and restoration, such as the *Baylands Ecosystem Habitat Goals Update* (2015) and the *Regional Restoration Strategy for Southern California Wetlands* (in progress) have cited the need to expand wetland habitats. These reports conclude that tidal wetland restoration projects should include the creation of broad upland transition zones. Historically marsh wildlife could escape high

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tides and storms by fleeing to adjacent moist grasslands, brackish marshes, and other immediately adjacent habitats. These critical refugia areas have largely been lost to development throughout the State, imperiling the survival of marsh-dependent species. Furthermore, as sea-levels rise, there are few areas where marshes can naturally migrate inland due to development and infrastructure. Therefore, to add refugia habitat and to allow for future sea level rise, large, gently sloping transition zones (or ecotone) need to be created as part of tidal wetland restoration projects. These features are recommended in the U.S. Fish and Wildlife Service's Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California (2013). This plan is an expansion and revision of the California Clapper Rail and Salt Marsh Harvest Mouse Recovery Plan (1984) and also addresses several federally endangered plants and other marsh species. The Plan specifically calls for upland transition zones to increase reproductive success and survivorship of listed species including California Ridgway's Rail and Salt Marsh Harvest Mouse.

The Water Board's proposed regulations specifically exclude the creation of upland areas as part of ecological restoration projects (p. 12, line 447), which is out of step with the latest scientific consensus on the importance of transition zones in coastal wetlands restoration projects. If fill used to create these large transition zones is considered by the Water Board in the same light as fill for a development project, then compensatory mitigation could be required, penalizing project proponents for an environmentally beneficial action. The mitigation requirement also raises significant questions about feasibility. In many estuarine habitats throughout the State, the opportunities to restore wetlands that are not already considered waters of the State or slated for future restoration is extremely limited. Even if an appropriate site could be found, other resource agencies (e.g., USFWS) would require the inclusion of transition zone, which could require more mitigation. The most likely result is that these transition features will be dropped from wetland restoration projects, jeopardizing their long-term success and our mutual goals of providing resilient habitat that supports endangered species recovery. The adopted regulations should facilitate complete environmental restoration projects and incorporate the latest scientific consensus that encourages the creation of upland transition zones. These regulations should not treat these features as impacts to be mitigated but rather be seen as essential to the long-term success of the entire ecosystem.

In addition, several wetlands restoration projects are beginning to consider increasing available salt marsh habitat by restoring areas that have been lost on the subtidal edges of the marsh. Many bays and estuaries have been dredged for recreational and commercial purposes. The areas of marsh that have been lost may need to be restored by placing fill into subtidal areas. Given the level of development that surrounds many of our remaining salt marshes, expanding into subtidal habitats could be some of our only options to save them. Finally, to allow for marshes to keep pace with sea level rise through accretion, it may be necessary in some instances to locally augment sediment delivery to tidal wetlands. Increasing suspended sediment concentrations, or direct sediment application to the marsh surface, should also be considered in our marsh sustainability practices.

2) Definition of Ecological Restoration and Enhancement Project (p. 12).

Please note that the State Coastal Conservancy is not included on the list of state conservation agencies (lines 443-5) in this section and, given our role as major funder of wetland restoration along the California coast and in San Francisco Bay, we hope you will correct this oversight.

The Conservancy understands the Water Board's intention to create a definition that does not allow compensatory mitigation projects to take advantage of the standards for restoration projects. However, the proposed definition is confusing, at odds with common restoration practices used throughout the State, and potentially could have the unintended consequence of hindering future restoration projects. However, we urge the Water Board to re-evaluate the language after reviewing a more diverse set of restoration and enhancement projects from all parts of the state. For example, we would like to see the definition to include other obvious restoration efforts included that have not specifically been certified as a wetland restoration and enhancement project by the Water Board program as suggested in the existing language of the definition.

We would suggest that an ecological restoration and enhancement project means the "project is voluntarily undertaken for the purpose of assisting or controlling the recovery of an aquatic ecosystem that has been degraded, damaged or destroyed to restore some measure of its natural condition and to enhance its beneficial uses, including the beneficial use of water". To further distinguish these types of projects the definition could discuss that these projects usually (although not exclusively) are funded by public funds and undertaken by one or more public agencies in order to fulfill their restoration mandate as opposed to compensate for adverse changes to the environment.

Public agency-led aquatic restoration projects often have multiple goals and benefits (e.g. engendered species recovery, storm surge protection, recreation) that do not solely focus on uses of water but they still can only be defined as restoration projects. The definition proposed by the Water Board excludes or potentially conflicts with the other multiple benefits provided by wetland restoration projects by stating the "sole purpose" of such projects is "to enhance the beneficial uses or potential beneficial uses of water". Many coastal wetland restoration projects in urban areas require extensive infrastructure construction or modification (PG&E transmission lines, flood risk management levees, etc.) before tidal restoration can take place. Incorporating flood protection into a project does not mean it is no longer a restoration project. Conducting wetland restoration activities that increase flood risks for adjacent communities or places project proponents at risk of litigation, necessitates flood protection infrastructure that maintains or improves levels of flood protection. In addition, because other regulatory requirements for public access along the coast and in the Bay (from BCDC and Coastal Commission) as well as the mission of the public agencies participating, restoration projects also often incorporate recreation and environmental education elements as a project purpose. These recreational enhancements do not take away from the aquatic restoration purpose. The Water Board's definition needs to have sufficient flexibility to acknowledge other

benefits as worthwhile parts of restoration projects or at least avoid being so specific that it excludes or ignores these other benefits, leaving these project elements to be defined as impacts to be mitigated.

The language in lines 440-2 confuses matters. The sentence, “Such projects are undertaken voluntarily in accordance with the terms and conditions of a binding...enhancement or restoration agreement or a wetland establishment agreement...” could be interpreted to imply that certain agencies have standard agreements that are routinely entered into. In the Conservancy’s experience, this is not the case. While the arrangements that agencies make to accomplish these projects can be varied (ranging from MOUs to recorded legal agreements), the agreements entered into are not really relevant to the definition. The other assumption imbedded in the rest of this sentence “...between the landowner and...federal and state resource agency” (lines 442-6) is that the majority of restoration projects are privately owned. Again, in the Conservancy’s experience along the coast and in San Francisco Bay, this is rarely the case. The majority of aquatic restoration projects are on publicly-owned land, undertaken with public funds and, potentially, some private foundation or relatively small amounts of local mitigation funding directed to the project by local regulators. These very specific details proposed in this section do not enhance the definition of wetland restoration because it does not reflect the reality of wetland restoration along the coast or in San Francisco Bay; this language more reflects wetland restoration or enhancement activities by farmers and ranchers in the Central Valley and other parts of the state.

3) Complete Application for all Ecological Restoration and Enhancement Projects (pp. 5-6).

The Water Board should consider that restoration projects that seek to improve conditions or return to historic conditions are not trying to replace or make up for a quantifiable loss from a development project. In fact, one could argue that any amount of success or improvement in ecosystem function from a restoration project justifies its execution, and holding it to the same standard as a compensatory mitigation project will only decrease the amount of resources that can be put toward further restoration efforts.

More specifically, the Conservancy is concerned that for larger, landscape scale project the proposed “minimum” monitoring plan requirements may not provide sufficient flexibility. While these requirements may be more appropriate for a mitigation project or smaller scale restoration projects, they could be onerous and irrelevant for an effort such as the South Bay Salt Pond (SBSP) Restoration Project, the largest wetland restoration effort on the west coast of the United States. The discussion below illustrates how these requirements could be problematic for the SBSP Restoration Project.

Requiring “an assessment of the overall condition of aquatic resources and their likely stressors, using an appropriate method subject to the approval of the permitting authority prior to restoration...and two years following...” implies that there is a commonly agreed upon methodology for such assessments for all habitat types and that two years after the project is appropriate. This is not the case. For example, CRAM, probably the most

commonly applied wetland condition assessment methodology, has limited applications to some pre-restoration sites such as former salt-evaporation ponds. Also, CRAM and other methodologies cannot capture the habitat values of upland transition zones that restoration ecologists around San Francisco Bay agree are essential features to incorporate into wetland restoration projects. Furthermore, tidal wetlands can take decades to evolve which means the two-year timeframe could yield little useful data. We agree that baseline data is essential and recommend that project assessments should focus on measuring success as defined by the restoration project and be flexible enough to take into consideration each site's unique conditions.

The SBSP Restoration Project's has focused more on adaptive management and less on traditional monitoring. After a 5 year planning process which included extensive scientific data gathering and analysis, the SBSP Restoration Project proponents concluded that traditional monitoring would not answer the key scientific uncertainties associated with the project. Typical measurements of vegetation cover and sedimentation were less likely to be useful because in San Francisco Bay, in general, if a tidal wetland restoration site has adequate tidal exchange, the sites usually become vegetated within a decade (depending on their depth) and repopulated by marsh species. However, there were still landscape-wide and site specific uncertainties that could affect the project's long-term success that would not be captured with CRAM or other generalized monitoring assessments on ponds restored by the project. Therefore, the SBSP Restoration Project has instead focused on implementing an Adaptive Management Plan (AMP). The AMP was developed by scientific researchers in key fields, to address these uncertainties and provide a framework for adjusting management decisions based on the physical and biological response of the system. San Francisco Bay Regional Water Quality Control Board staff and other regulatory agencies were extensively involved in the creation of the AMP and this approach has been largely successful to date. The implementation of the AMP does require monitoring and applied scientific research but the information generated is of direct utility to the land managing agencies and regulatory agencies. A blanket state-wide application of monitoring protocols could have forced the project to divert scarce research dollars to fulfilling regulatory requirements that did not generate useful information. Please consider allowing for site-specific monitoring where the technical issues do not easily fit into a regional approach, and also consider different standards for compensatory mitigation and wetland restoration and enhancement projects.

#### 4) Definition of Adaptive Management.

The Conservancy supports the definition of adaptive management in Section 230.92 except that it should not be limited to compensatory mitigation projects. Adaptive management is a process that allows early identification of potential problems and appropriate management responses. This applies to mitigation and restoration projects alike and, as discussed above, can have a particularly central role in restoration projects. In fact, adaptive management is much more likely to succeed in a restoration project, particularly those that seek to return a site to its historic conditions.

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We would also like to point out that adaptive management is not the same thing as addressing deficiencies after a project has failed to meet its goals as described in Section (c) p. 41. The process described there is remediation. Under most conditions, a well-designed adaptive management plan should prevent a project from reaching that point by having sufficient assessment and monitoring to resolve uncertainties and detect potential issues before they manifest into problems. Furthermore, possible corrective management actions should be identified in advance as much as possible so the response can be timely. Addressing project failure, on the other hand, often requires “going back to the drawing board” and questioning initial project assumptions, goals, and objectives. It is much less about how the project is managed.

When the term adaptive management is misapplied it can discredit this approach. We do not want adaptive management to be seen as a way to avoid addressing project complications or postponing necessary actions.

Finally, the draft language provides no certainty to the applicants as to what will be required, as almost all of the parameters are at the discretion of Board staff. This is challenging when implementing a project, as the cost and time considerations will not be known, and could vary depending on the specific staff person assigned to the project. We would like to see much tighter language as to when and why certain steps would be required, and respectfully request that voluntary wetland restoration or enhancement projects be given consideration for an expedited process. Public funding for restoration can be very limited and increasing costs with open ended permitting processes can affect a public agency’s ability to fulfill its public benefit mission. We hope that the Water Board can create regulations that will continue to protect California’s waters but without greatly adding to the cost of a publicly-funded restoration project so that the dollars can accomplish as much restoration or enhancement as possible.

Thank you for considering our input and we look forward to continuing to work with the Water Board to protect and enhance California’s wetland resources. I can be reached at [mary.small@scc.ca.gov](mailto:mary.small@scc.ca.gov) or 510-286-4181 if you have additional questions.

Sincerely,



Mary Small  
Deputy Executive Officer