San Francisco Bay Conservation and Development Commission

Fill for Habitat Restoration

What is Habitat Restoration?

Restoring or enhancing natural habitat areas that have been impacted by physical conditions or anthropogenic activities, and returning these altered habitats to a natural state.

Historically, many of the wetlands around San Francisco Bay were diked from the Bay and are currently subsided. The Bay's beaches have suffered a similar loss due to shoreline development. Additionally, suspended sediment supply to the Bay has decreased over time, which creates an additional challenge for existing and future habitats. Sediment is needed to ensure that marshes keep up with rising sea level. Too much water and too little sediment may result in the drowning of vegetation and wildlife, and erosion of the marshes, and beaches. As a region, restoration of these habitats, and others, are an active and long-term goal. The Baylands Ecosystem Habitat Goals Project set a goal to **restore 100,000 acres of baylands** and approximately **34,000 acres** are now either being restored or in the planning phase.

Policy challenge: BCDC's current policies limit Bay fill in habitat restoration and enhancement projects to a "minor amount," which poses an additional policy burden, beyond the "minimum amount of fill necessary for the project" required by the McAteer-Petris Act.

Issues

- Both the McAteer-Petris Act and the Bay Plan seek to minimize fill in the Bay regardless of the project type.
- Transition zones (wetlands and beaches) for habitat resilience may require significant amounts of Bay fill to be successful.
- Habitat enhancement through sediment augmentation may cause impacts to existing healthy marshes and species, and the future habitat value is uncertain.
- Sediment augmentation methods are untested in the Bay, and likely to impact existing habitat. Different methodologies have different impacts and benefits (timing, amount, aerial extent, and thickness must be considered).
- Bay Plan policies currently limit and condition the reuse of dredge sediment for habitat purposes until the success of the Middle Harbor Enhancement Project is proven.

Potential Solutions

- Consider a Bay Plan amendment to revise or eliminate the additional fill policy test - "minor amount of fill" for habitat adaptation and restoration projects.
- Investigate an amendment to the McAteer-Petris Act to create greater flexibility with regards to fill for restoration and the adaptive management of restoration sites.
- Develop regulations specific to restoration projects and transitions zones.
- Develop policies that specifically address climate change and habitat restoration (long-term habitat resilience, life of the project, evolution of habitats).
- Consider amending the Bay Plan to remove or modify the restrictive policy associated with the Middle Harbor Enhancement Project.
- Consider a Bay Plan amendment to modify or possibly exempt habitat restoration projects from mitigation requirements.

Quick Policy Facts

- Marshes are part of the Bay.
- Fill behind dikes (not in the Bay) can be authorized prior to breaching.
- Sediment added after breaching is considered Bay fill.
- Fill in salt ponds and managed wetlands is treated differently.

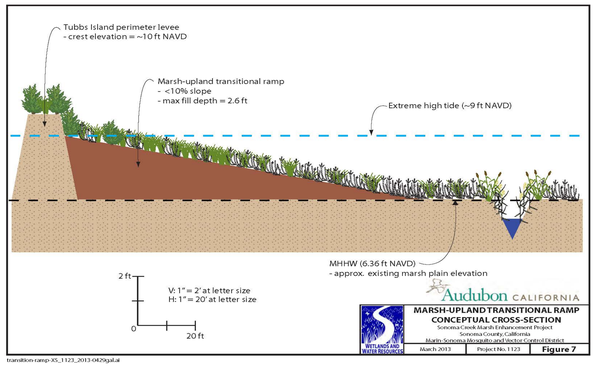

Figure 1. Conceptual transition zone design for the Sonoma Creek Enhancement Project.

Pros/Cons

- Restored wetlands and other habitats are needed to improve the ecological health of the Bay and support recovery of listed species. However, they may require significant fill.
- Clear guidance to the Commission and applicants regarding fill placement for restoration is needed, but would require resources, funding, and time to develop.
- Placing fill in existing habitats may convert one habitat type to another, resulting in loss of current habitat and species.

Discussion Questions

1. Is there anything about how this issue is framed that concerns you?
2. Considering this topic only, what do you envision would be a positive outcome for the region?
3. Would you identify this issue as your top priority to address in the short-term?