



San Francisco Bay Plan Amendment to Address Bay Fill for Habitat Restoration Projects



Presentation to the Engineering Criteria Review Board
Megan Hall
May 8, 2019



San Francisco Bay Conservation
and Development Commission

Fill for Habitat



Photos courtesy of Roger Leventhal



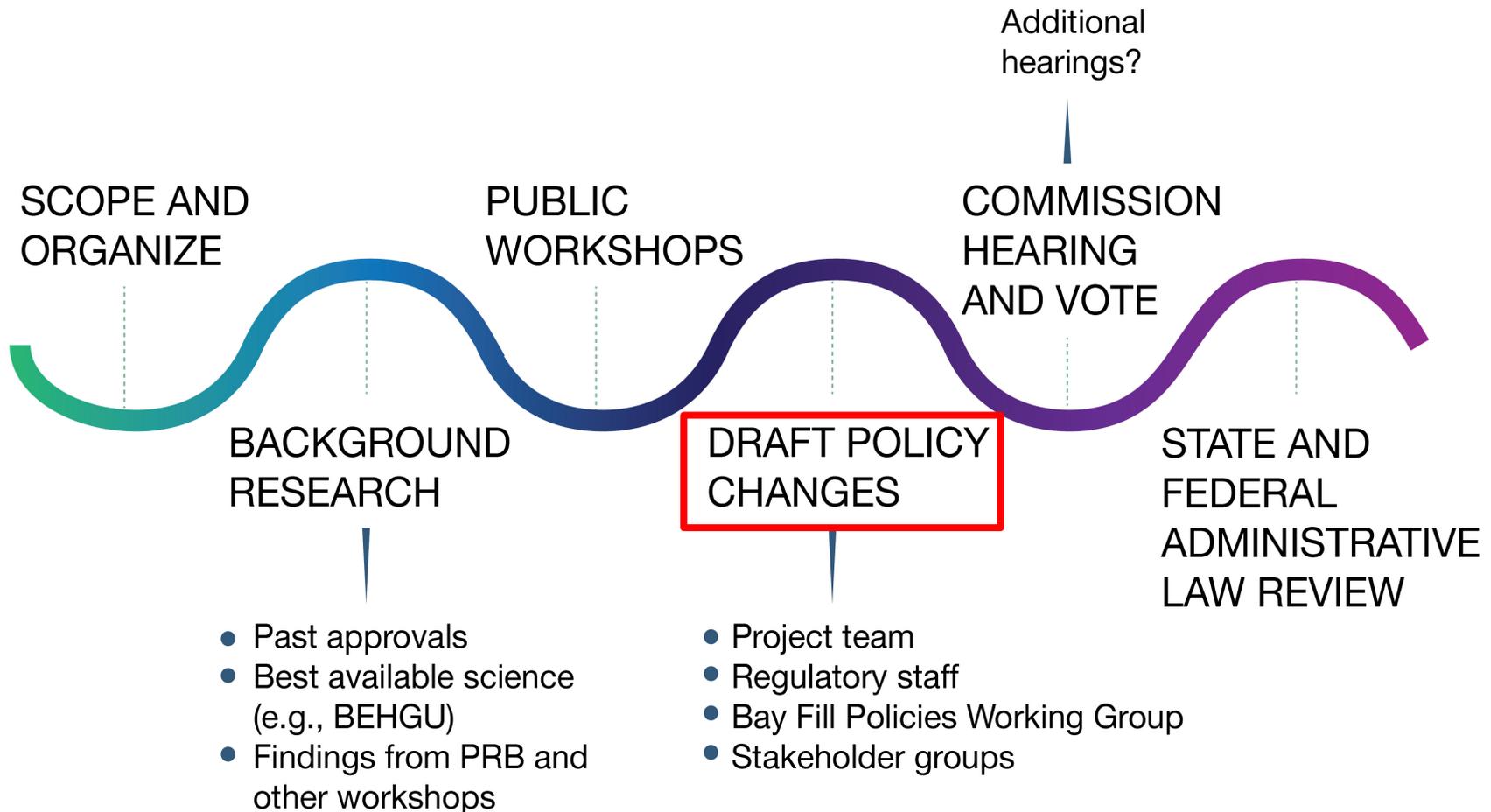
Project Goal

Amend the San Francisco Bay Plan to address the planning, design, and permitting of necessary Bay fill for *habitat projects* in the San Francisco Bay, and to increase the region's resilience to rising seas using the best available science.



Bay Plan Amendment Process

BAY PLAN AMENDMENT PROCESS



Bay Plan Sections Currently Under Consideration



- Fish, Other Aquatic Organisms and Wildlife
- Tidal Marshes and Tidal Flats
- Subtidal Areas
- Dredging
- Shoreline Protection



https://www.fws.gov/refuge/San_Pablo_Bay/Clapper_Rail.html



<https://www.epa.gov/sfbay-delta/south-bay-salt-pond-tidal-marsh-restoration-pond-a17-project>



<https://www.sfgate.com/science/article/2-million-oysters-in-bay-begin-restoration-effort-4984300.php>



<http://www.walking-the-bay.com/2011/04/albany-mudflats-bikepath-mar-30-11.html>

1. Limited Amount of Fill Allowed for Restoration Projects

- Should we allow more than a “minor” amount of fill in the Bay for restoration?
- What is “minor”?

Tidal Marshes and Tidal Flats, Policy 8:

“Based on scientific ecological analysis and consultation with the relevant federal and state resource agencies, a **minor amount of fill** may be authorized to enhance or restore fish, other aquatic organisms or wildlife habitat if the Commission finds that no other method of enhancement or restoration except filling is feasible.”



2. Using Dredged Sediment for Habitat Projects in Tidal Waters

- How should we allow more dredged sediment to be used for habitat projects in tidal waters?

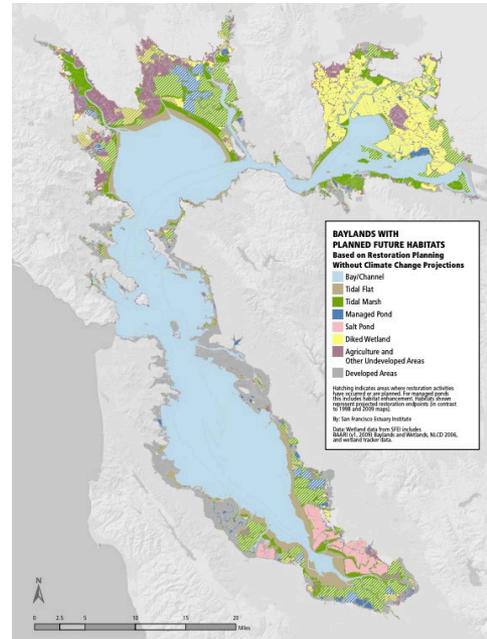
Dredging Policy 11b:

“To ensure protection of Bay habitats, the Commission should not authorize dredged material disposal projects in the Bay and certain waterways for habitat creation, enhancement or restoration, except for projects using a minor amount of dredged material, until”



3. Regional Goals | Restoring Complete Ecosystems

- Should we require Fill for Habitat projects to adhere to regional habitat restoration frameworks and work with natural processes in their goals, siting, and design?
- Should we add language encouraging projects to restore connectivity and complete ecosystems?



Baylands Ecosystem Habitat Goals Update (2015)

4. Pilot Projects | Monitoring | Adaptive Management

- How can our policies facilitate novel approaches to Fill for Habitat, as well as the monitoring and adaptive management of projects with uncertain outcomes?



5. Impacts and Habitat Conversion Caused by Fill

- What policy changes are necessary to ensure that we appropriately consider habitat type conversion and impacts caused by Bay fill for restoration projects?
- How can we best assess these changes on a regionwide scale?

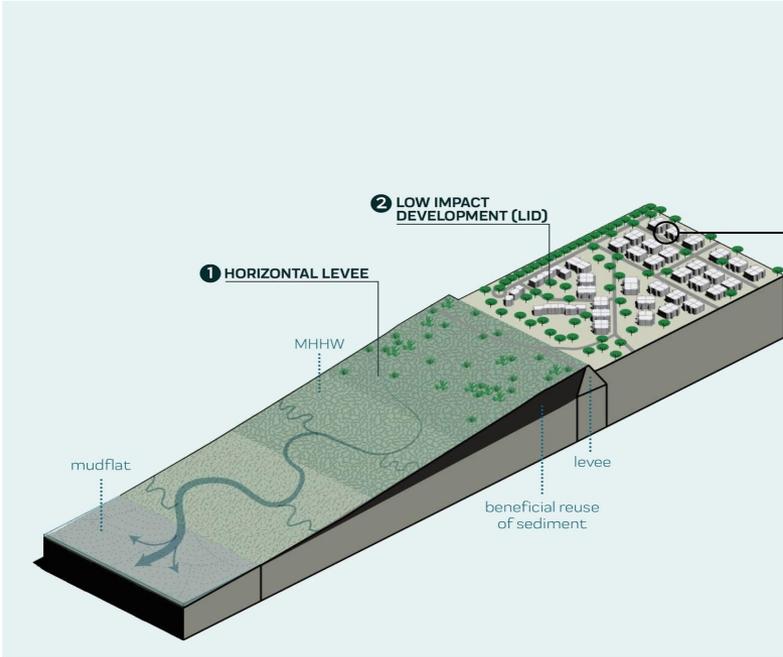


<https://tlp.el.erdc.dren.mil/seal-beach-2/>

6. Fill for Shoreline Protection and Multi-Benefit projects



- What kind of language is required to increase the opportunities to use living shoreline approaches for shoreline protection?



Courtesy of Roger Leventhal



<http://scc.ca.gov/climate-change/climate-ready-program/san-francisco-bay-living-shorelines-project/>

Next Steps



Discussion Questions

- How might the allowance of more fill for habitat projects intersect with the ECRB?
- Do you see an immediate role for the ECRB in the assessment of safety of fills for habitat projects?



Thank you!



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