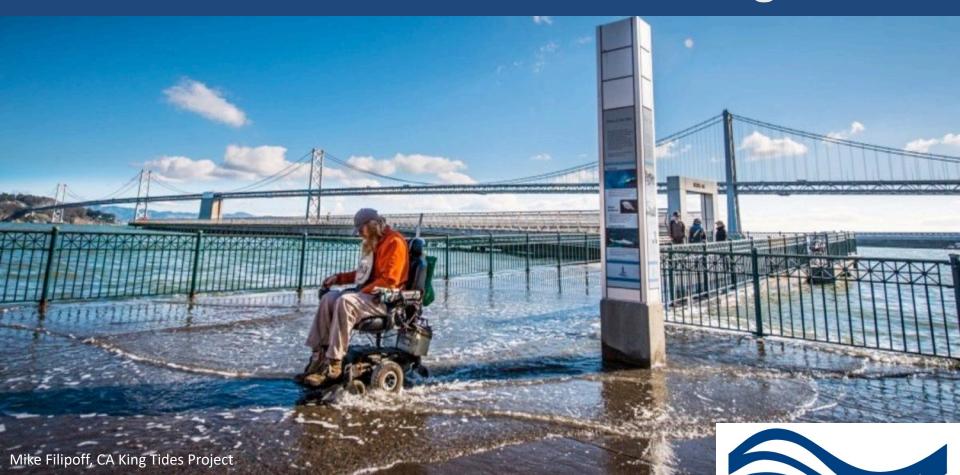
# Water Board Policy Update: Wetlands and Climate Change



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# Climate Change Threats

- More frequent and severe droughts and floods
- Sea level rise
- Coastal flooding, overtopping, erosion
  - Higher groundwater tables
  - Drowning of tidal marshes

# What the Water Board Is Doing

- 1. Collaborating with partners
- 2. Planning and permitting projects
- 3. Supporting the Adaptation Atlas
- 4. Amending our Basin Plan

# SF Bay Basin Plan

- Master policy document
- Designates beneficial uses
- Assigns water quality objectives
- Describes implementation plans & policies
  - Chapter 4.23: Wetland Protection & Management



# Key Beneficial Uses of San Francisco Baylands + Shorelines

- Estuarine habitats mudflats, tidal fresh, brackish, and salt marshes
- Habitat for wildlife, including rare and specialstatus species
- Recreation, commercial fisheries, shellfish harvesting





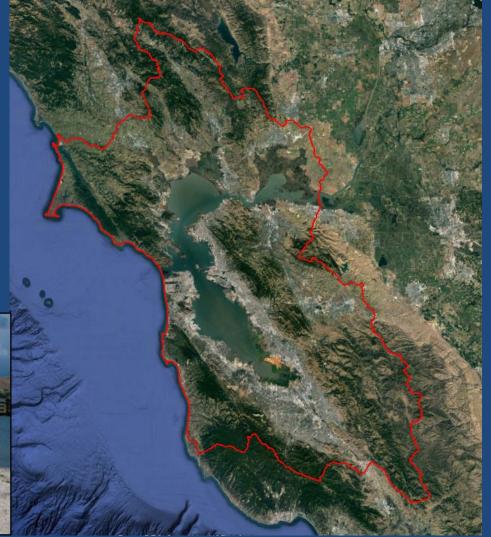


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# Key Water Board Authorities

- Placement of fill in wetlands and waters
- Dredging and beneficial reuse





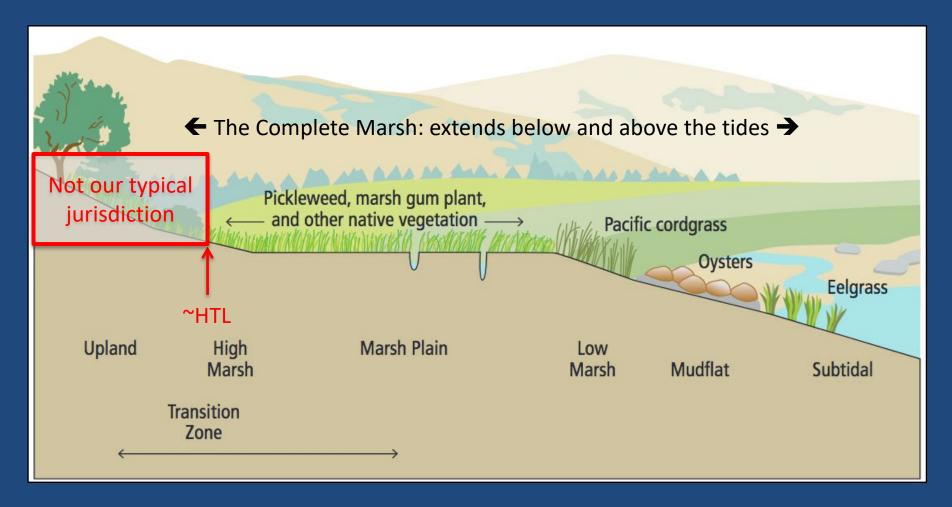
#### **CA Wetlands Conservation Policy**

- "No Net Loss"
- Ensures no overall net loss and a long-term net gain in wetlands acreage, functions, and values
- Emphasizes regional restoration goals, planning, and strategies



# The Complete Tidal Marsh

Important habitats above the high tide line (HTL)



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- 1. Document threats that climate change poses to Bay habitats and beneficial uses
- 2. Identify benefits of "complete" baylands
- 3. Identify preferred strategies for SLR adaptation: Baylands Goals, Adaptation Atlas



- 4. Clarify how we will apply "No Net Loss" for
  - Horizontal and ecotone levees
  - Living shorelines, beaches, dunes, and naturebased (hybrid green-grey) infrastructure
  - Strategic/thin-lift sediment placement
  - Enhanced high tide refugia in marshes

- 5. Clarify acceptable wetland type conversions
- 6. Incentivize landward alignments of shoreline protection, movement of natural shorelines
- 7. Develop framework to address temporal and spatial tradeoffs and uncertainties
- 8. Address indirect and cumulative impacts

- 9. Minimize shoreline hardening
- 10. Evaluate mitigation on a regional basis
- 11.Support regional tidal wetland monitoring



### Basin Plan Amendment: Next Steps

 Climate change + wetlands policy staff report: http://www.waterboards.ca.gov/sanfranciscobay/water\_issues/programs/climate\_change/

- 2020-2021: Develop Basin Plan Amendment
  - Staff writing + review, stakeholder engagement,
     CEQA, Board adoption, sign-off by EPA and CA
     Office of Administrative Law

