# Sediment and Beneficial Reuse Commissioner Working Group Meeting

April 7, 2026

# Agenda Item 2: SWAP Overview

## Outline

- Sediment system
- Status of beneficial reuse in the Bay
- Project description

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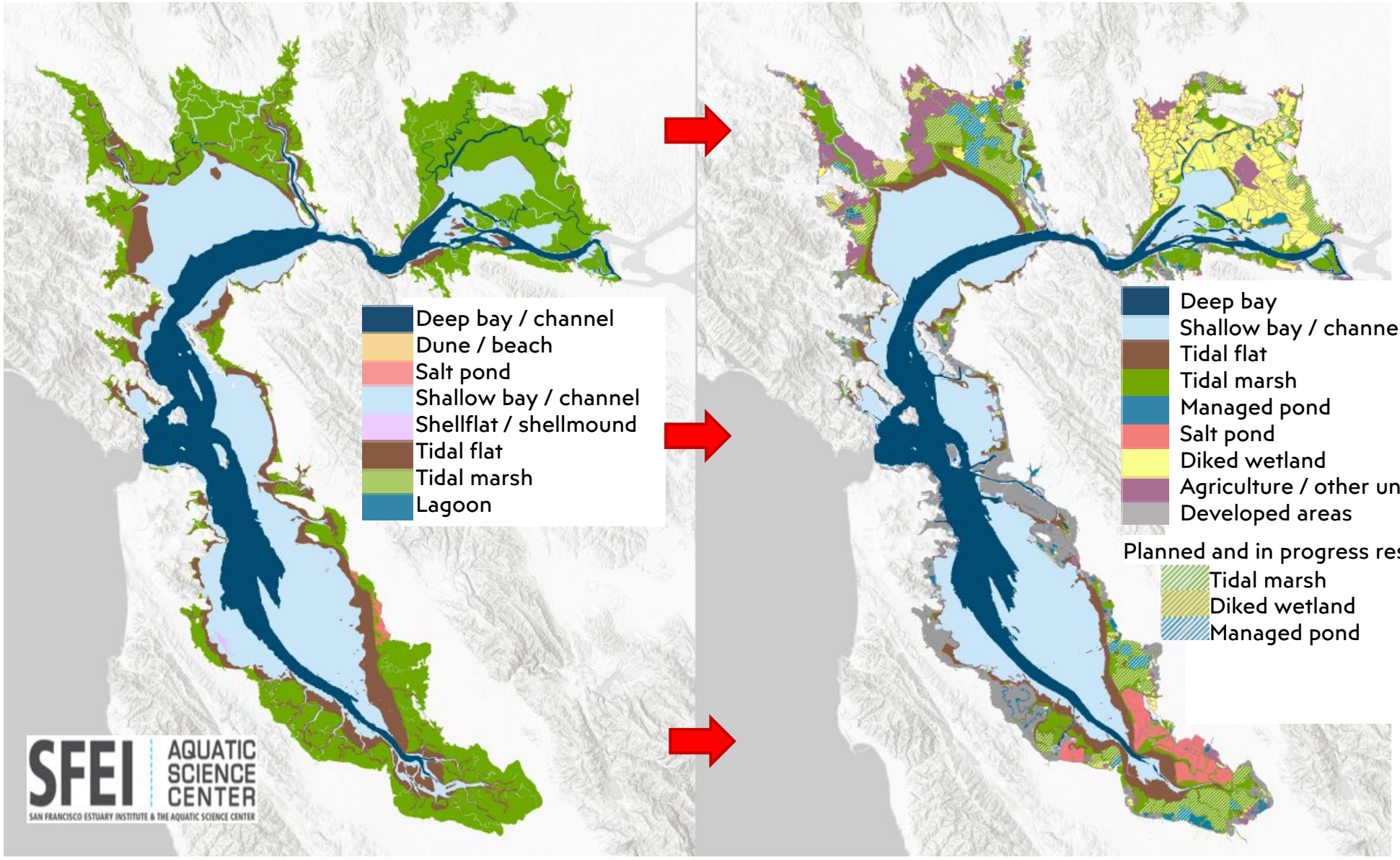
## Historical Baylands Circa 1800

## Modern Baylands Circa 2009



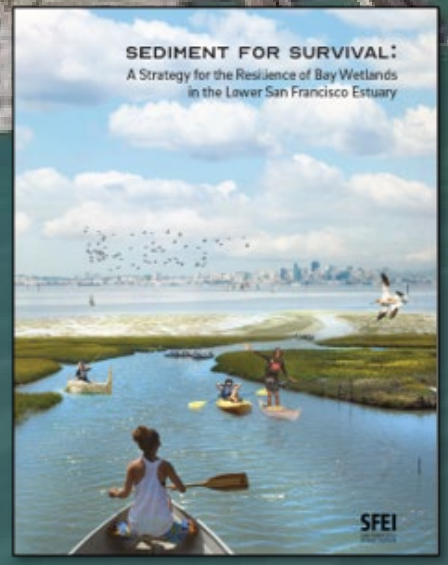

**Between 1880 – 1998, ~90% of wetlands were lost due to human activities**

# Sediment in service

- Wetland Environmental Services
  - Carbon sequestration
  - Nutrient and mineral source
  - Water quality
  - Storm buffer
  - Biodiversity
- Sediment supports Bay Ecosystems
  - Plants and microbes in soil are the building blocks of the food web
  - Stabilization and growth
  - Promotes ecosystem diversity

# VOLUME OF SEDIMENT NEEDED FOR TIDAL WETLANDS AND MUDFLATS BY 2100

**450–650 million metric tons**

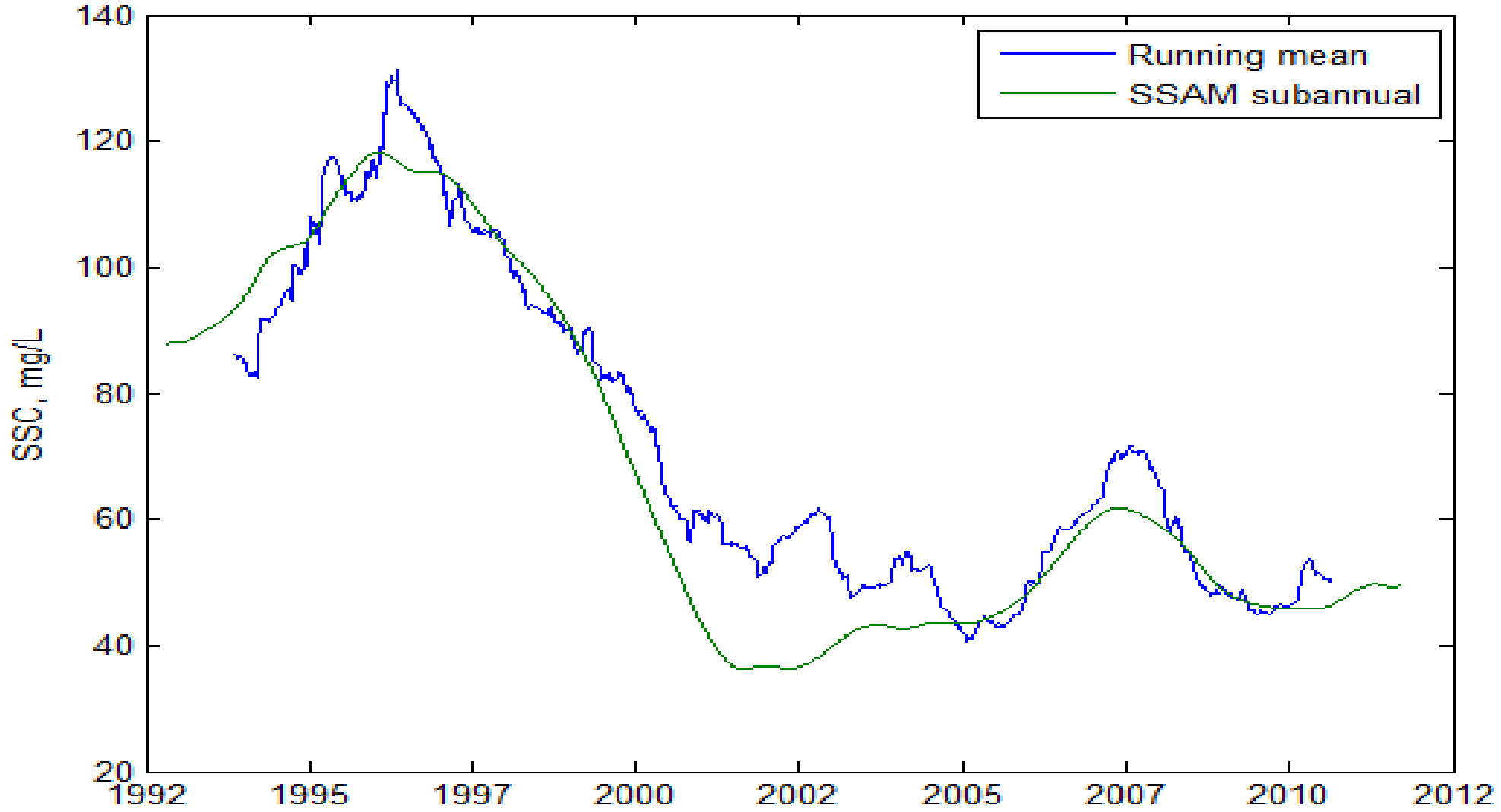



Amount of sediment that can be supplied by nature and current management approaches

The sediment need that could be met by changing management practices to access more in-bay and watershed sediment

Imagery courtesy Google Earth

# DECLINE IN SUSPENDED SEDIMENT INPUT




Dumbarton Bridge, mid-depth, Dave Schoellhamer, USGS

Excess construction soil

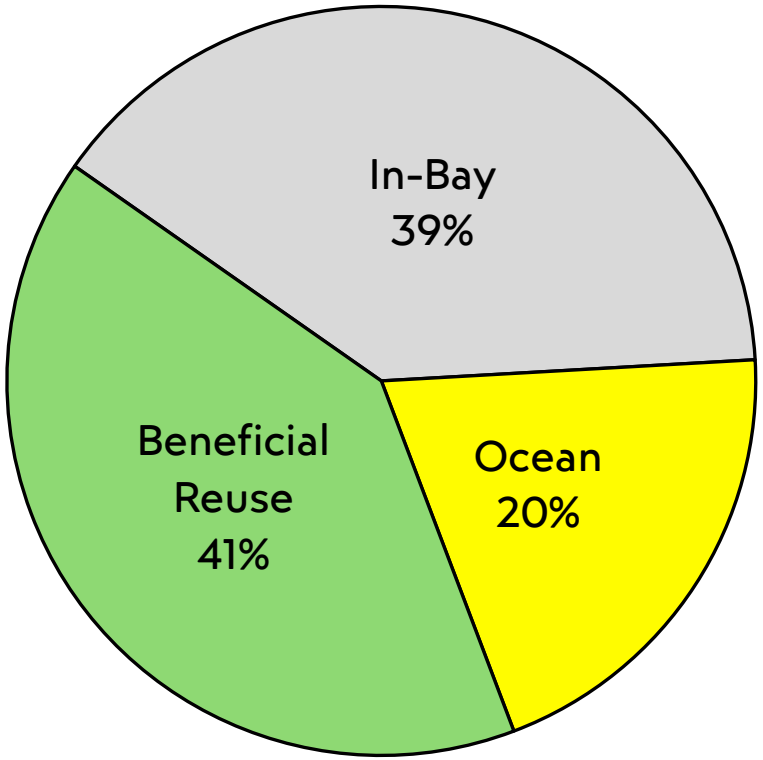
Soil Reuse at South Bay Salt Ponds Restoration


Sediment dredged from Bay, flood control channels

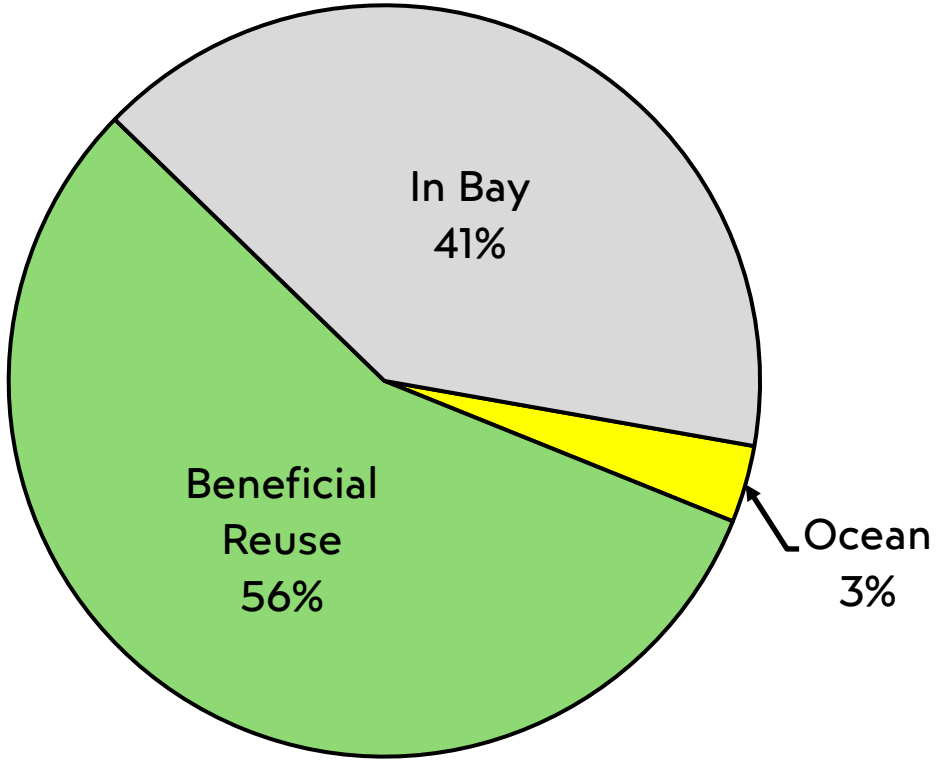
Sediment Reuse in Deer Creek, Novato

# Placement and Disposal Status

2000-2024 Dredged Material Placement & Disposal (Average)




2024 Dredged Material Placement & Disposal



# Beneficial reuse of dredged sediment happens when:

1. Sites are available
2. The dredging community balances its disposal and beneficial reuse proposals through integrated alternative disposal site analysis (meeting the LTMS goals)
3. Dredging occurs outside the environmental work windows (mitigation for impacts)
4. New work dredging projects (mitigation for impacts)
5. Funding is available specifically for beneficial reuse (incremental cost)

# Sonoma Baylands: 1993


Sonoma Baylands Trail

Image U.S. Geological Survey

# Sonoma Baylands: 2024

# What is the SWAP?

Photo: Hamilton Wetlands, Marin County

**Goal**: Increase beneficial reuse of sediment and soil for wetland habitat restoration, resilience, and sea level rise adaptation in the San Francisco Bay Area.

## Objectives:

- Increased collaboration ✓
- Beneficial Reuse Action Plan ✓
- Possible policy changes
- Financing Strategy

Funders: EPA + California Ocean Protection Council

# SWAP Timeline

2025 → 2026

***Phase 1 (Complete)***
Stakeholder Engagement
- Coalition building
- Action Plan ✓

***Phase 2*** – Potential Bay Plan Amendment

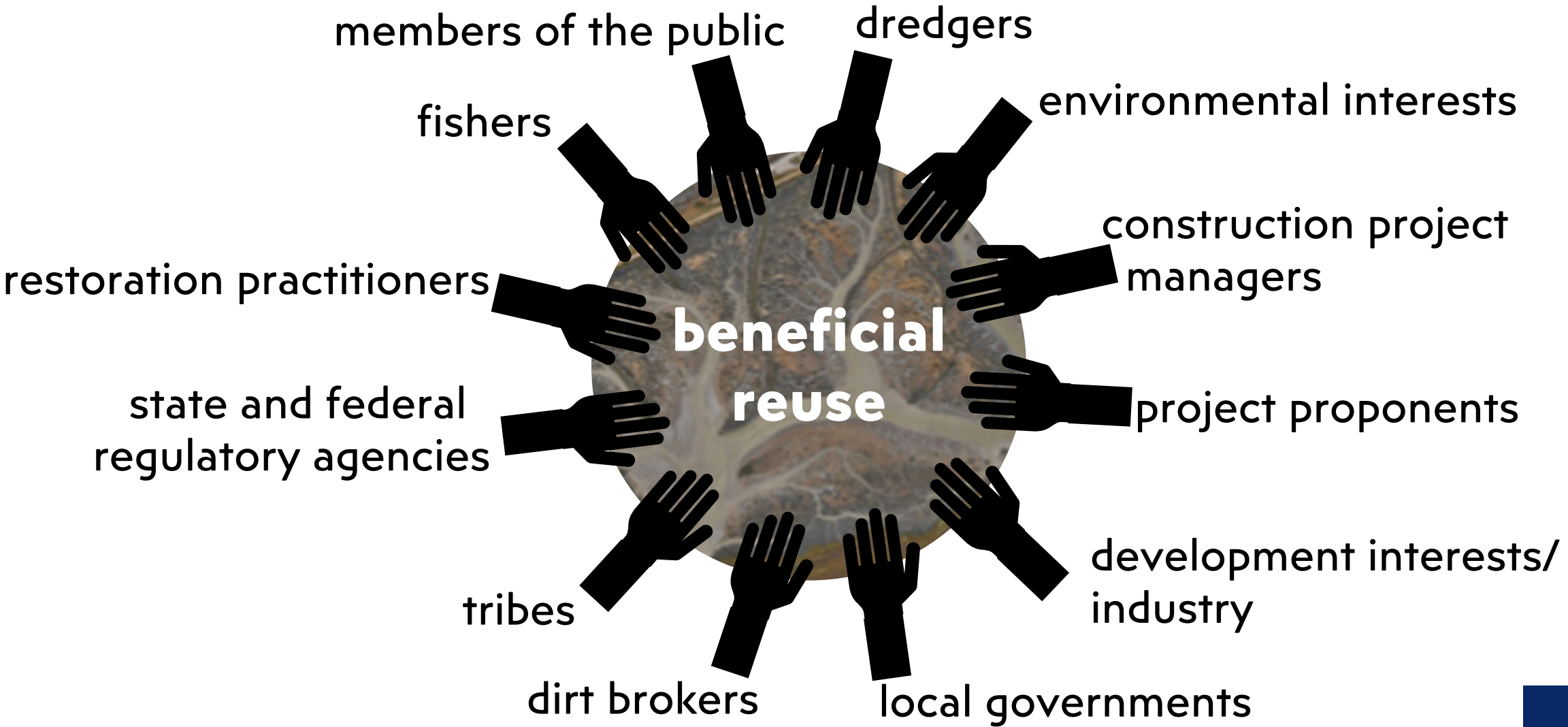
***Phase 3*** – Financing Strategy

Commissioner Working Group meetings

Core Team meetings

Core Team:

# Stakeholders

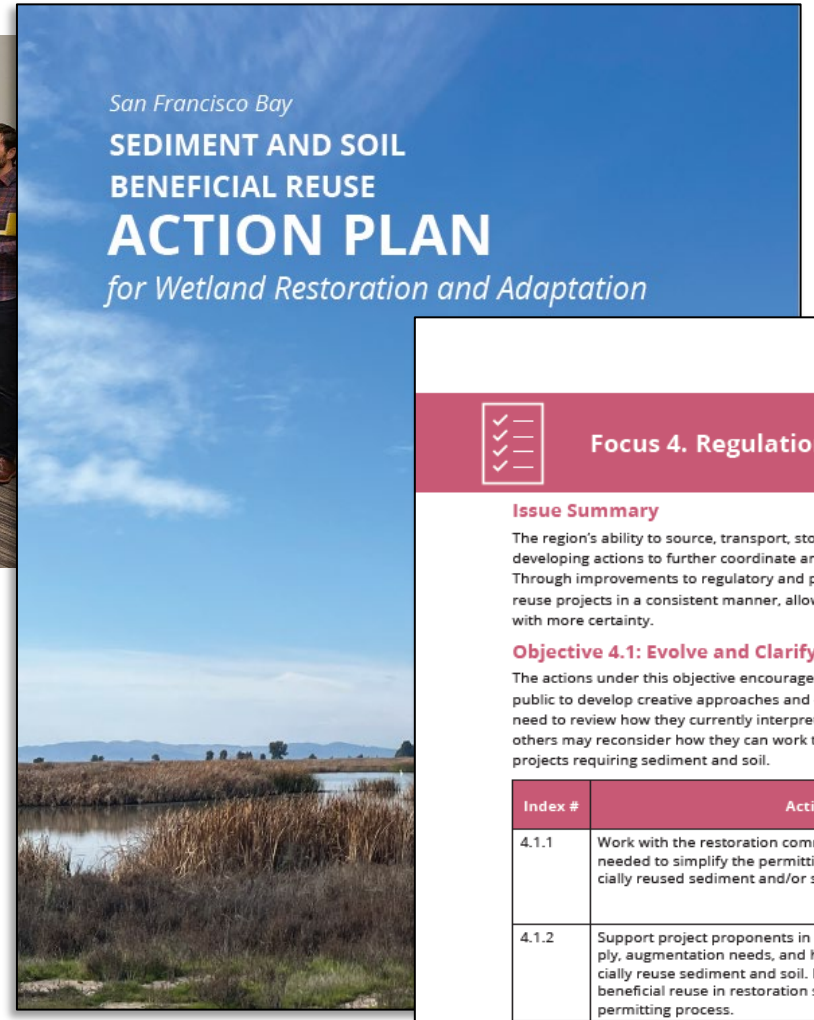


# Stakeholder Workshops

- Early 2024

# Regional Action Plan

- Released March 2025
- Beneficial reuse challenges
- 70 actions organized into 8 focus areas
- Action prioritization




## Focus 4. Regulations and Permitting

### Issue Summary

The region's ability to source, transport, store, and place sediment and soil can be improved by developing actions to further coordinate and streamline regulatory and permitting processes. Through improvements to regulatory and permitting processes, agencies can address beneficial reuse projects in a consistent manner, allowing project proponents to plan their restoration with more certainty.

### Objective 4.1: Evolve and Clarify Permitting Regulations and Practices

The actions under this objective encourage project proponents, permitting agencies, and the public to develop creative approaches and evolve processes and practices. Some entities may need to review how they currently interpret and apply their legal and regulatory authority; others may reconsider how they can work together to support successful wetland restoration projects requiring sediment and soil.

| Index # | Action | Status & *Champion(s)* |
|---|---|---|
| 4.1.1 | Work with the restoration community to understand what is needed to simplify the permitting process to receive beneficially reused sediment and/or soil. | In process<br><br>*BCDC, Water Board, SCC, USACE, U.S. EPA* |
| 4.1.2 | Support project proponents in understanding sediment supply, augmentation needs, and how to design sites to beneficially reuse sediment and soil. Develop guidance to support beneficial reuse in restoration site development and the permitting process. | Not yet started |
| 4.1.3 | Consider whether beneficial reuse of sediment and/or soil at wetland restoration sites can mitigate for dredging or flood protection project impacts. | In progress<br><br>*National Oceanic and Atmospheric Administration (NOAA), USACE, Water Board, BCDC, CDFW* |
| 4.1.4 | Discuss among regulatory agencies appropriate characterization and review of stream maintenance sediment (chemical/contaminant analyses, soil grain size and type, geotechnical properties, etc.). | Not yet started |

FOCUS AREAS

# Questions/ Discussion/ Public Comment

Photo: Seal Beach, Orange County (USFWS)