San Francisco Bay Conservation and Development Commission (BCDC)

Applying Natural and Naturebased Adaptation in Subregional Plans: the Regional Shoreline Adaptation Plan Guidelines in Practice



State of the Estuary | October 29, 2025 **Dana Brechwald**, Assistant Planning Director for Climate Adaptation

<u>Dana.brechwald@bcdc.ca.gov</u>



Agenda

- Overview of BCDC's role in climate adaptation planning
- Introduction to SB 272 and the RSAP
- How nature-based solutions are prioritized in subregional adaptation planning
- How to learn more



BCDC's role in the region

Regulatory

- Shoreline development
- Bay resources
- Dredging and sediment

Planning

- Long-range planning
- Sea level rise planning
- Environmental justice



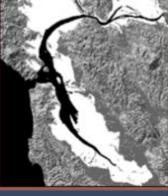


BCDC's changing relationship with the shoreline

 BCDC has been adapting to a changing shoreline since 1965



in 1849 Bay fill in 1965



Projected fill in 2020



Sea level rise of 6 feet

Actions include policy
 changes, planning studies,
 coalition-building,
 convenings, and leadership
 on sea level rise for the past
 15+ years





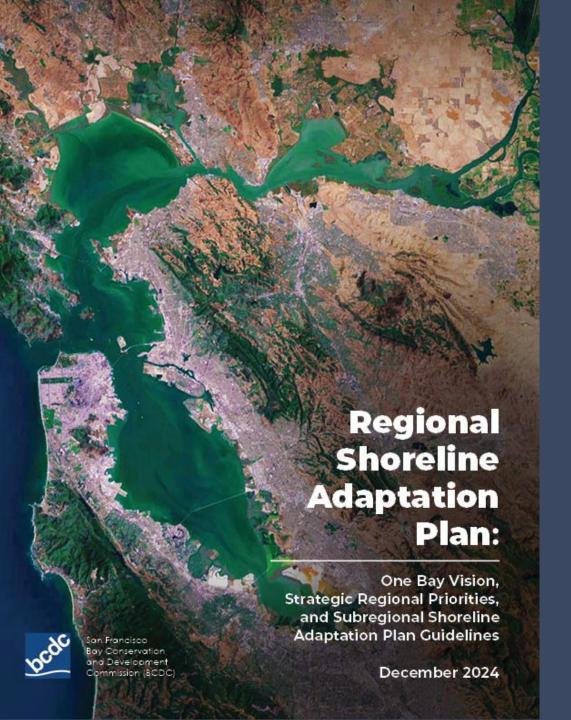
For the Bay Area:

- Local governments required to develop subregional plans by Jan 1, 2034.
- Adaptation projects in approved plans prioritized for state funding.

BCDC required to:

- Create guidelines for developing plans

 within the Regional Shoreline
 Adaptation Plan.
- Review and approve or deny plans.



What is the Regional Shoreline Adaptation Plan (RSAP)?

- A regional plan to address rising sea levels in the Bay.
- Includes the guidelines for creating subregional shoreline adaptation plans.

Goal: Ensure we plan for sea level rise at a local level while coordinating regionally for a resilient Bay Area.

Many voices shaped the RSAP













- 6 Advisory Group meetings
- 40+ Subcommittee meetings
- 6 Local Electeds
 Regional Task Force
- 3 Bay Adapt
 Implementation
 Coordinating Group
- 6 BCDC Commission meetings
- 6 Rising Sea Level
 Commissioner Working.
 Group meetings
- 2 Design Review Board
- 1 Tribal consultation

- 2 EngineeringCriteria Review Board
- 10 Community events
- 1 Online survey
- 1 Public workshop
- 4 Focus Groups
- **5** Local workshops
- 1 Practitioner workshop
- 4 Conferences
- 9-County local elected road show4+ Interagency
 - **4+** Interagency Meetings



One Bay Vision

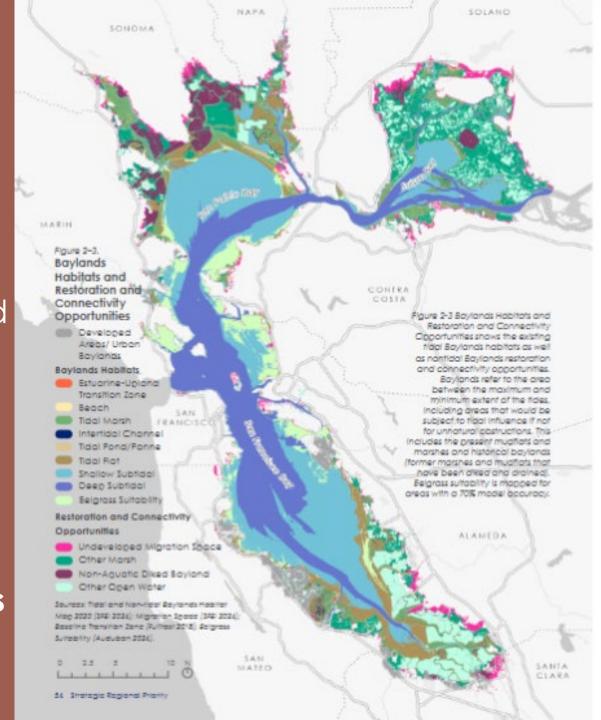
As sea levels rise, the Bay Area's diverse communities come together to transform how we live, work, plan, and adapt along our changing shorelines...



Strategic Regional Priorities

Key regional challenges to be addressed locally in Plans to support effective outcomes for regional networks, infrastructure, values, and priorities

Complete and Connected Ecosystems



RSAP Section 3.2 Subregional Plan Elements

Element A: Planning Process

Element B:

Existing Conditions

Element C: Vulnerability
Assessment

Element D:

Adaptation Strategies and Pathways

Document the planning process.

Element E:

Land Use and Policy Plan

Element F:

Implementation Plan

Element G: Project List

Understand the local context and conditions of vulnerability.

Select adaptation strategies that respond to risks and local values; and advance strategies through appropriate avenues.

RSAP Subregional Plan Guidelines

Plan Element Requirements

- A Planning Process
- B Existing Conditions
- C Vulnerability Assessment
- Adaptation Strategies and Pathways
- E Land Use and Policy Plan
- F Project Implementation and Funding
- G Project List

Minimum Standards



Coastal Flood Hazards and Sea Level Rise Scenarios



Minimum Categories and Assets



Equity Assessment



Adaptation Strategy Standards





Subregional Plan Guidelines Minimum Standards: Minimum Categories & Assets

- Requires assessing key physical, social, environmental, and economic assets.
- Sets a consistent regional baseline for identifying and protecting critical assets.
- Allows flexibility if local data is missing or sensitive.

Used In: Plan Elements B, C & D



Subregional Plan Guidelines Minimum Standards: Adaptation Strategy Standards

20 required standards guide the selection & evaluation of adaptation strategies.



Photo by Karl Nielson.

- Define what effective, equitable adaptation should achieve.
- Aligned with regional outcomes and local priorities.
- Allow flexible, locally tailored solutions.
- Guide evaluation of trade-offs and longterm risks.

Used In: Plan Element D



Subregional Plan Guidelines Minimum Standards: Adaptation Strategy Standards



Putting it together...

Element B: Existing Conditions

Document existing conditions for Ecosystem
 Health and Resilience

Element C:

Vulnerability Assessment

- 2. Assess exposure and vulnerability
- Identify high priority locations, which must include Baylands habitats and Strategic Regional Priorities

Element D:

Adaptation Strategies and Pathways

- 4. Apply Adaptation Strategy Standards when identifying adaptation strategies
- 5. Identify how strategies will need to change over time





BCDC's resources







BCDC website

Plan resources **RSAP** <u>Atlas</u>







<u>liaisons</u>

<u>Subregional</u> Consultation <u>Tracking Plan</u> meetings

Progress



Summary

- BCDC has a new role in guiding, reviewing, and approving shoreline adaptation plans
- The Regional Shoreline Adaptation Plan guides how local planning should be done
- Nature-based solutions are prioritized in a Strategic Regional Priority, identifying high priority areas, and the Adaptation Strategy Standards
- BCDC is here to help you do subregional plans!



Local Plans Website

Stay engaged with us!





Dana Brechwald, Assistant Planning Director for Climate Adaptation dana.brechwald@bcdc.ca.gov



Juliette Chausson, Senior Climate Adaptation Planner Juliette.chausson@bcdc.ca.gov



Danielle Flanagan, Climate Adaptation Planning Specialist Danielle.Flanagan@bcdc.ca.gov



Sabrina Lopez, Climate Adaptation Planning Specialist

Sabrina.lopez@bcdc.ca.gov

