



# North Bay Baylands Regional Conservation Investment Strategy

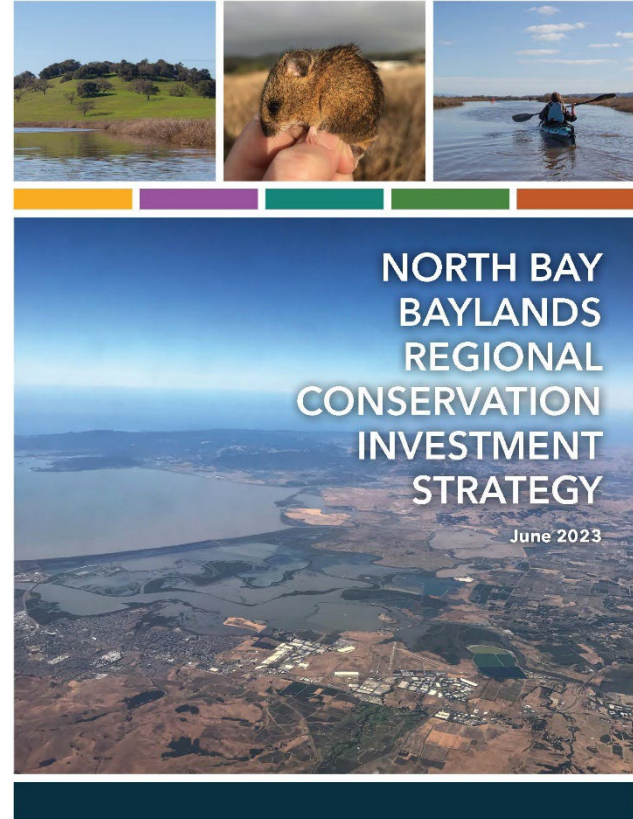


North Bay Watershed Association Board Meeting – February 2, 2024



# Agenda

- RCIS Overview
- Current Status and Timeline
- RCIS Document Review
  - Overall structure





# Why Prepare an RCIS?

To Guide Action

To Improve Outcomes

To Enable Mitigation Credit Agreements

Photo: Camp 4, R. Janover, SLT



# Why here? Why now?

Depth of Flooding ?

Transparency:

- 0 - 2 feet
- 2 - 4 feet
- 4 - 6 feet
- 6 - 8 feet
- 8 - 10 feet
- 10 - 12 feet
- 12+ feet

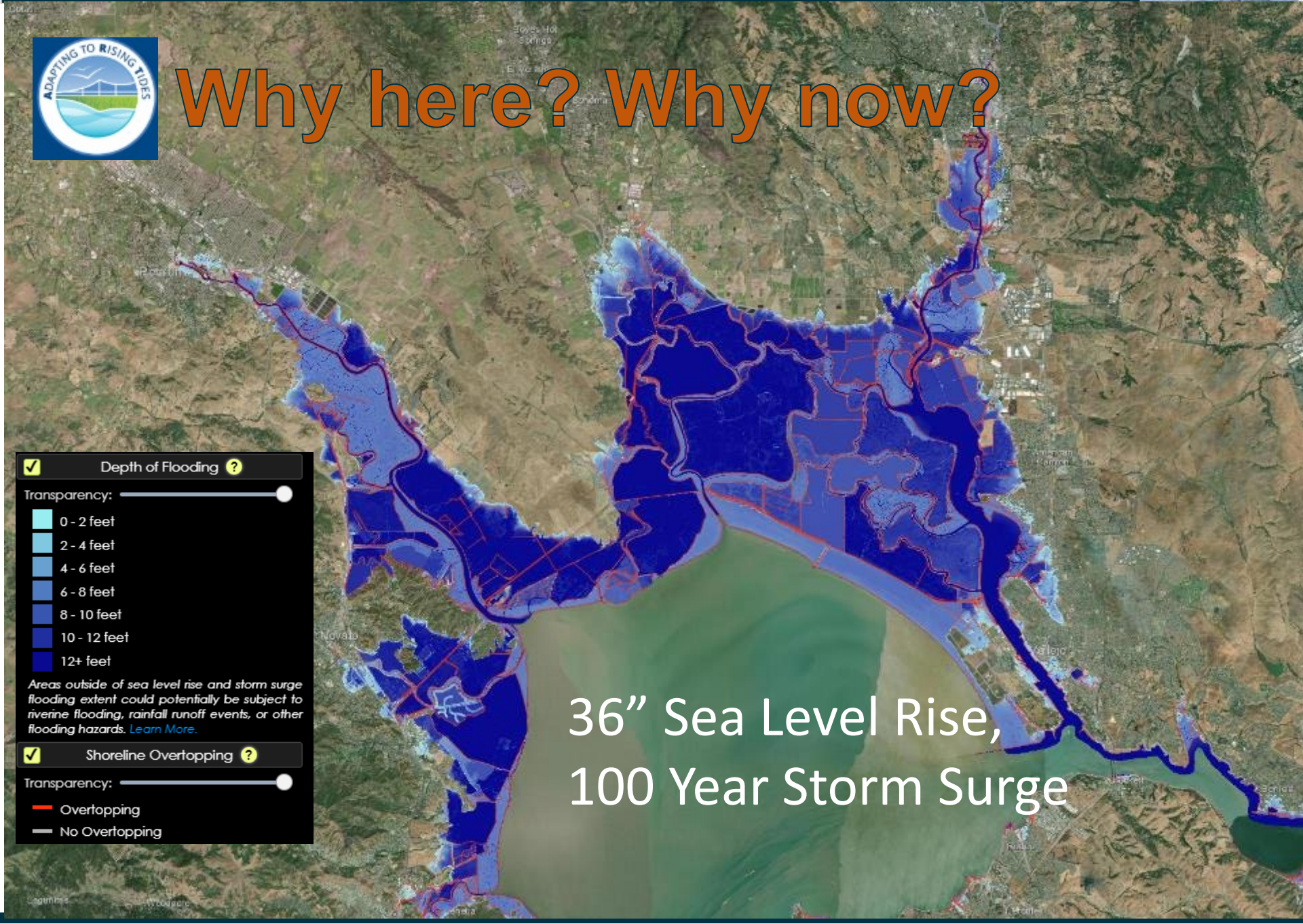
Areas outside of sea level rise and storm surge flooding extent could potentially be subject to riverine flooding, rainfall runoff events, or other flooding hazards. [Learn More.](#)

Shoreline Overtopping ?

Transparency:

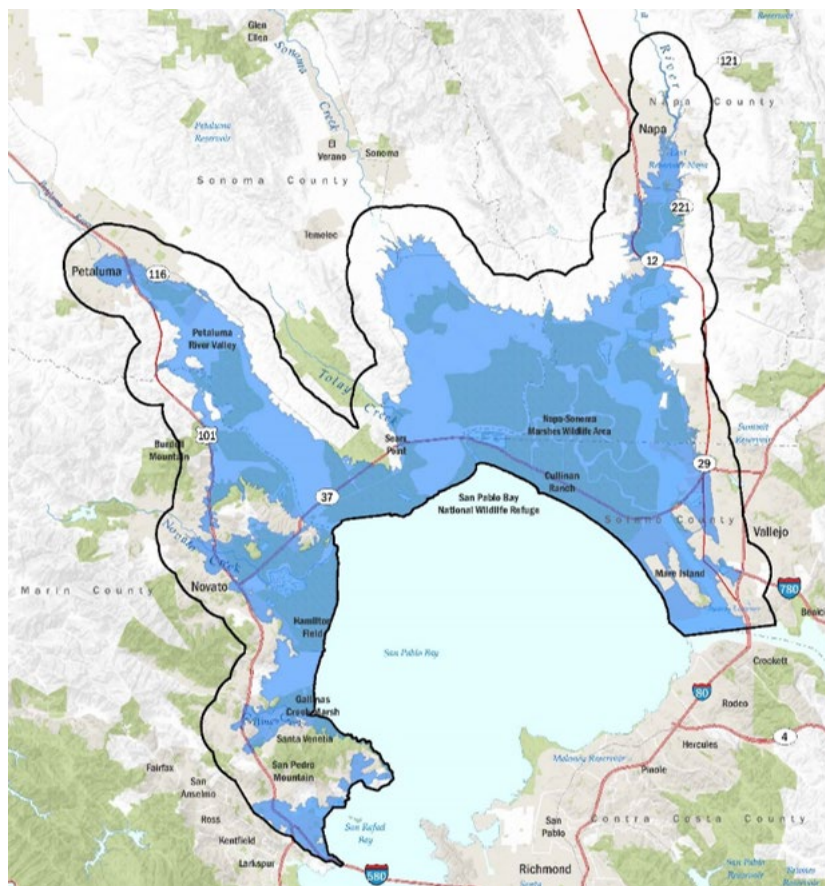
- Overtopping
- No Overtopping

36" Sea Level Rise,  
100 Year Storm Surge





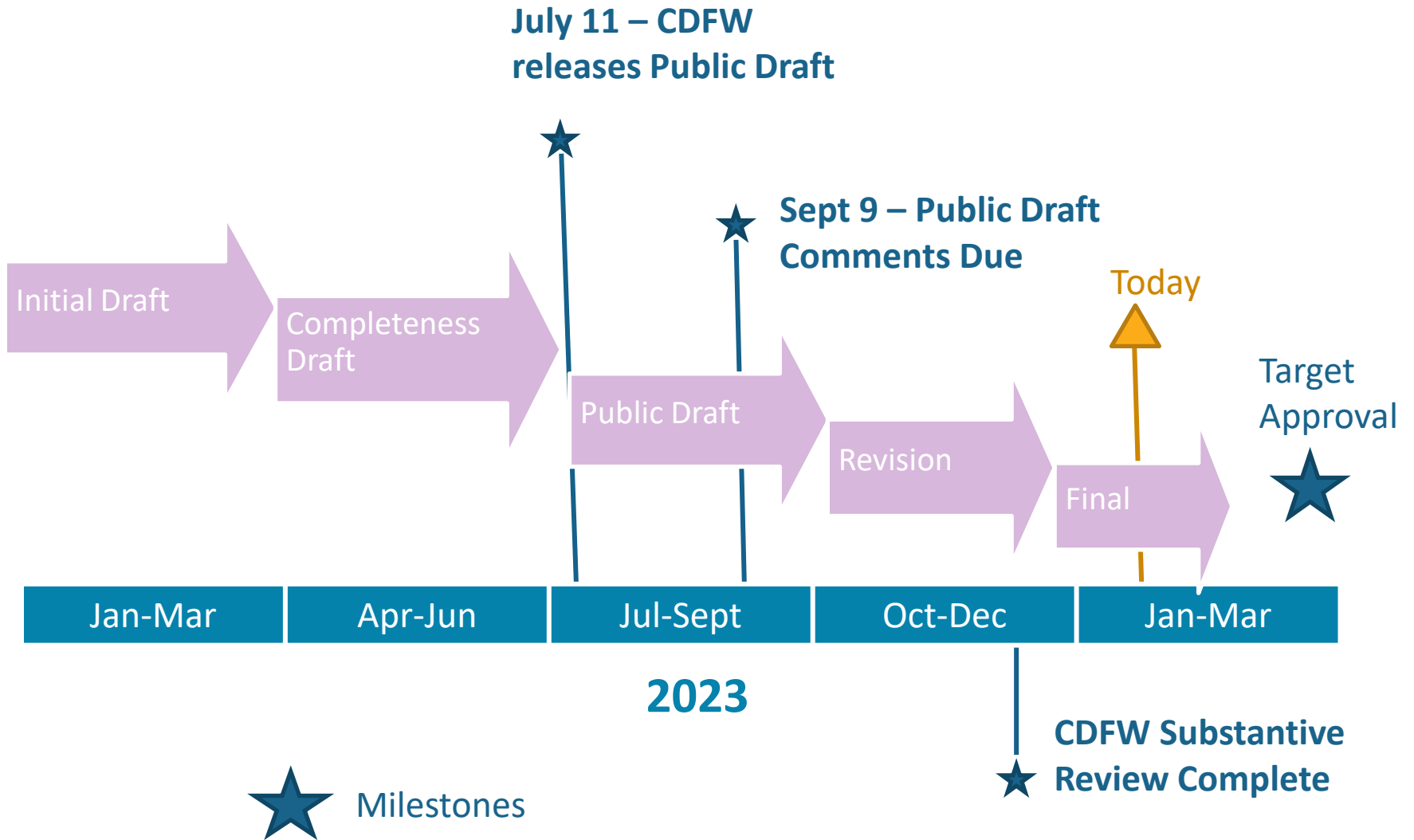
# North Bay RCIS Geographic Extent



- Richmond-San Rafael Bridge to Carquinez Bridge
- 10.2' sea level rise + 100 year storm surge scenario + 1 mile buffer



# 2023-2024 Schedule





# Key RCIS Terms

## Conservation Elements

	Has Specific Conservation Strategy	Associated with Another CE Strategy	Eligible for Mitigation Credit Agreement	Defined in CDFW RCIS Program
Focal Species	✓	?	✓	✓
Other Conservation Elements	✓	?	✓	✓
Non-Focal Species		✓	✓	✓
Co-benefitted Natural Resources		✓		

- **Conservation Strategy**
  - Collection of goals, objectives, actions, and priorities identified in the RCIS to benefit a conservation element
- **Mitigation Credit Agreement**
  - Agreement between CDFW and an entity that identifies the type and number of credits an entity will receive by implementing one or more RCIS actions.



# North Bay Baylands RCIS Outline

1. RCIS Overview
  2. Regional Conditions
  3. Conservation Elements Selection and Overview
  4. Conservation Strategy
  5. RCIS Implementation and Adaptive Management
- Appendices







# Focal Species/Conservation Elements

## Focal Species

- Crotch bumble bee
- Green sturgeon
- CCC steelhead
- Chinook salmon
- California red-legged frog
- Western pond turtle
- Burrowing owl
- CA black rail
- CA Ridgway's rail
- Salt marsh harvest mouse
- Marin western flax

## Conservation Elements

- Habitat Connectivity
- Working lands/Agricultural baylands
- Tidal Habitats
- Bat Habitat
- Riparian Corridors
- Freshwater Wetlands
- Shallow Subtidal Habitats
- Hydrological Processes
- Waterfowl and Shorebird Habitat

## Non-focal Species

- Callippe silverspot
- Western bumble bee
- Western ridged mussel
- CA freshwater shrimp
- Delta smelt
- Longfin smelt
- Sacramento splittail
- Pallid bat
- Townsend's big-eared bat
- California least tern
- Tricolored blackbird
- Swainson's hawk
- Soft bird's beak
- Saltmarsh common yellowthroat
- San Pablo song sparrow
- Western snowy plover

## Associated Co-benefited Natural Resources

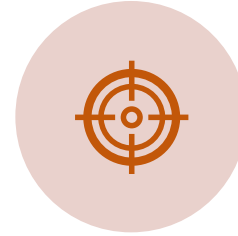
- Grasslands
- Diked wetlands
- Rookeries



# Chapter 4: Conservation Strategy



**Goal** – desired outcome



**Objective** – achieved to advance the goal



**Action** – specific implementation steps



**Priorities** (for Conservation Elements)  
– actions identified based on their importance for benefiting conservation



**Prioritization Guidelines** – principles to integrate when feasible



# Regional Landscape

**Goal:** Sustain a functioning landscape that supports a mosaic of native species and habitats, intact ecological services and processes, resiliency to climate change stressors, and healthy ecosystem functions in the RCIS area.

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**RL Objective 1.1:** Protect land that provides existing habitat and ecosystem values; transitional habitat and ecosystem processes; and land that may provide habitat and ecosystem function in the future because of landscape changes.

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**RL Objective 1.2:** Restore and enhance land to improve ecological function and habitat value.

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**RL Objective 1.3:** Improve understanding of the distribution, abundance, and condition of species and communities in the landscape.

Water Quality

Anadromous  
Fish

Herpetofauna

Tidal  
Communities



# Example: Hydrological Processes

**HYDRO Goal:** Promote increased resiliency to climate change-induced impacts of aquatic resources by encouraging sustainable hydrological processes to maintain communities for focal and non-focal species.

**HYDRO Objective 1.1:** Promote physical processes that contribute to hydrological functions with a focus on locations with high resilience to projected climate changes. Measure progress toward achieving this objective by the improvement and restoration of aquatic and riparian conditions including acre-feet of groundwater recharge capacity, sediment supply, stream flow (cubic feet per second), inundation duration (consecutive days), and hydrological connectivity.

## Actions Associated with HYDRO Goal and Objective

HYDRO 1.1.1: Restore and protect local stream hydrology to supply the flow regimes necessary to move fine sediments to the bay while protecting stream health. Evaluate ways of accessing sediment trapped behind dams (Goals Project 2015).

HYDRO 1.1.6: Implement groundwater recharge methods, redirecting water across land surfaces through canals, infiltration basins, or ponds, adding irrigation furrows or sprinkler systems, or adding injection wells (USGS 2020). Consultation with CDFW about impacts to focal species and other conservation elements should be taken into consideration if in suitable and/or occupied habitat. Focus efforts within SGMA Priority 1 groundwater basins (Sonoma Valley, Napa-Sonoma Lowlands, and Petaluma Valley) (DWR 2022b).

HYDRO 1.1.7: Support implementation of conservation and recycling strategies and programs that increase water supply. This may include monitoring the impacts of water use on groundwater dependent ecosystems.

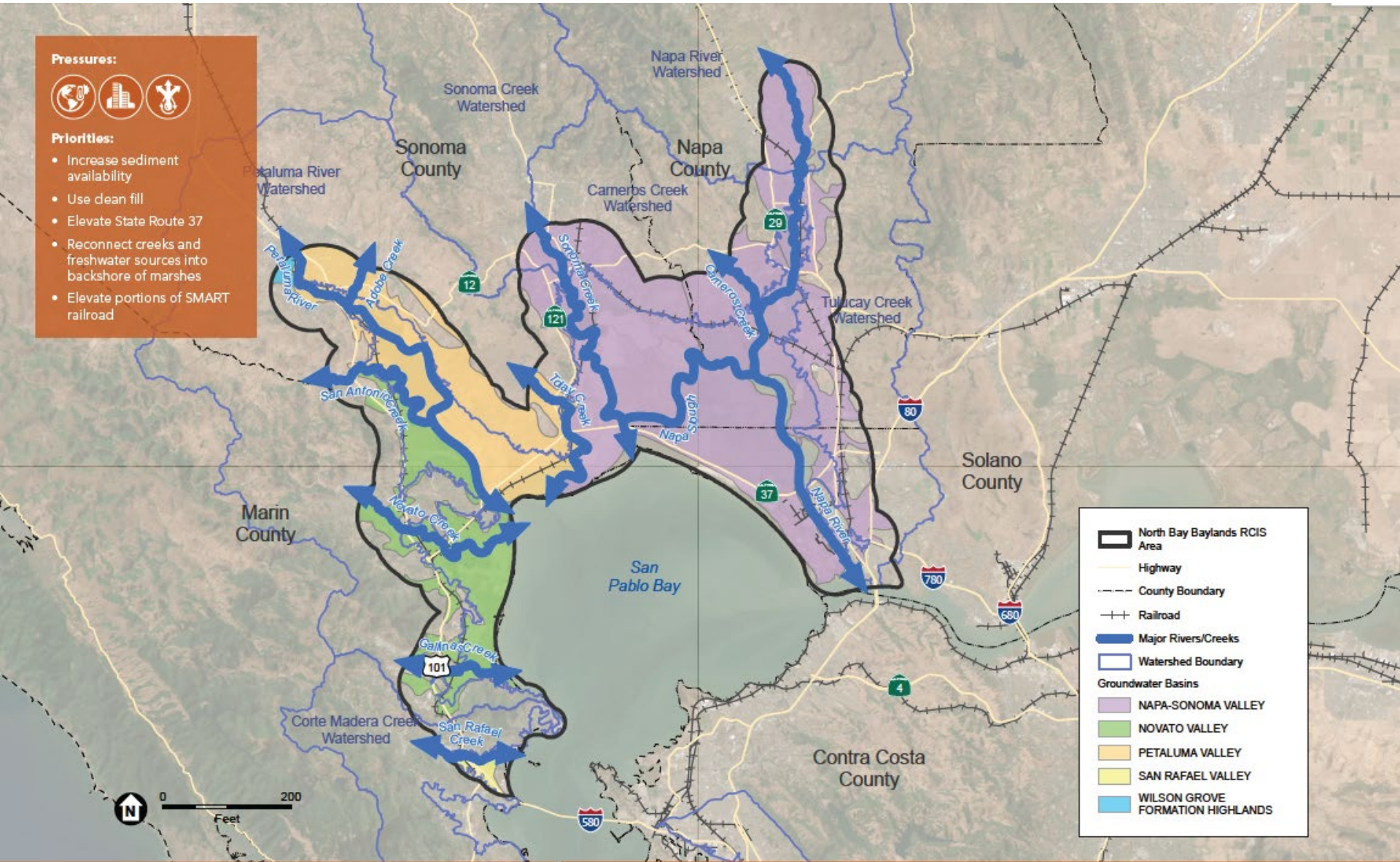
# NORTH BAY BAYLANDS REGIONAL CONSERVATION INVESTMENT STRATEGY



**Pressures:**

**Priorities:**

- Increase sediment availability
- Use clean fill
- Elevate State Route 37
- Reconnect creeks and freshwater sources into backshore of marshes
- Elevate portions of SMART railroad



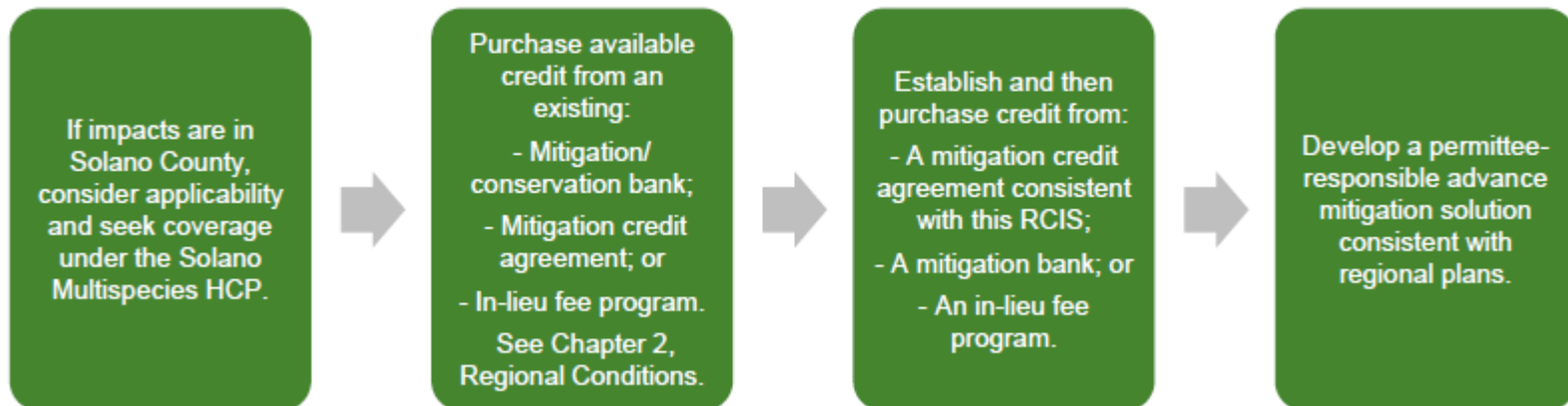
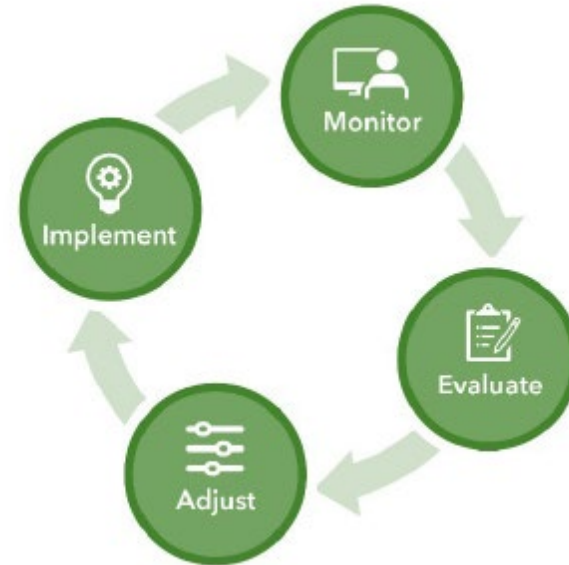
	North Bay Baylands RCIS Area
	Highway
	County Boundary
	Railroad
	Major Rivers/Creeks
	Watershed Boundary
<b>Groundwater Basins</b>	
	NAPA-SONOMA VALLEY
	NOVATO VALLEY
	PETALUMA VALLEY
	SAN RAFAEL VALLEY
	WILSON GROVE FORMATION HIGHLANDS

SOURCE: ESA, 2024; California Groundwater Basins (DWR 2022a), National Hydrography Database (USGS 2019).

Figure 4-19  
Hydrological Processes in RCIS Area

# Chapter 5: Implementation and Adaptive Management

- RCIS Approval and Implementation Process
- Advance Mitigation Planning
- Adaptive Management and Monitoring Program
- RCIS Maintenance and Responsibilities



## Questions?

**For More Information**

Website: <http://baylandsrcis.org>

Contact: [info@baylandsrcis.org](mailto:info@baylandsrcis.org)