

Calabazas/San Tomas Aquino Creek Marsh Connection Project

South Bay Salt Ponds
A8 Ponds, and Coyote Creek
Dick Lyons, 2017

CIP COMMITTEE MEETING

May 18, 2026

Presented by: Judy Nam, Senior Water Resources Specialist



Purpose of Today's Presentation

- Project Overview
- Present Planning Study Results
- Introduce Staff Recommended Alternative (Alt 6)
- Highlight key benefits, risks, and tradeoffs
- Receive Committee input

PROJECT LOCATION AND OBJECTIVES



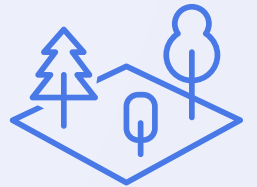
HABITAT RESTORATION



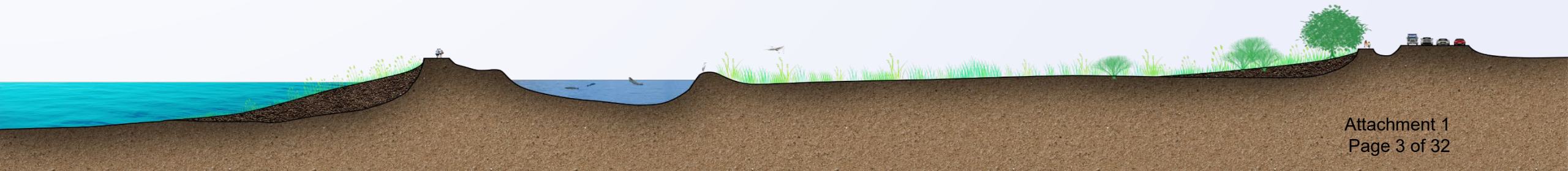
**RESILIENT FLOOD
PROTECTION**



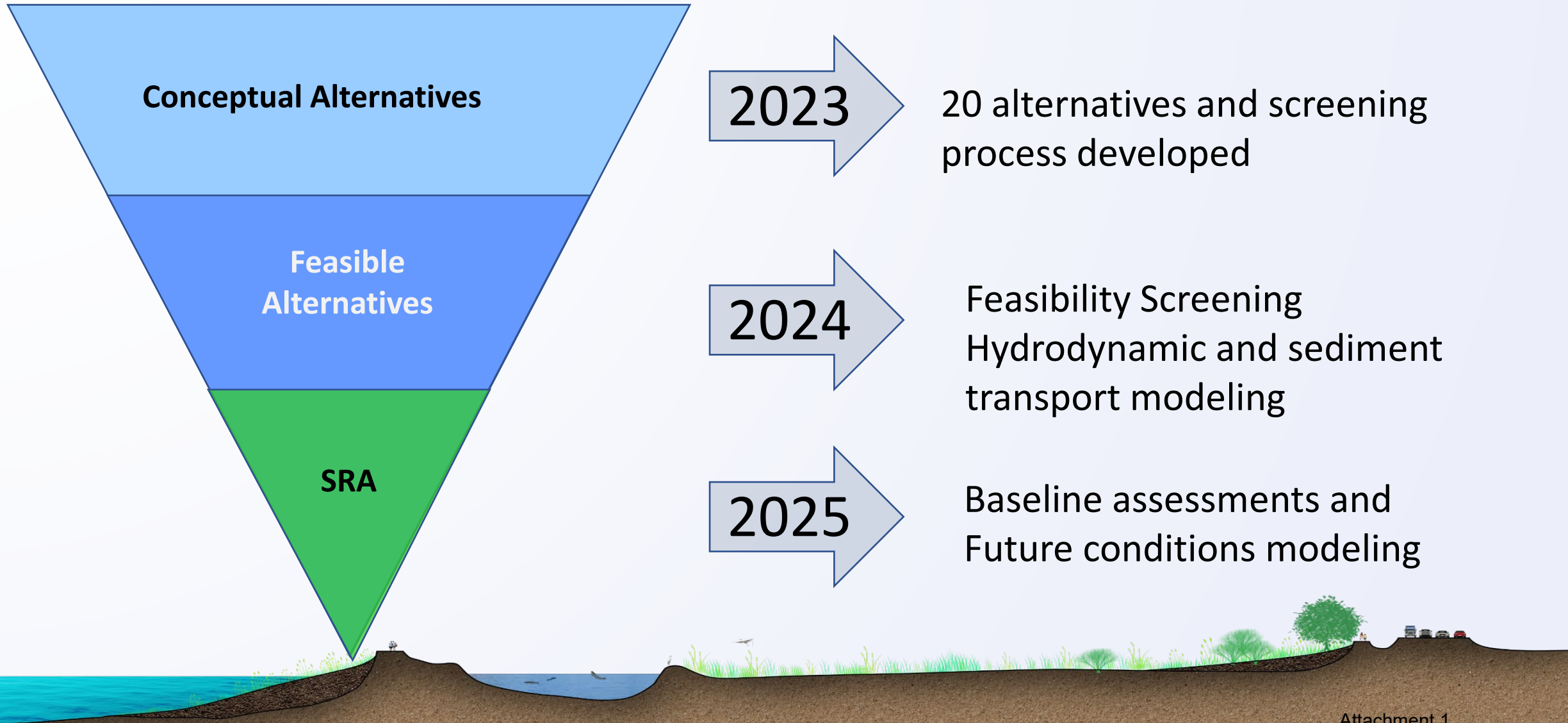
**REDUCED
MAINTENANCE NEEDS**



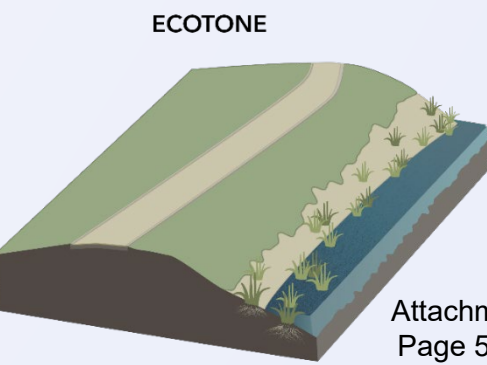
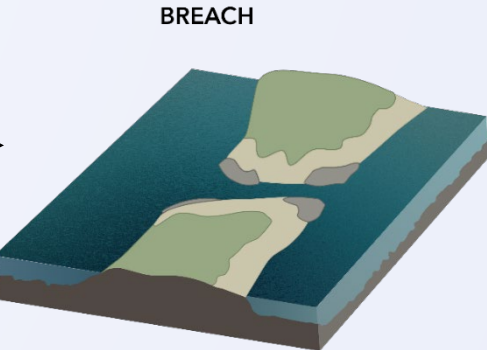
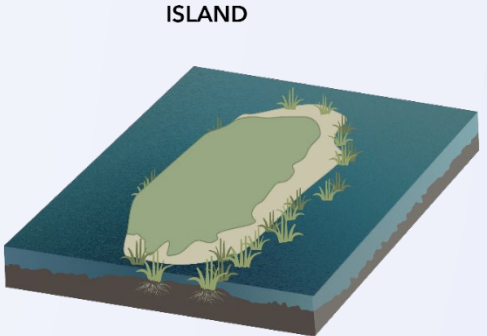
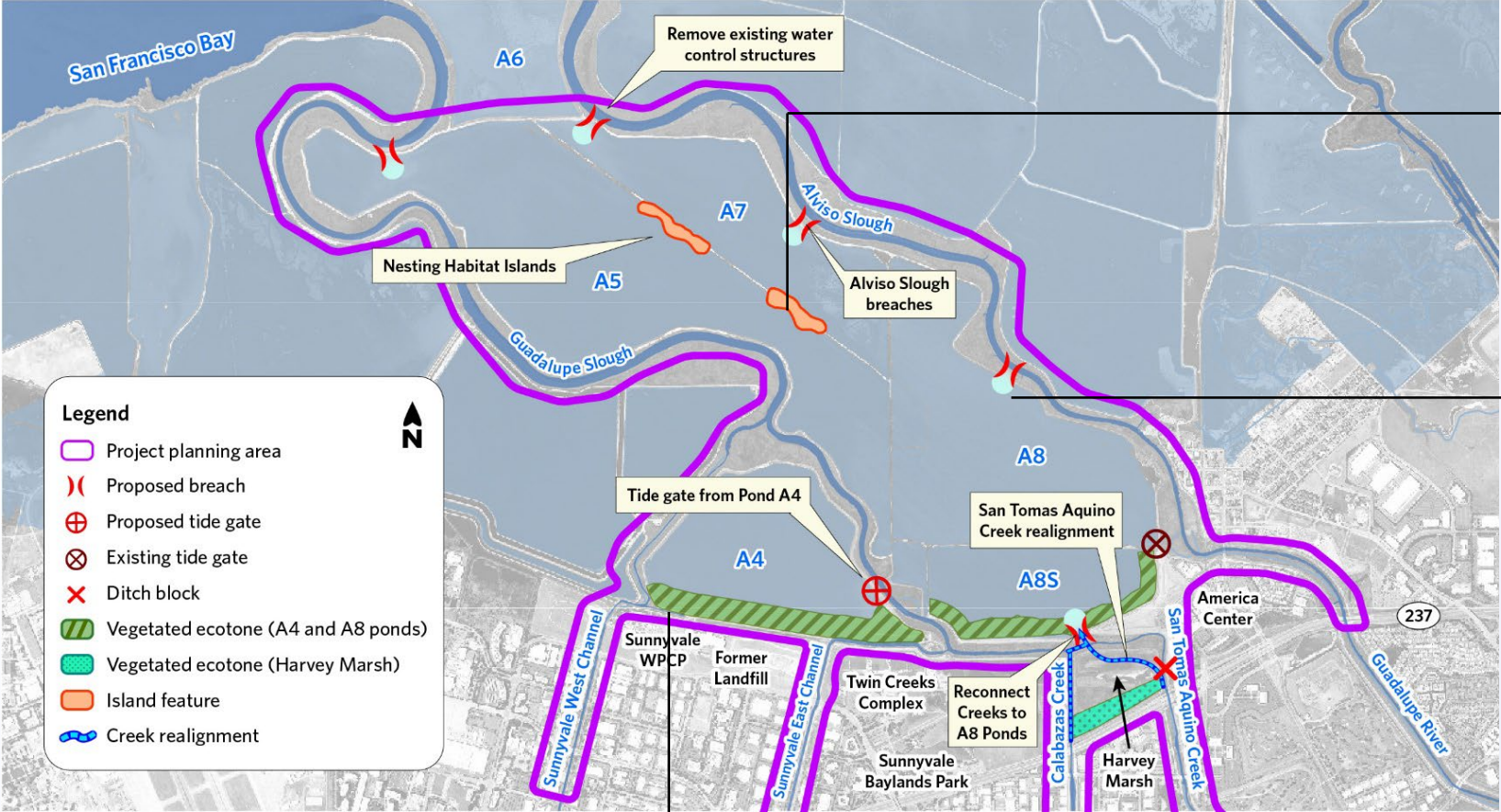
**ENHANCED
PUBLIC ACCESS**



PROJECT PLANNING PROCESS

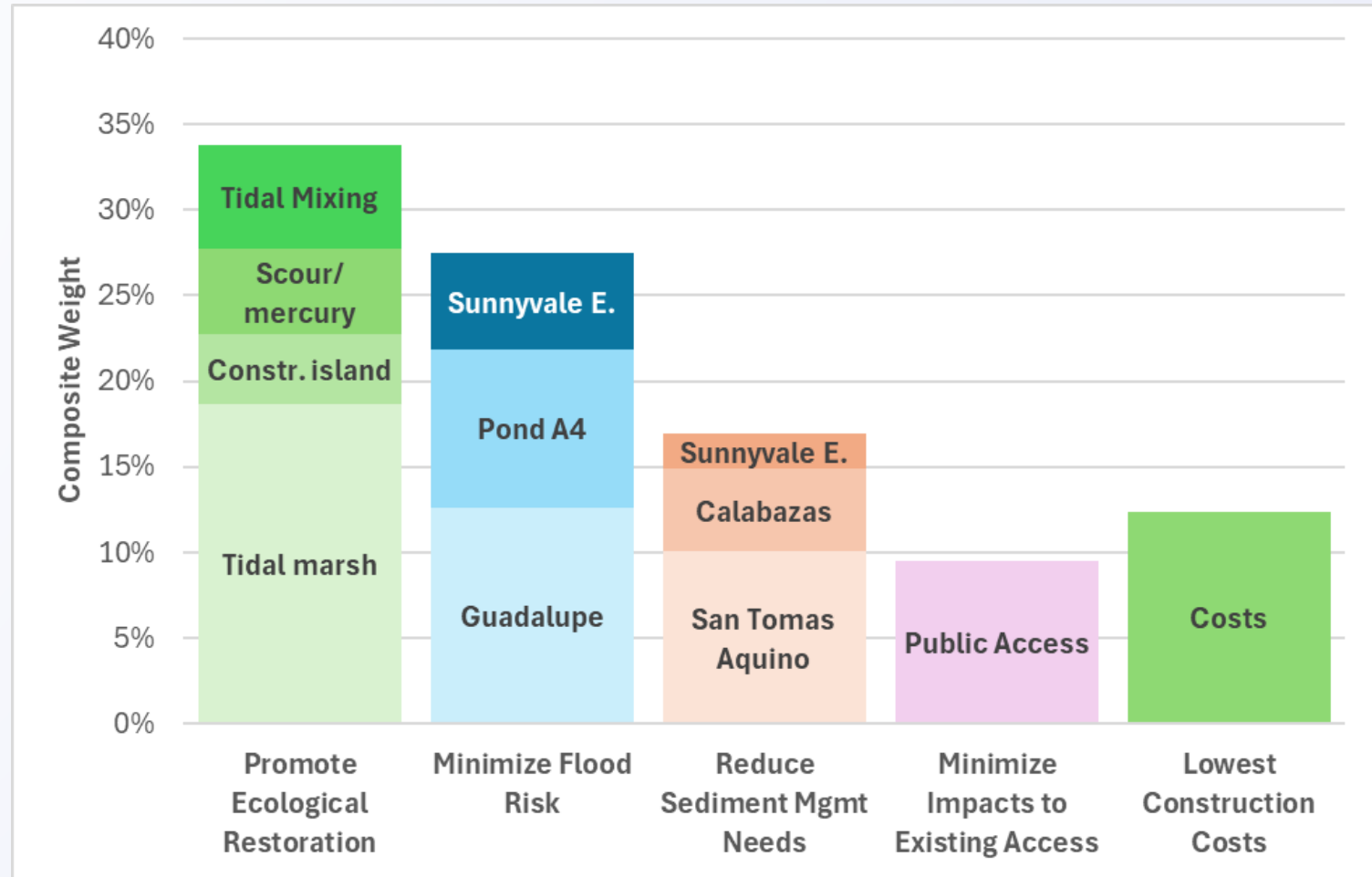


RESTORATION ELEMENTS CONSIDERED

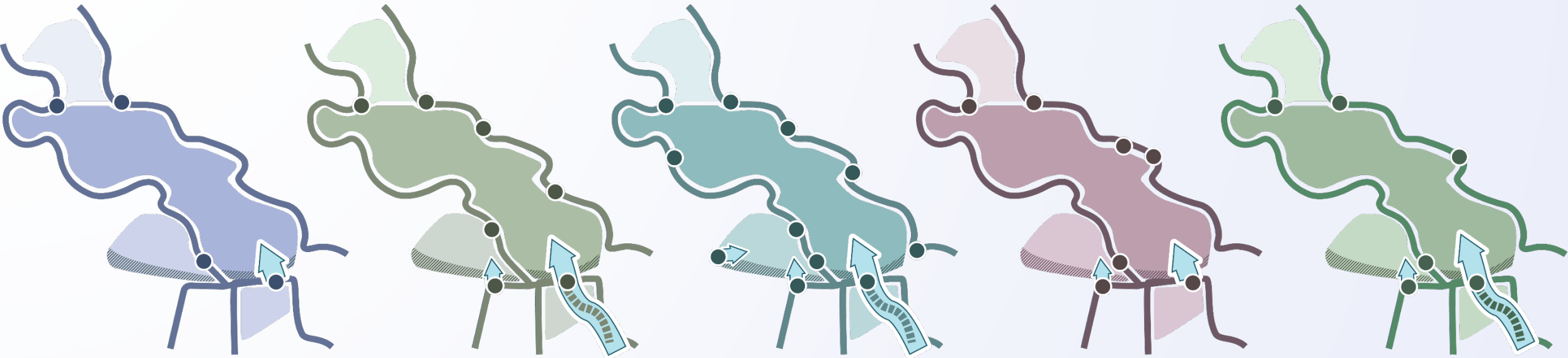


FEASIBLE ALTERNATIVES ANALYSIS

- Assessment Methodology:
 - Categories broken into factors for scoring
 - Each factor given a weight



FEASIBLE ALTERNATIVES ANALYSIS SUMMARY



ALTERNATIVE 1

ALTERNATIVE 3

ALTERNATIVE 5

ALTERNATIVE 6

ALTERNATIVE 7



Poor

Fair

Adequate

Very Good

Outstanding

FEASIBLE ALTERNATIVES ANALYSIS SUMMARY

Assessment Categories	Alt. 1	Alt. 3	Alt. 5	Alt. 6	Alt. 7
Promote Ecological Restoration					
Minimize Flood Risk					
Reduce Sediment Management Needs					
Minimize Impacts to Existing Access					
Lowest Construction Costs					
Overall Rating					



Poor



Fair



Adequate



Very Good



Outstanding

ALT. 6 – CREEK RECONNECTION, ALVISO SL. & POND A4 BREACHES



Why Alternative 6

- Most effective marsh formation
- Improves water quality over time
- Reduces sediment buildup in creeks
- Most cost-effective among high-performing options
- Balances habitat, flood, and maintenance goals

Public Access Enhancements

Support for Bay Trail Reach 9



Key Benefits of the Recommended Alternative

Habitat & Ecology

- Accelerates tidal marsh formation
- Supports long-term ecosystem health

Flood Risk

- Increased tidal storage
- Lower or unchanged water levels in most areas

Operations

- Reduced sediment removal needs and lower long-term maintenance cost
- Lowest construction cost

Key Risks & Considerations

Flood Risk (Localized)

- Increased water levels in Pond A4 under extreme events
- Mitigation to be refined during design

Water Quality (Short-Term)

- Temporary increase in mercury mobilization
- Long-term improvement expected with tidal exchange

Implementation

- Requires securing construction funding

Funding & Next Steps

Planning & Design Funding Secured

- Measure AA, EPA, Prop 1, Fund 12

Next Steps

- Finalize Planning Study (June 2026)
- Begin Design (July 2026)
- Pursue construction funding



Questions

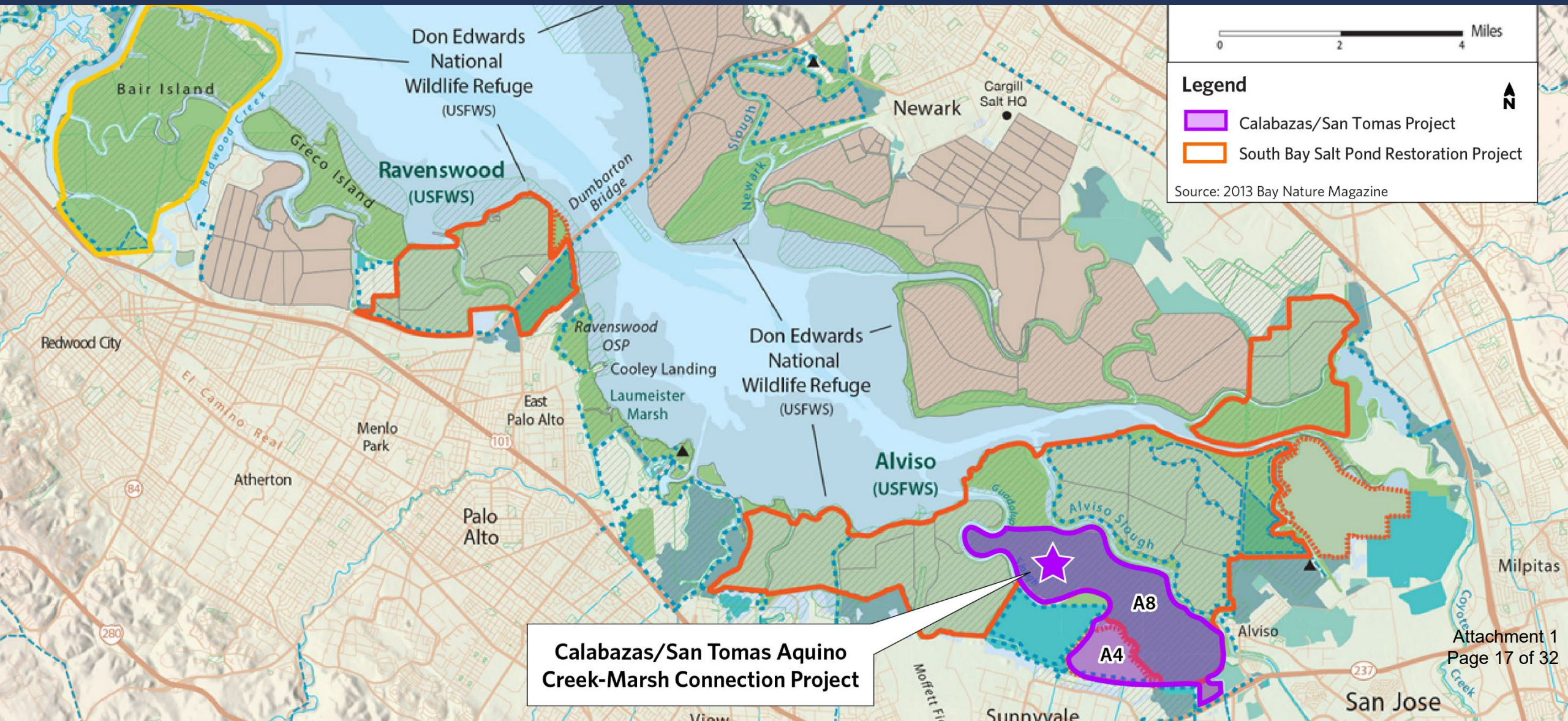


Extra:

- **Restoration Elements**
- **Feasible Alternatives**
- **Alternative Analysis Details**

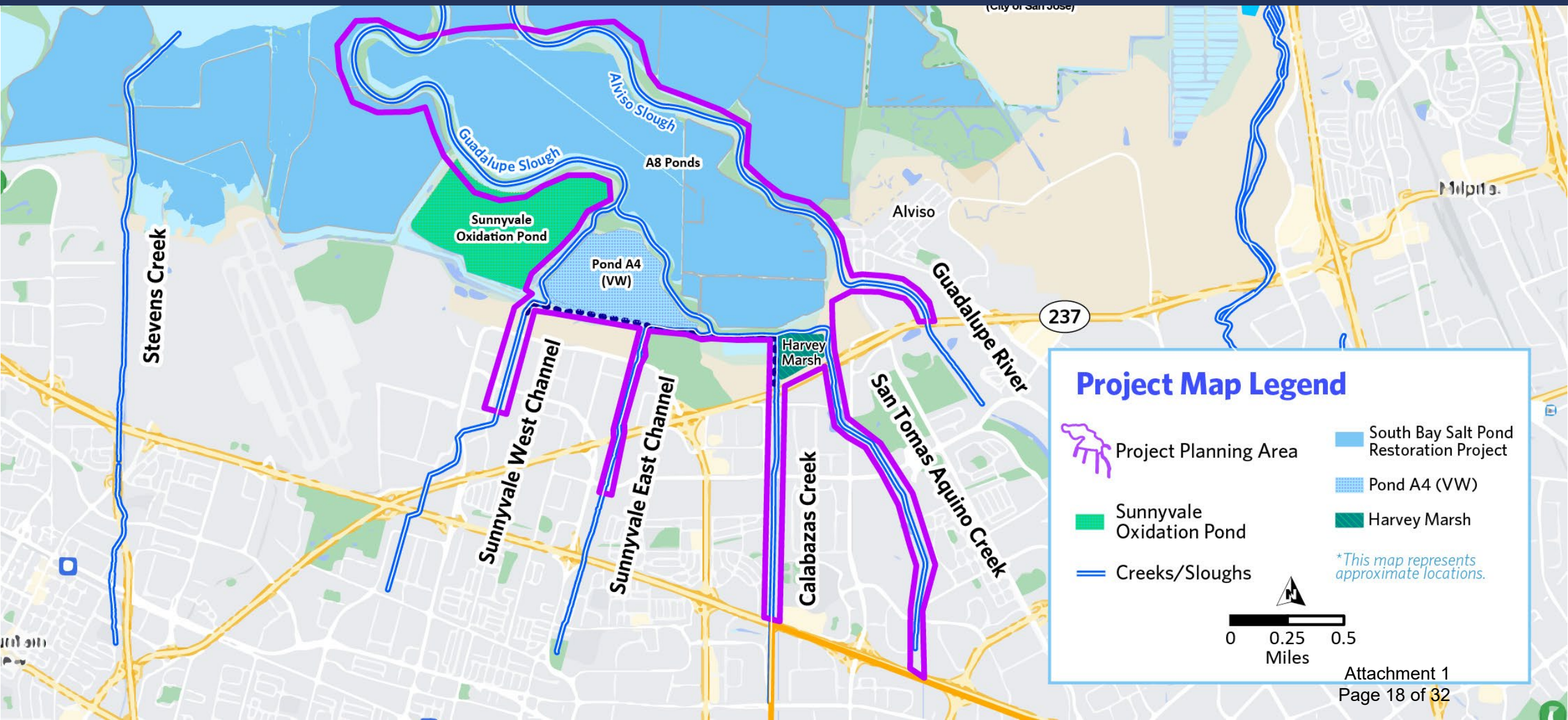


CONNECTION TO BROADER SOUTH BAY SALT POND RESTORATION



Calabazas/San Tomas Aquino
Creek-Marsh Connection Project

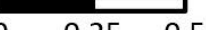
CALABAZAS/SAN TOMAS AQUINO CREEK-MARSH CONNECTION PROJECT



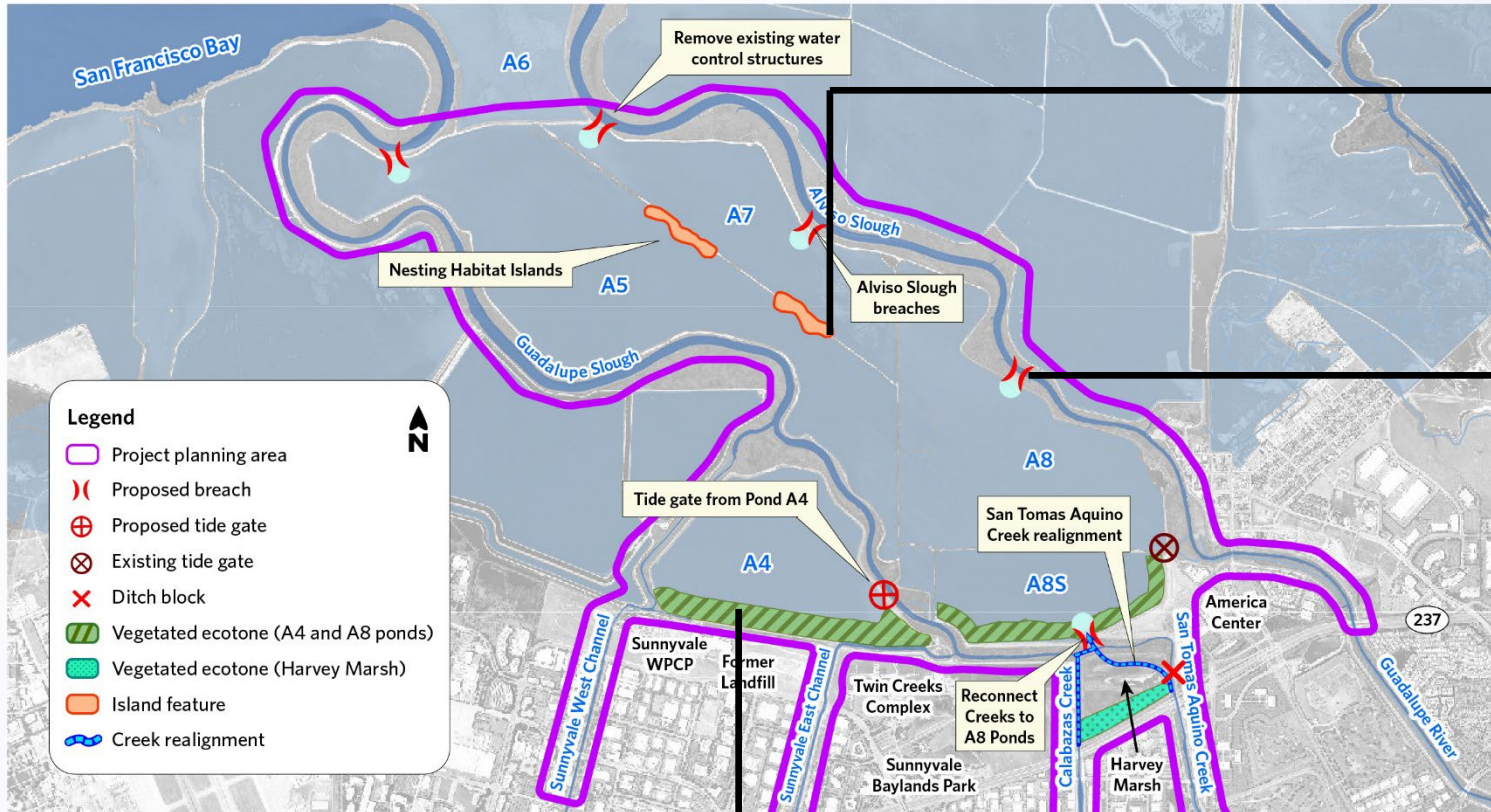
Project Map Legend

	Project Planning Area		South Bay Salt Pond Restoration Project
	Sunnyvale Oxidation Pond		Pond A4 (VW)
	Creeks/Sloughs		Harvey Marsh

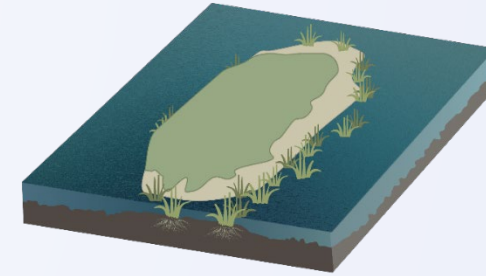
**This map represents approximate locations.*



0 0.25 0.5
Miles

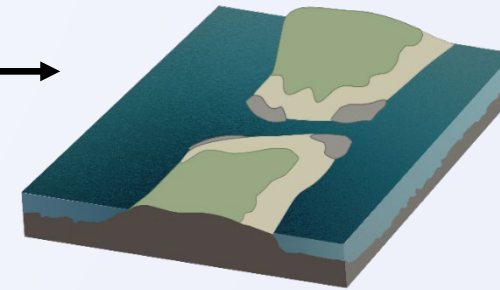
RESTORATION ELEMENTS CONSIDERED



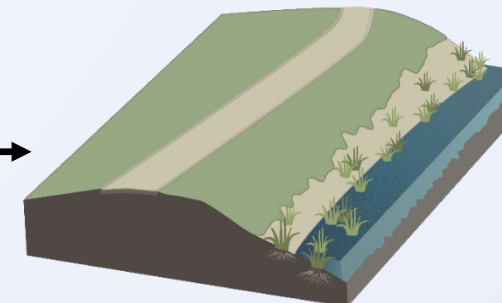
ISLAND



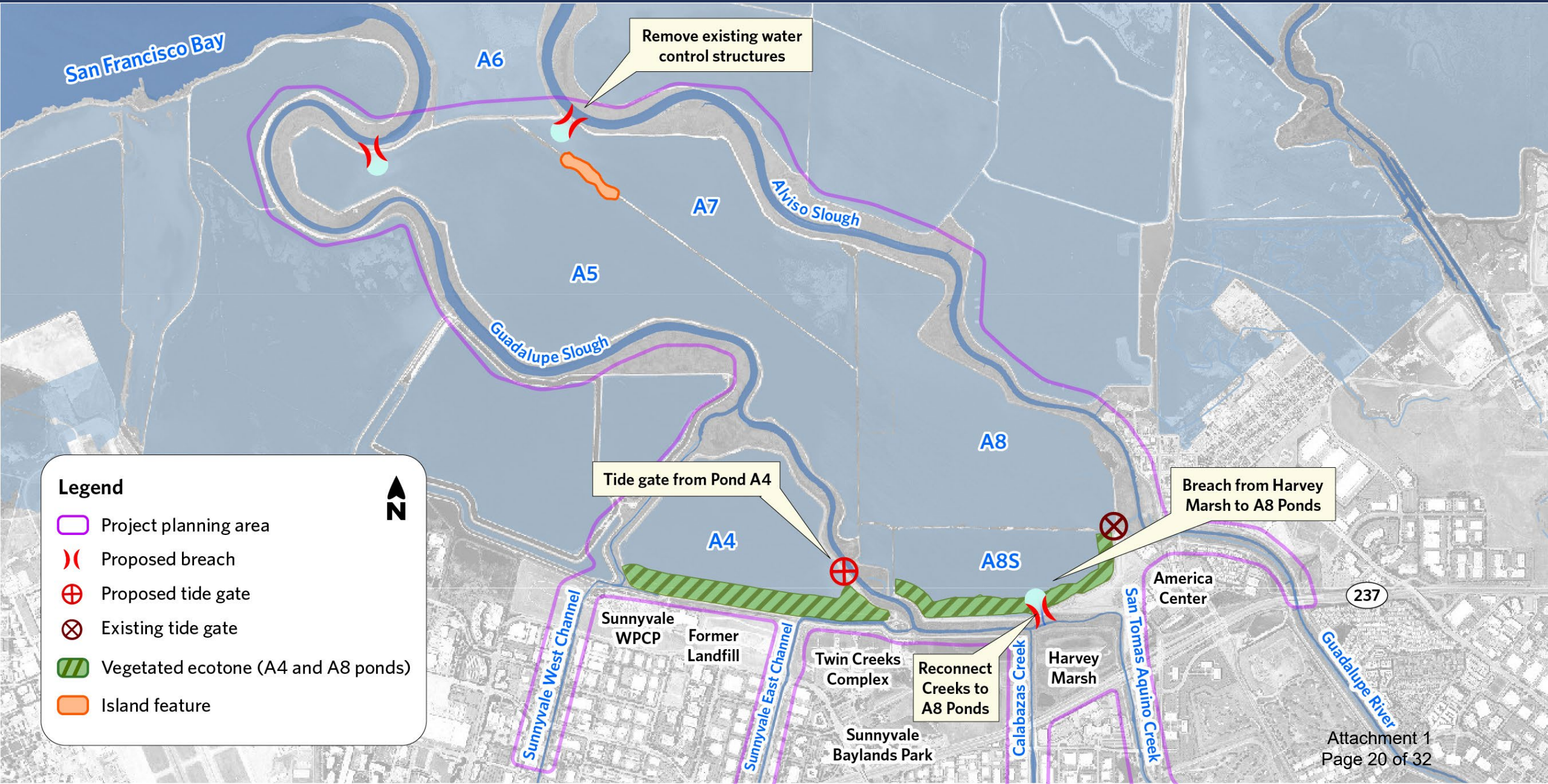
BREACH



ECOTONE



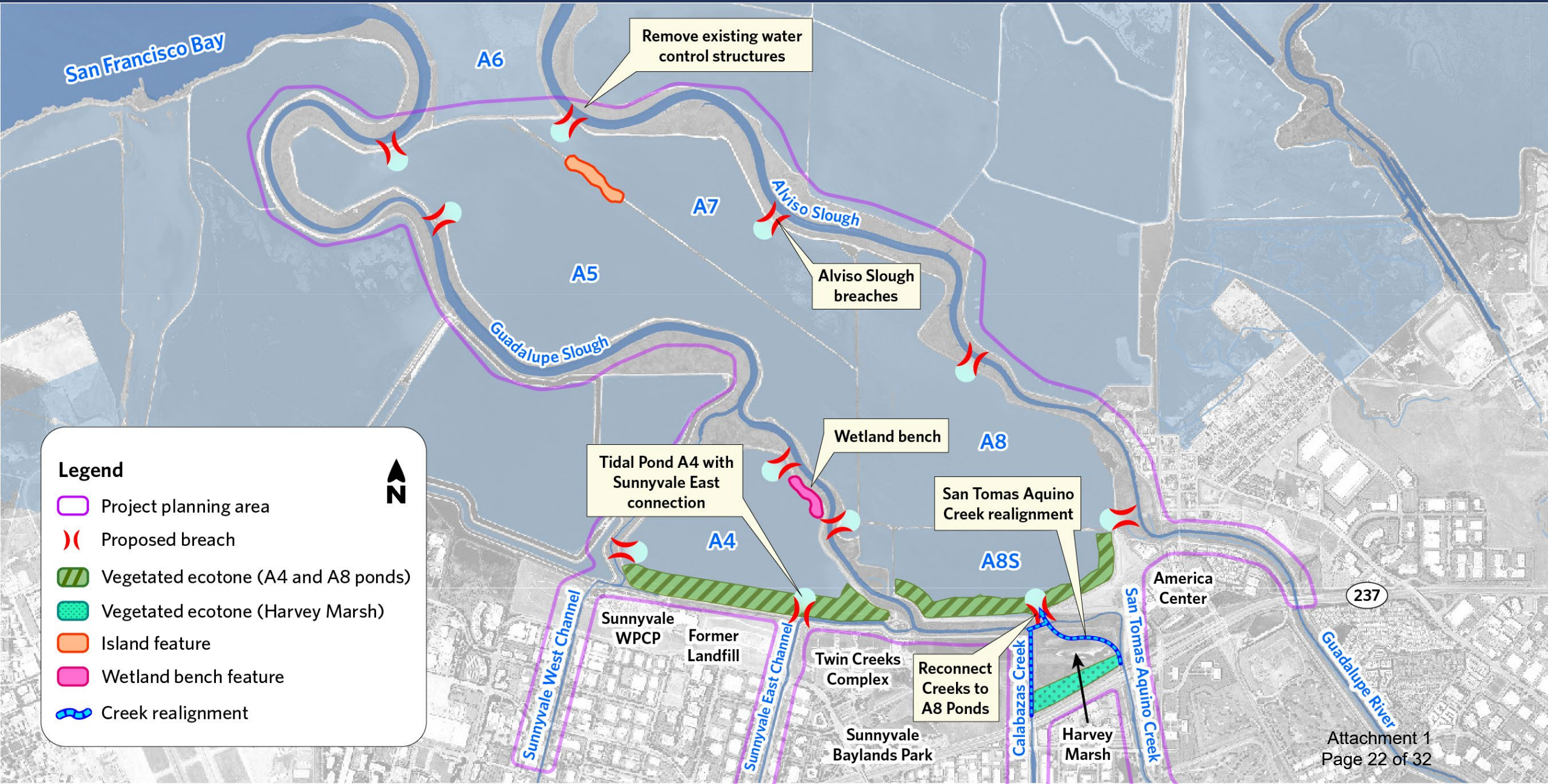
ALT. 1 – MINIMUM TIDAL CONNECTIVITY



ALT. 3 – CREEK REALIGNMENT, ALVISO SL. & POND A4 BREACHES



ALT. 5 - MAXIMUM TIDAL CONNECTIVITY



ALT. 6 – CREEK RECONNECTION, ALVISO SL. & POND A4 BREACHES



ALT. 7 - CREEK REALIGNMENT, HARVEY MARSH ENHANCEMENT

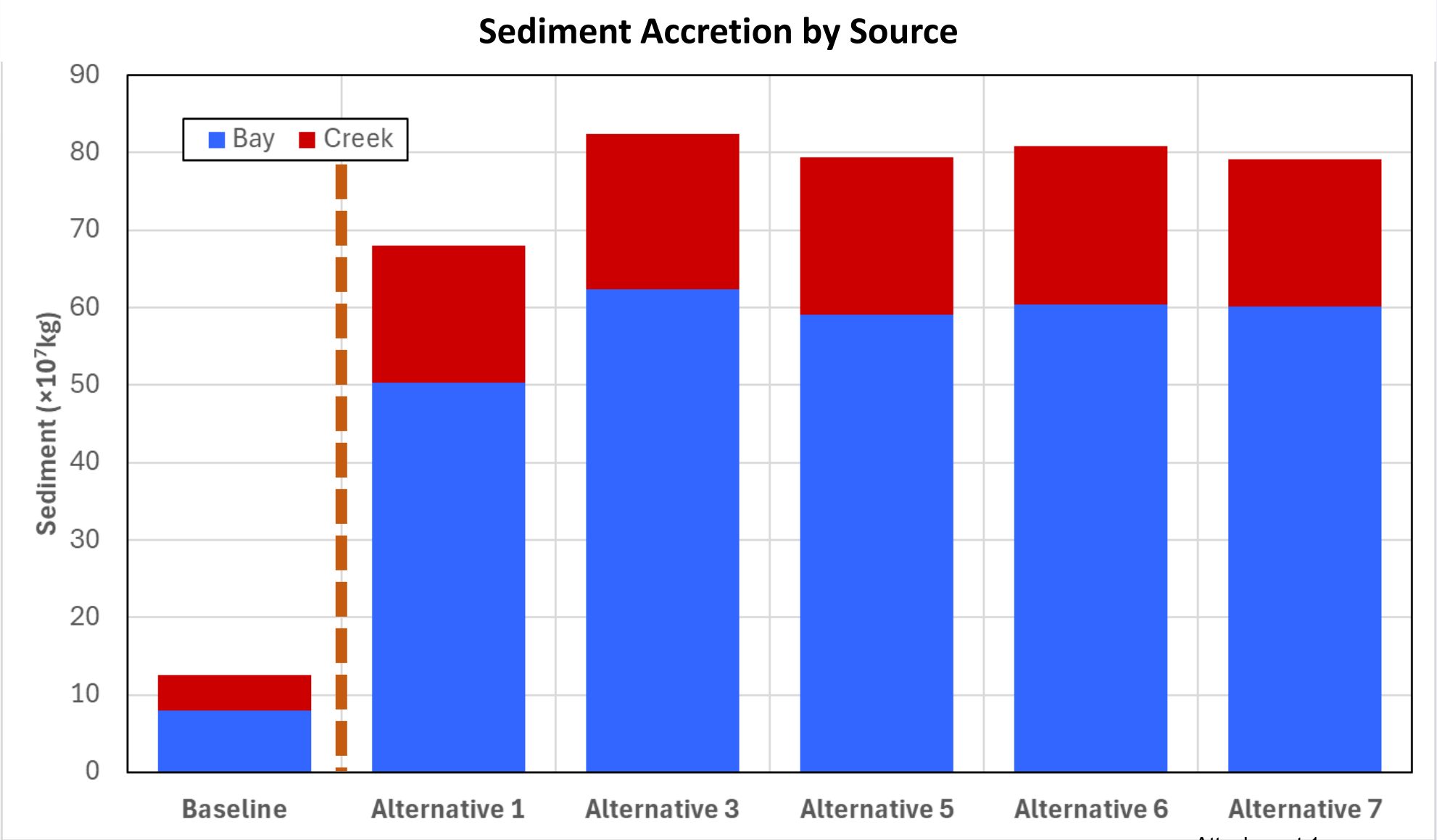


Alternatives Analysis



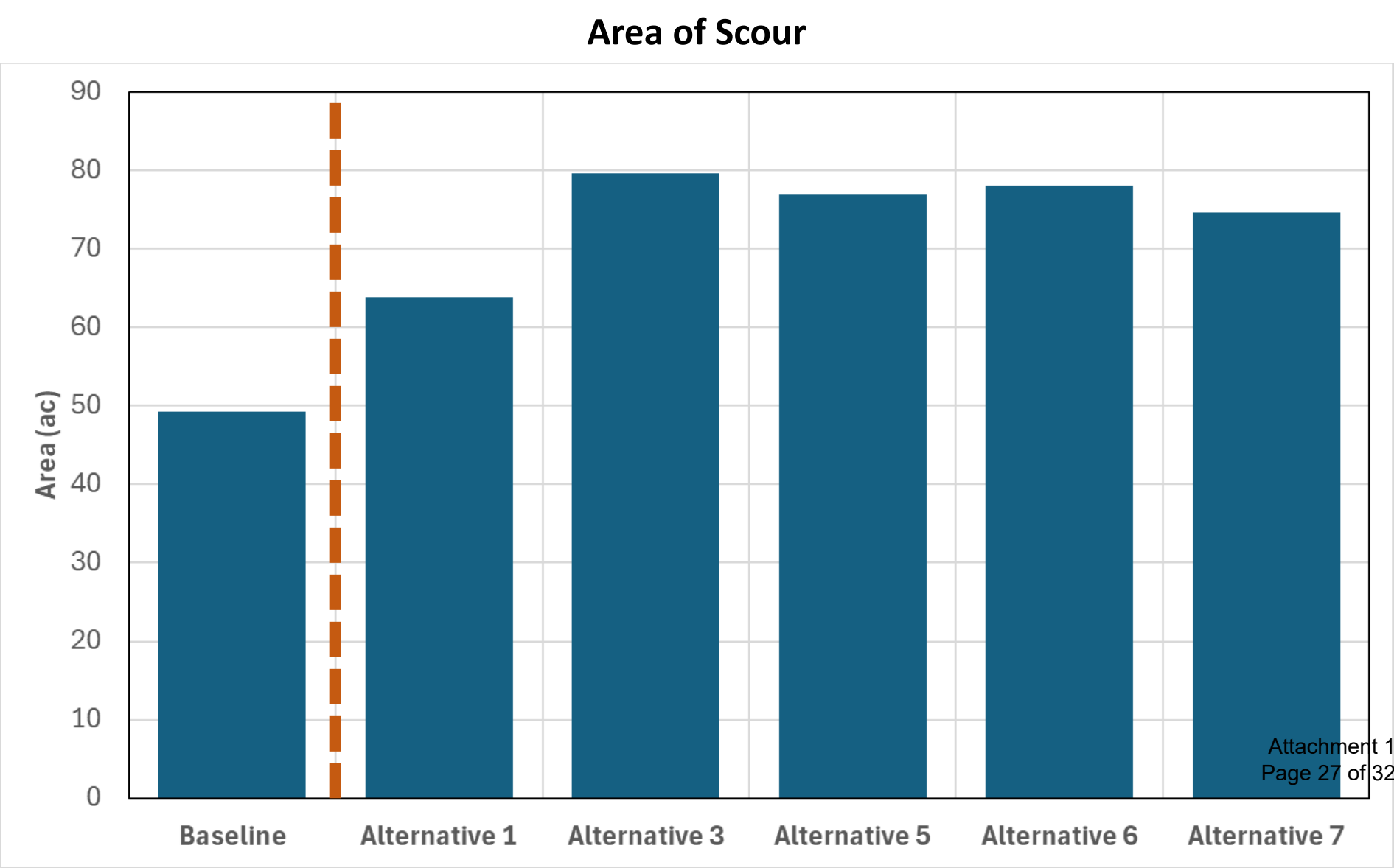
Sediment Modeling Results

*Increased
Tidal Marsh
Sediment
Accretion*



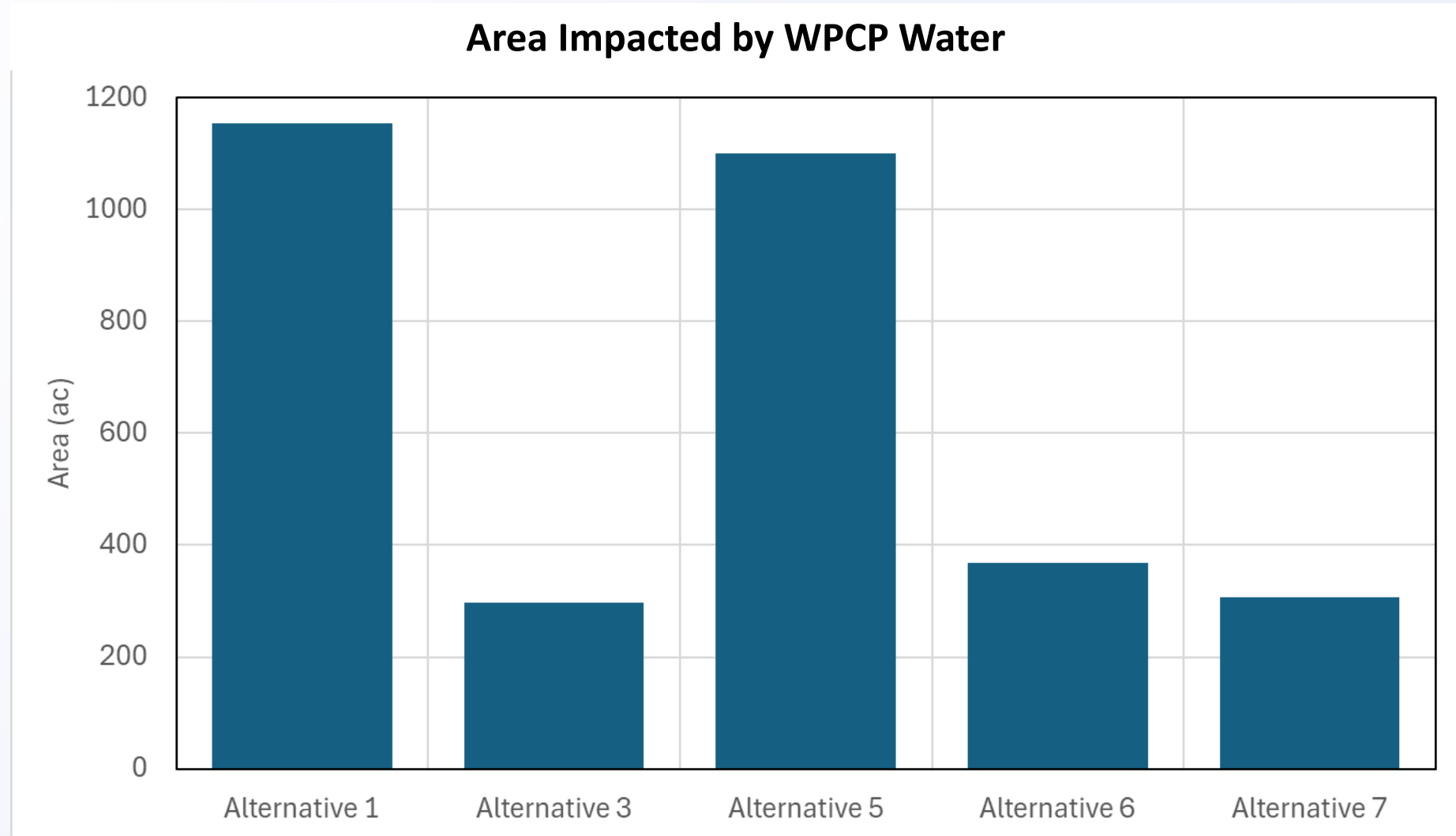
Sediment Modeling Results

*Less sediment
scour → Less
Mercury
Mobilization*



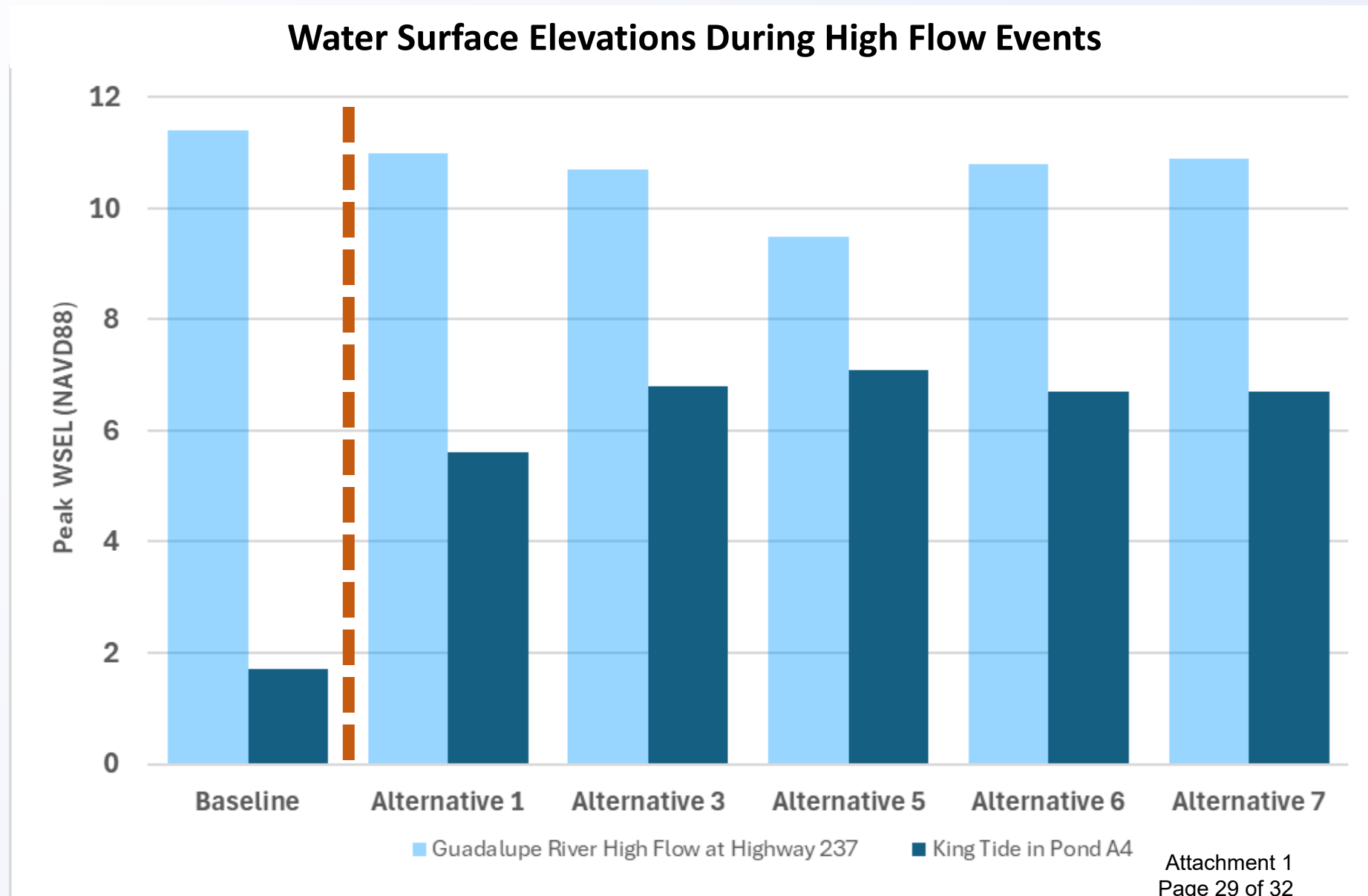
Hydrodynamic Modeling Results

*Less mixing with
Sunnyvale
Water Pollution
Control Plant
(WPCP) water
➡ Reduced
potential for
algae blooms*



Modeling of King Tides and High Flow Events

Pond breaches increase tidal storage → reduces tidal range and flood risk

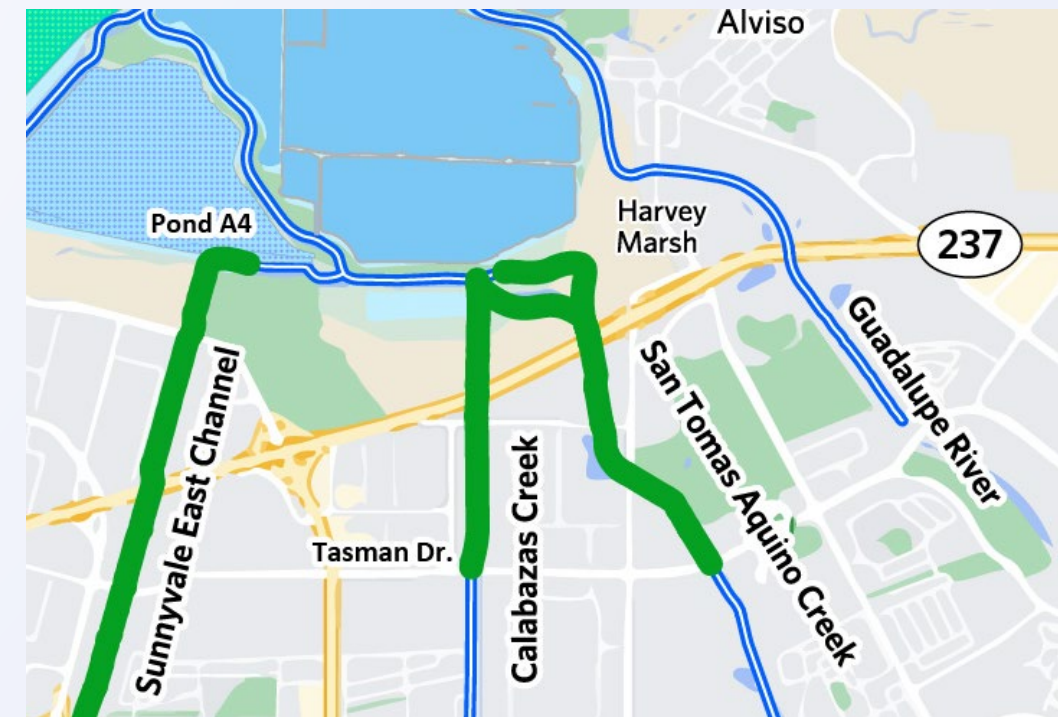
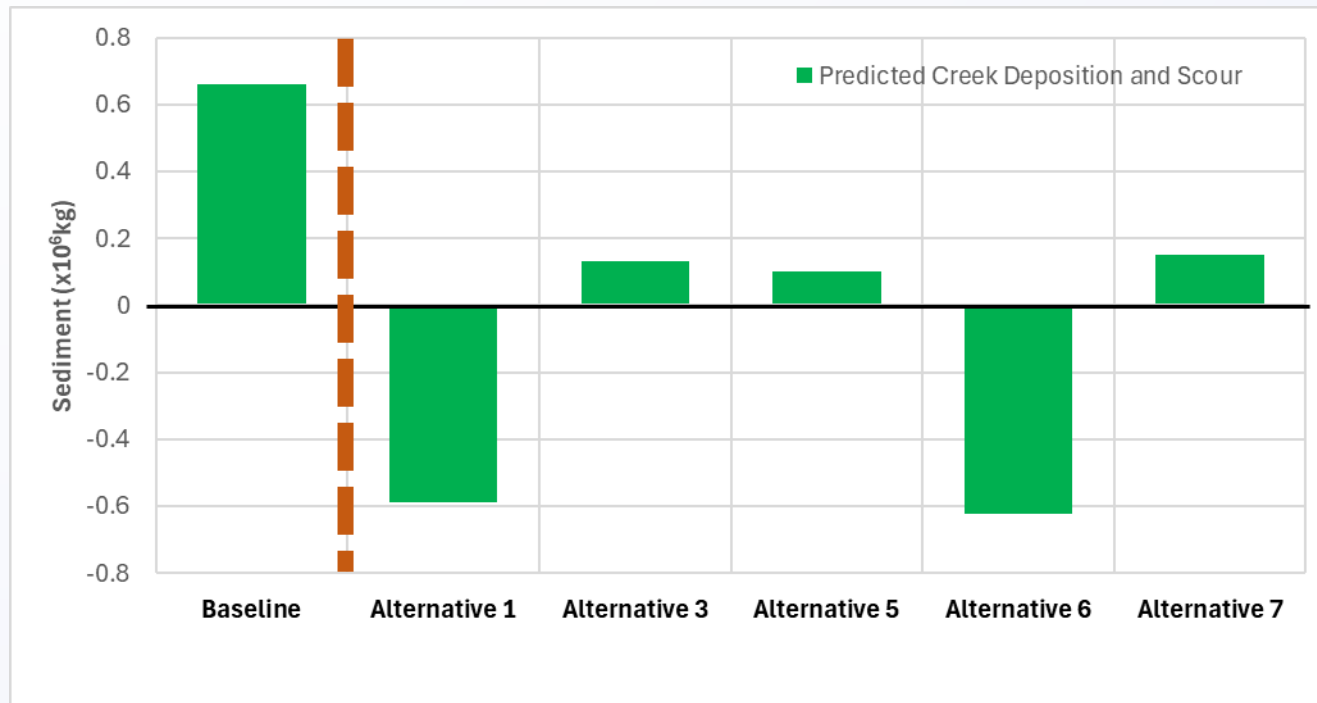


Combined Sediment Accumulation in Creeks

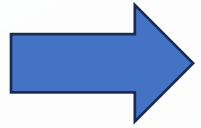
Reduced Sediment Deposition in Creeks

➡ *Reduces future sediment removal costs*

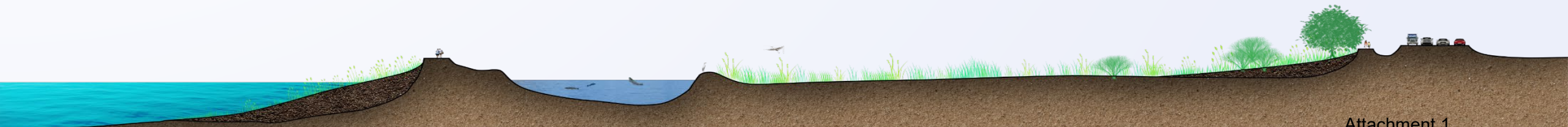
➡ *Supports tidal marsh creation at southern end of Ponds*



Public Access Enhancements



*Support for Bay
Trail Reach 9*



Bay Trail Reach 9

