

Calabazas/San Tomas Aquino Creek Marsh Connection Project

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

CONCEPTUAL ALTERNATIVES PUBLIC MEETING

May 16, 2023





Valley Water

Clean Water • Healthy Environment • Flood Protection



Stillwater Sciences

Schaaf & Wheeler
Consulting Civil Engineers

SFEI | AQUATIC
SCIENCE
CENTER



KEARNS WEST

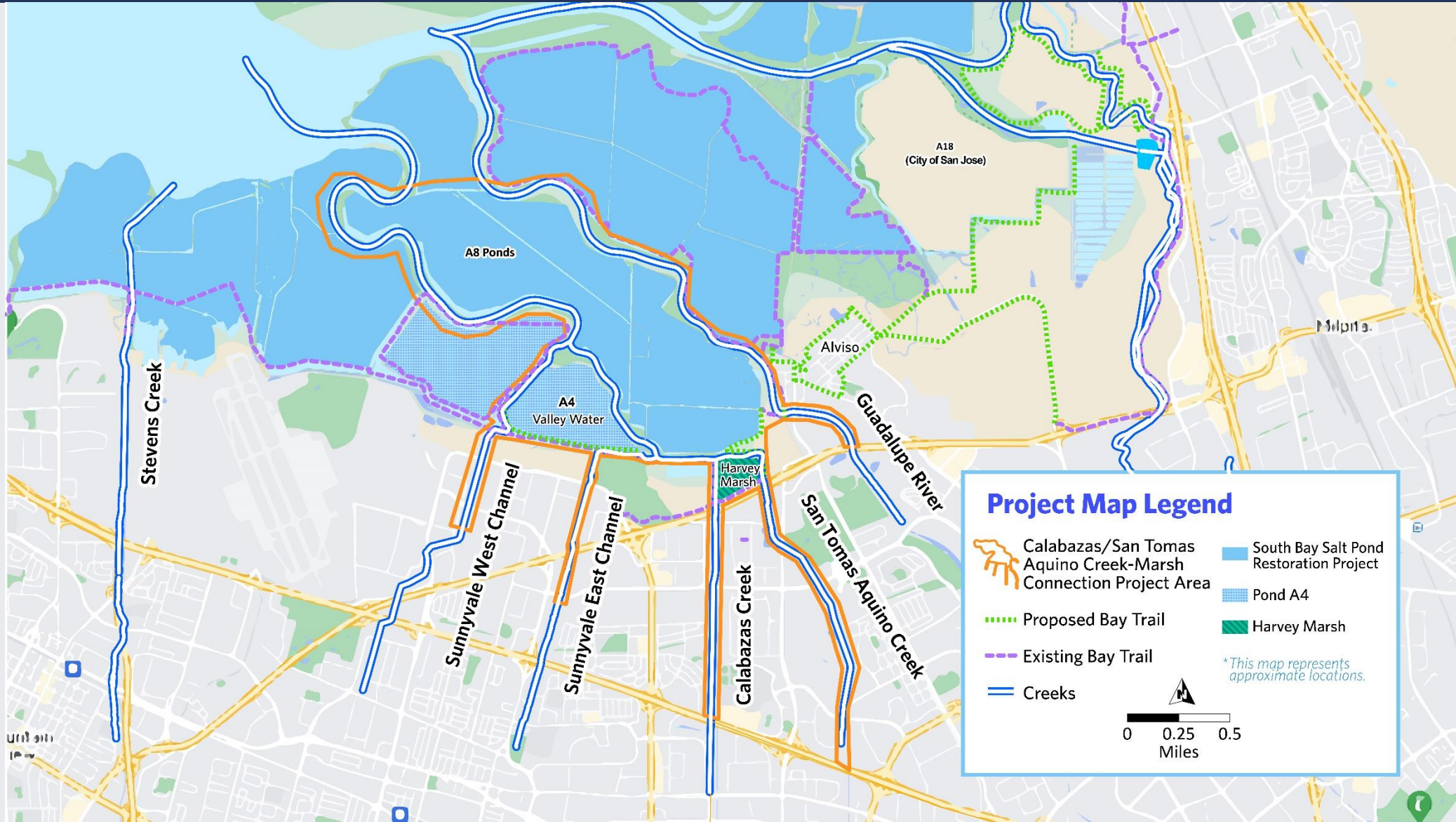
pathways
CLIMATE INSTITUTE



CINQUINI & PASSARINO, INC.
GEOSPATIAL SOLUTIONS

- ▲ BOUNDARY
- ▲ INFRASTRUCTURE
- ▲ BATHYMETRY
- ▲ TOPOGRAPHIC
- ▲ DEVELOPMENT
- ▲ GEOPHYSICAL

CALABAZAS/SAN TOMAS AQUINO CREEK-MARSH CONNECTION PROJECT



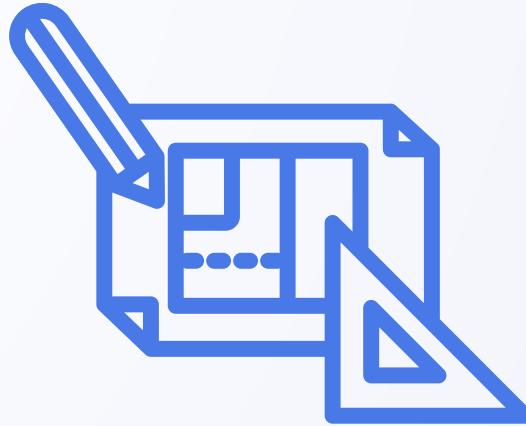
Project Map Legend

Calabazas/San Tomas Aquino Creek-Marsh Connection Project Area	South Bay Salt Pond Restoration Project
Proposed Bay Trail	Pond A4
Existing Bay Trail	Harvey Marsh
Creeks	<i>*This map represents approximate locations.</i>

MEETING PURPOSE



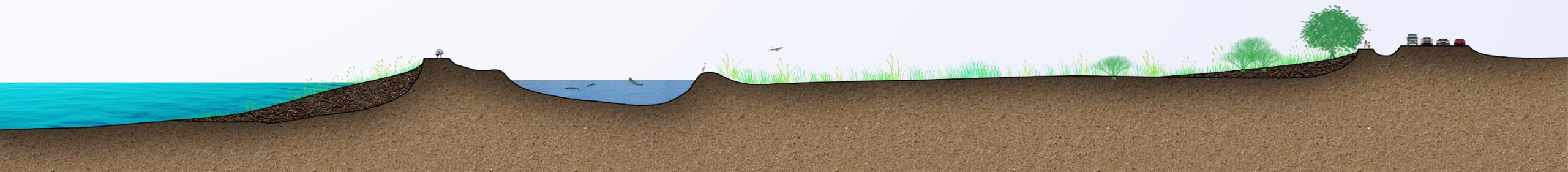
**PROVIDE PROJECT
OVERVIEW**



**PRESENT 5 CONCEPTUAL
ALTERNATIVES AND
PRELIMINARY TRAILS
CONCEPTS**



**COLLECT COMMUNITY
QUESTIONS AND
INPUT**



Opening Remarks



PARTNERSHIPS

GRANT FUNDERS

SF Bay Restoration Authority Measure AA

California Dept of Fish and Wildlife

US Environmental Protection Agency San Francisco Bay Water Quality Improvement Fund

LOCAL AGENCIES

City of San Jose

County of Santa Clara Parks and Recreation

City of Santa Clara

SF Bay Trail (Metropolitan Transportation

City of Sunnyvale

Commission)

ENVIRONMENTAL ORGANIZATIONS

Citizens Committee to Complete the Refuge

Sierra Club Loma Prieta Chapter.

Save the Bay

Santa Clara Valley Audubon Society

PROJECT PARTNERS

California State Coastal Conservancy

Caltrans

South Bay Salt Pond Restoration Project

US Fish and Wildlife Service Don Edwards National Wildlife Refuge

REGULATORY AGENCIES

Bay Conservation and Development Commission

California Dept. of Fish and Wildlife

San Francisco Bay Regional Water Quality Control Board

US Army Corps of Engineers

NOAA National Marine Fisheries Service

US Fish and Wildlife Service

PROJECT TEAM

VALLEY WATER

Judy Nam, PM

Lisa Bankosh, Asst Deputy Officer

Jiana Escobar, Public Information Representative

James Downing, Senior Water Resource Specialist

Sarah Gidre, Biologist

Jaeho Hahn, Asst Engineer

Nick Mascarello, Environmental Planner

James Manidakos, Assoc. Water Resource Specialist

Emily Zedler, Senior Engineer

STILLWATER SCIENCES

Noah Hume, PM

Stillwater Sciences (PM, Restoration Planning, Agency Coordination)

Schaaf & Wheeler (Flood Protection, Engineering)

San Francisco Estuary Institute (Geomorphology, Wetland Restoration)

Rincon Consultants (Environmental Compliance)

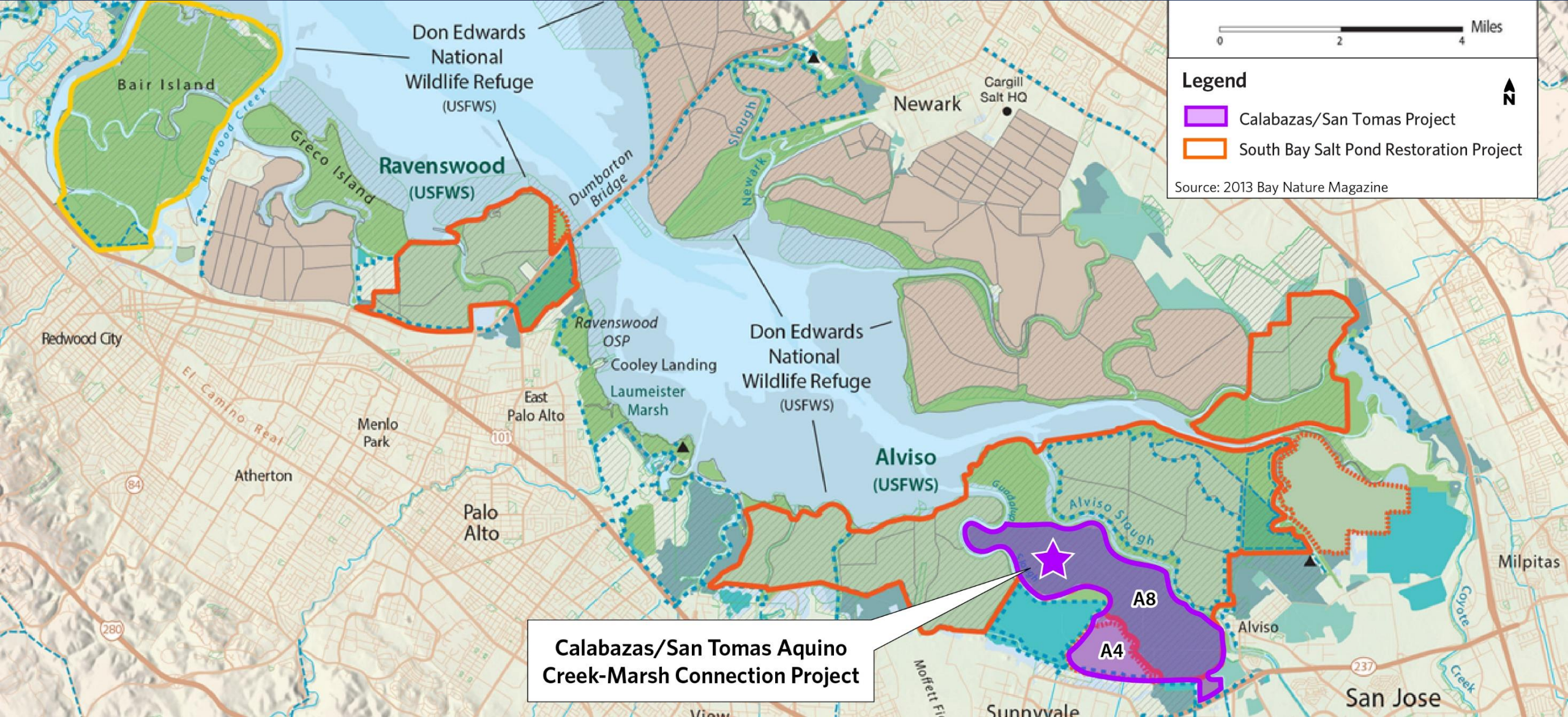
Pathways Climate Institute (Climate Change Adaptation)

Kearns & West (Community Outreach)

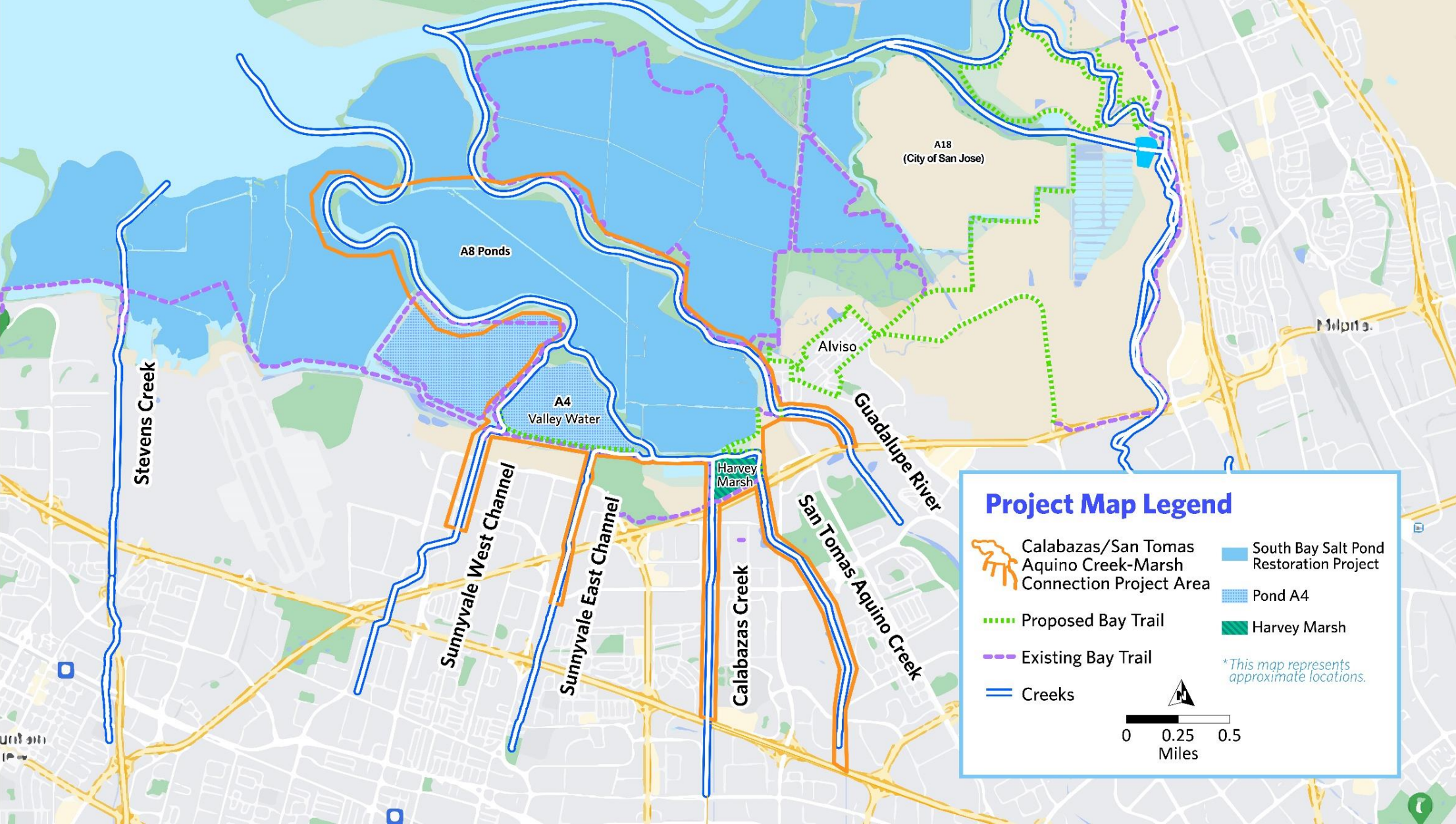
Cinquini & Passarino (Surveying)

Anchor QEA (Hydrodynamic and Sediment Transport Modeling)

CONNECTION TO BROADER SOUTH BAY SALT POND RESTORATION



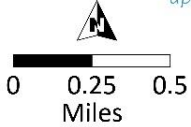
PROJECT OVERVIEW



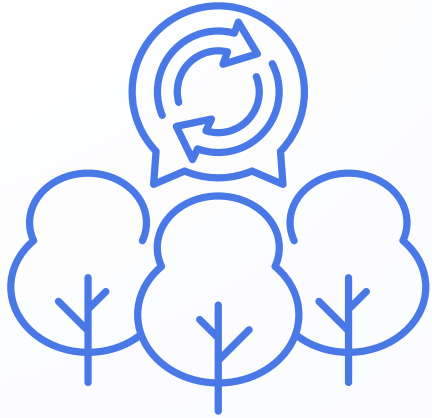
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- Calabazas/San Tomas Aquino Creek-Marsh Connection Project Area
- South Bay Salt Pond Restoration Project
- Pond A4
- Proposed Bay Trail
- Existing Bay Trail
- Creeks
- Harvey Marsh

**This map represents approximate locations.*



PROJECT OBJECTIVES



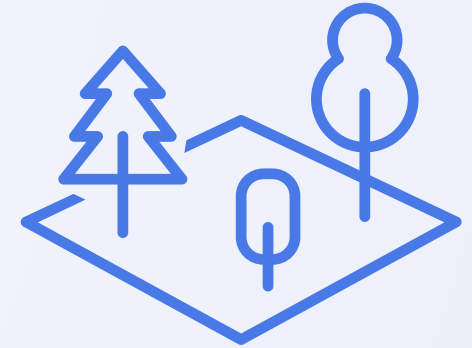
**HABITAT
RESTORATION**



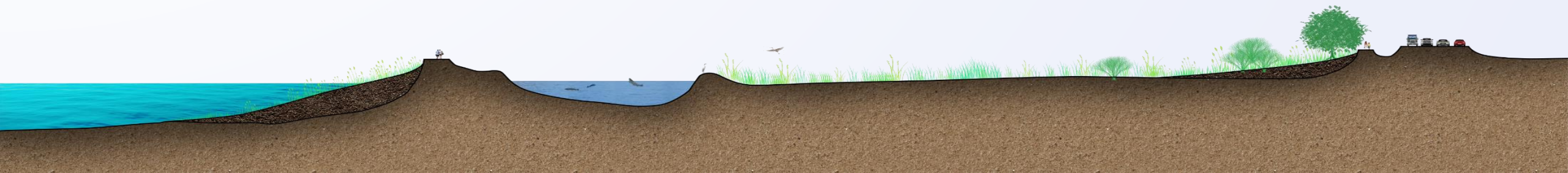
**RESILIENT FLOOD
PROTECTION**



**REDUCE
MAINTENANCE
NEEDS**

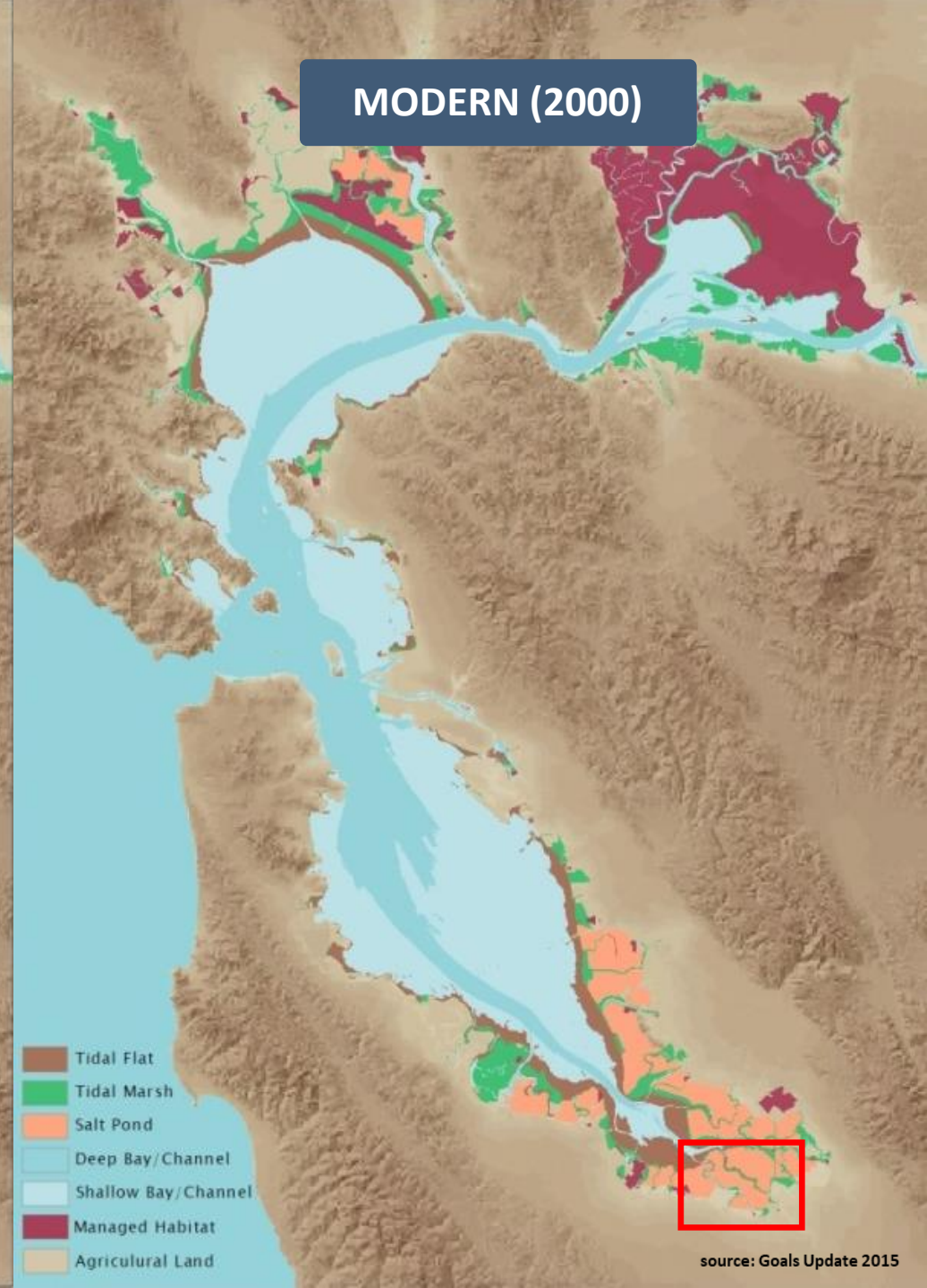
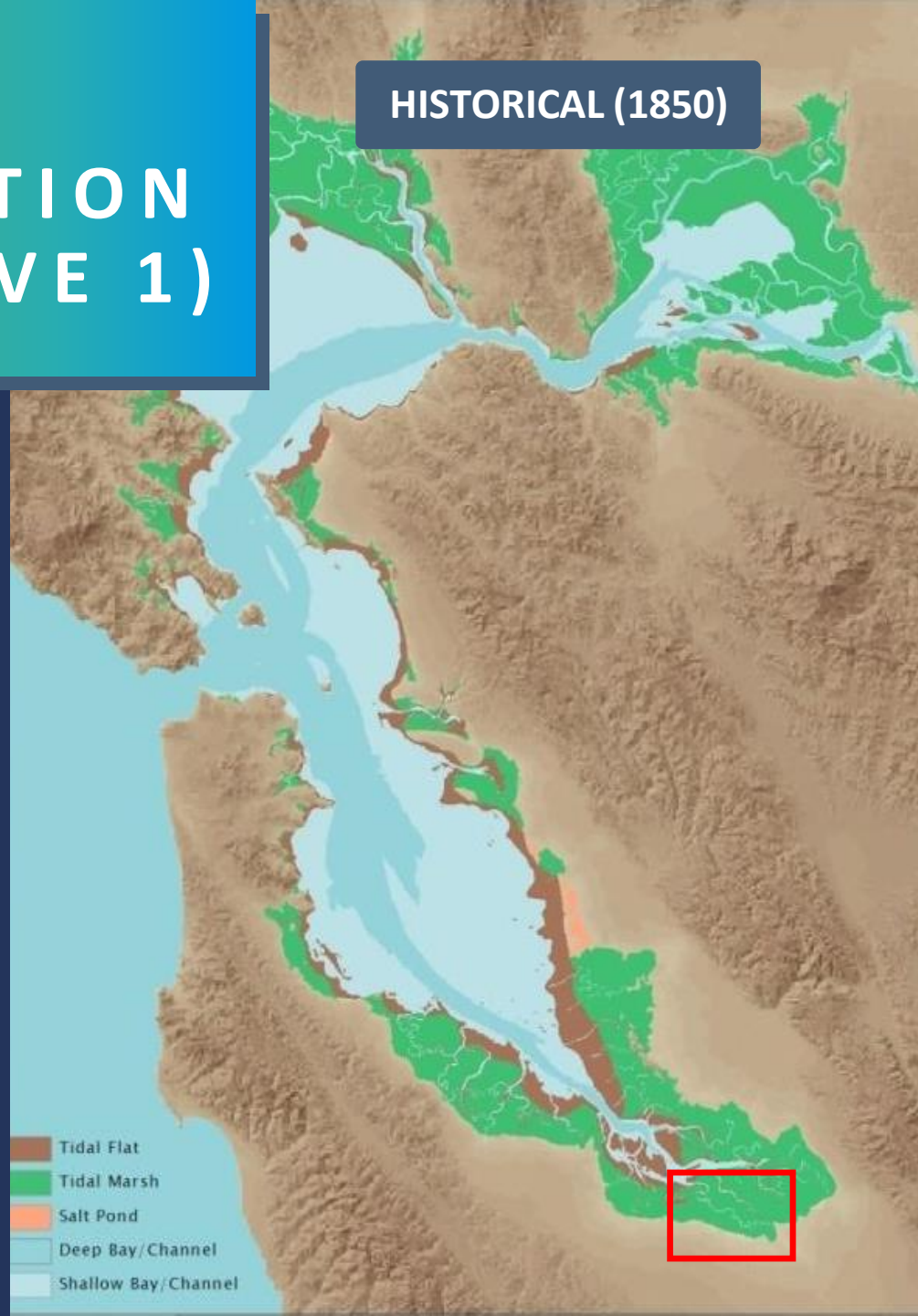


**ENHANCE
PUBLIC ACCESS**



HABITAT RESTORATION (OBJECTIVE 1)

Since 1850, over 100,000 acres of tidal marsh lost around the Bay







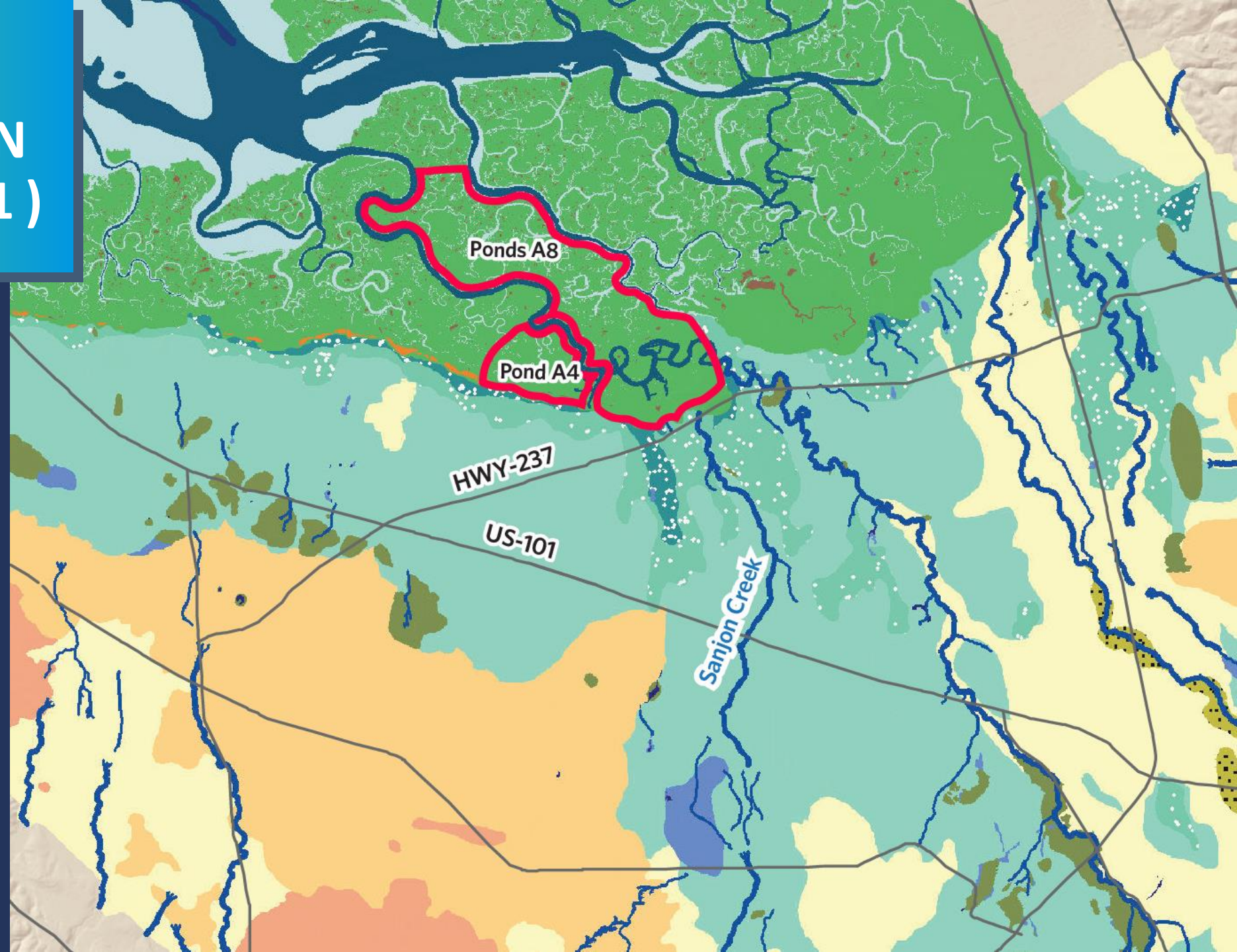
HABITAT RESTORATION (OBJECTIVE 1)

Project will capture sediments from creeks and lower South Bay to build up to 1,800 acres of new tidal marsh habitats.

Legend



-  Tidal Marsh
-  Wet Meadow
-  Oak Woodland
-  Project Area



RESILIENT FLOOD PROTECTION/SEA LEVEL RISE (OBJECTIVE 2)

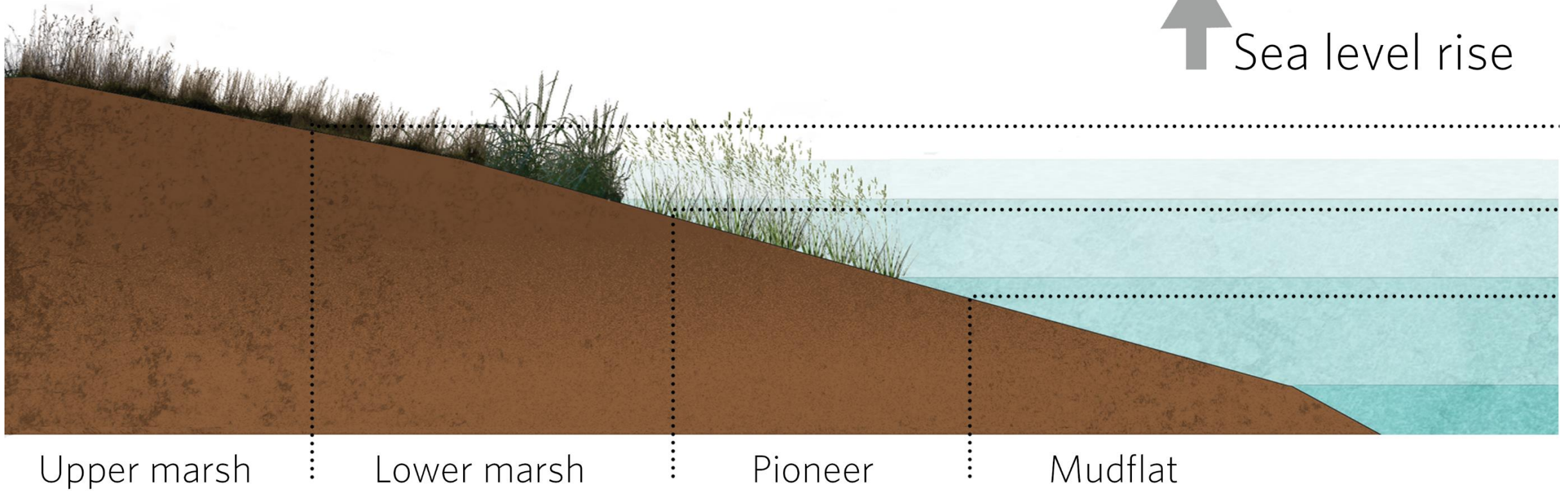
Increasing Sea Levels

Habitat migration

Existing and Future Flood Protection

← Inland migration of coastal habitats

↑ Sea level rise



Upper marsh

Lower marsh

Pioneer

Mudflat

RESILIENT FLOOD PROTECTION/SEA LEVEL RISE (OBJECTIVE 2)



Project will maintain current flood protection level

In coordination with planned flood protection projects

SEDIMENT AND CREEK MAINTENANCE (OBJECTIVE 3)

Increased Flood Risks from Sediment Buildup in Creeks

Reduced Maintenance and Removal Costs

Increase Sediment Supply for Marsh Restoration



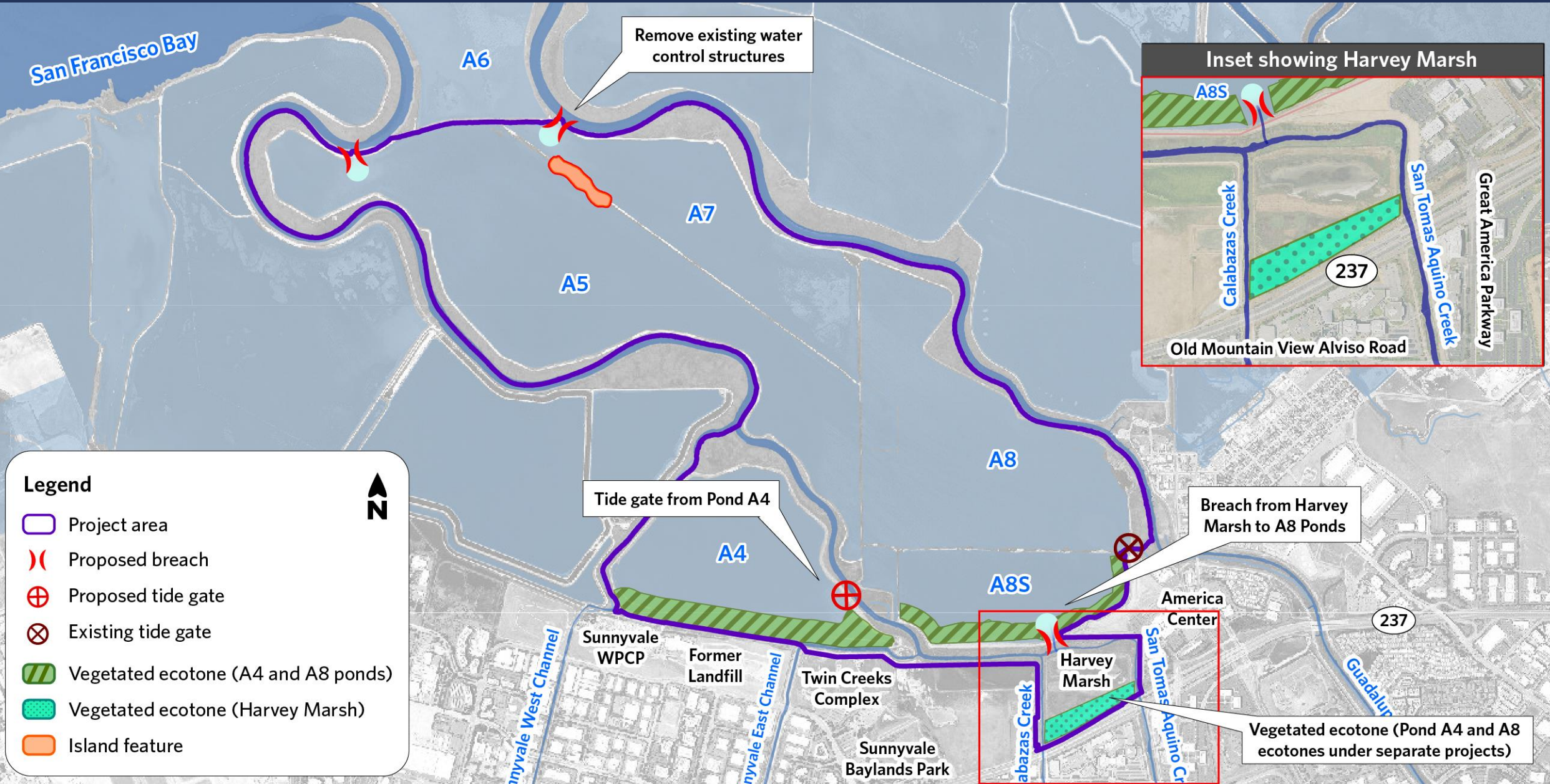
ALTERNATIVE



1

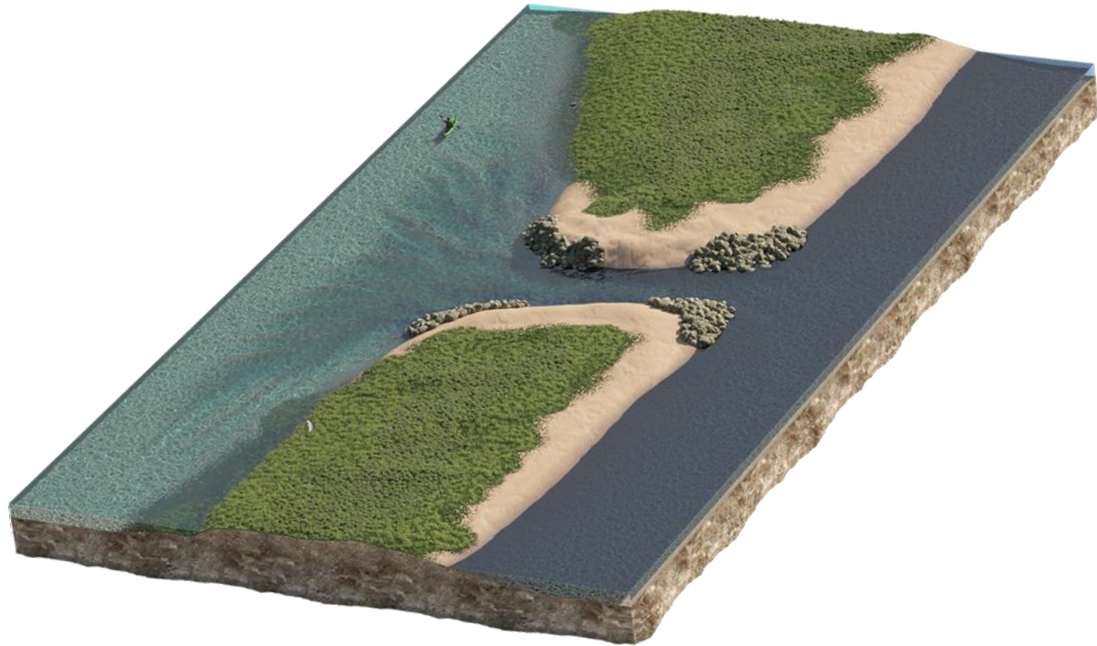
Minimum Tidal Connectivity

ALTERNATIVE 1 – MINIMUM TIDAL CONNECTIVITY



RESTORATION ELEMENTS

Pond Berm Breaches



USACE Coastal Texas Study

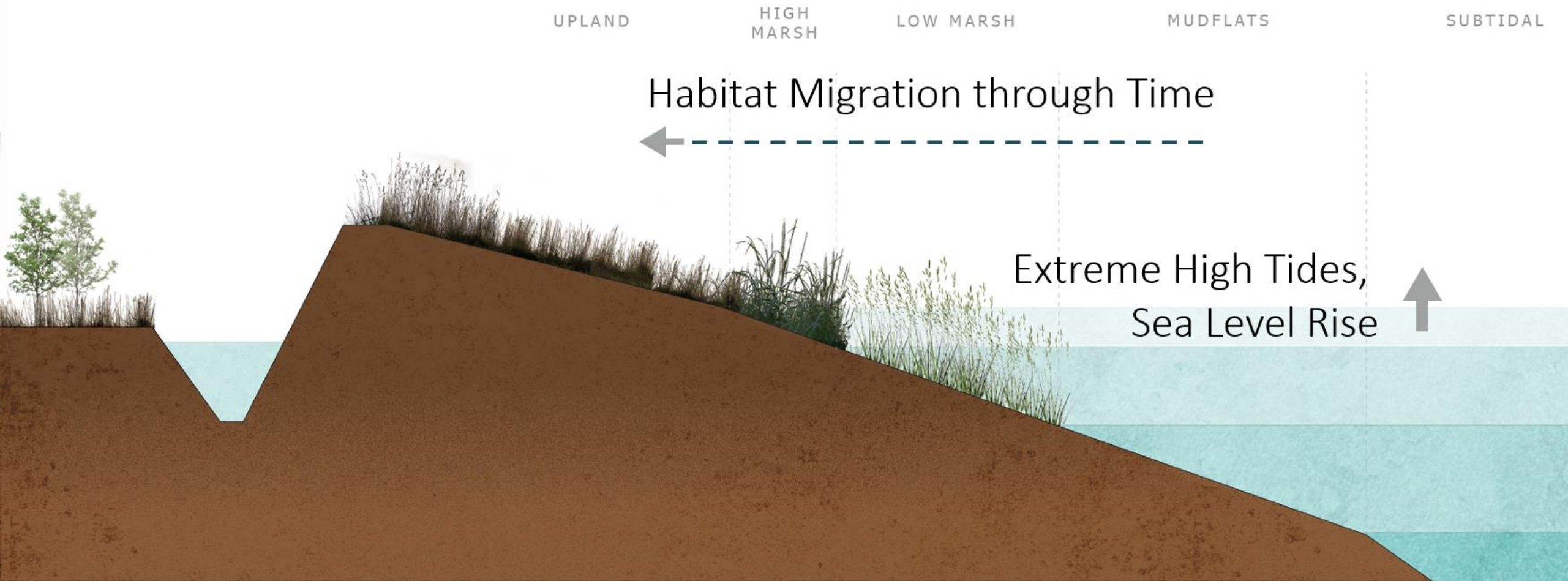
Operable Tide Gates



<https://www.southbayrestoration.org>

RESTORATION ELEMENTS

Vegetated Ecotone Slopes



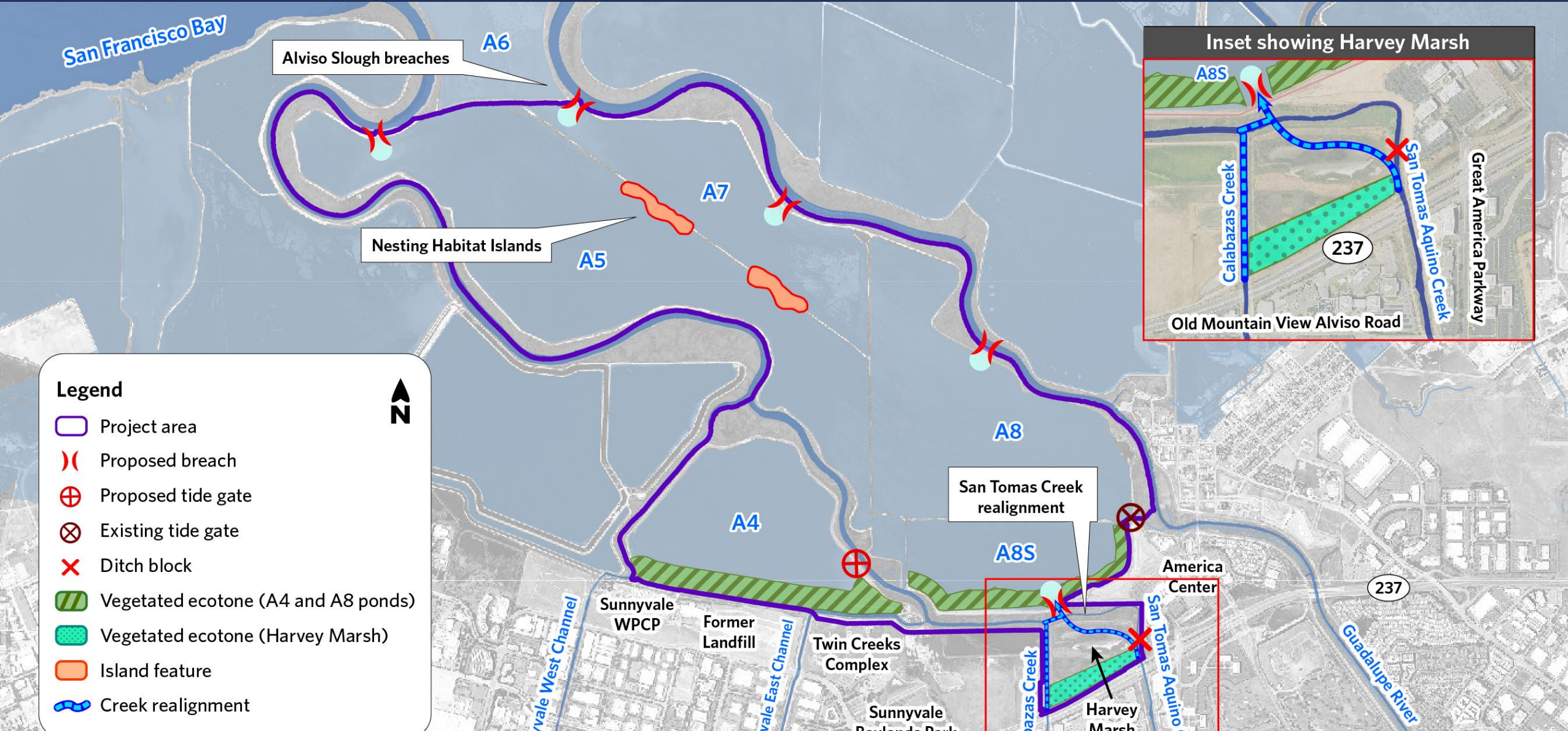
ALTERNATIVE



2

**Intermediate Tidal Connectivity,
Alviso Slough breaches**

ALT. 2 – INTERMEDIATE TIDAL CONNECTIVITY, ALVISO SLOUGH BREACHES



RESTORATION ELEMENTS

Nesting Habitat Islands

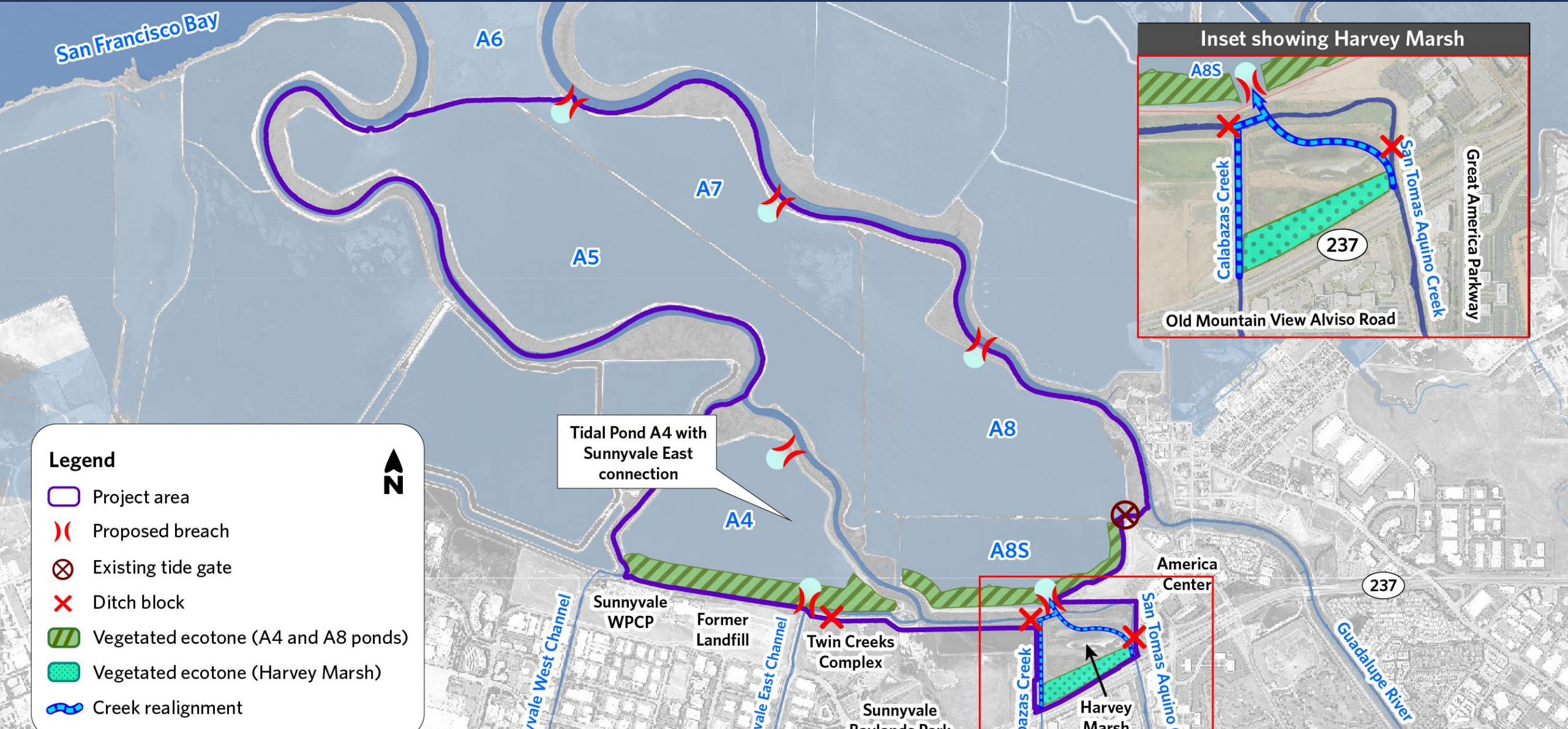


ALTERNATIVE



**Intermediate Tidal Connectivity,
Pond A4 breaches**

ALT. 3 – INTERMEDIATE TIDAL CONNECTIVITY, POND A4 BREACHES



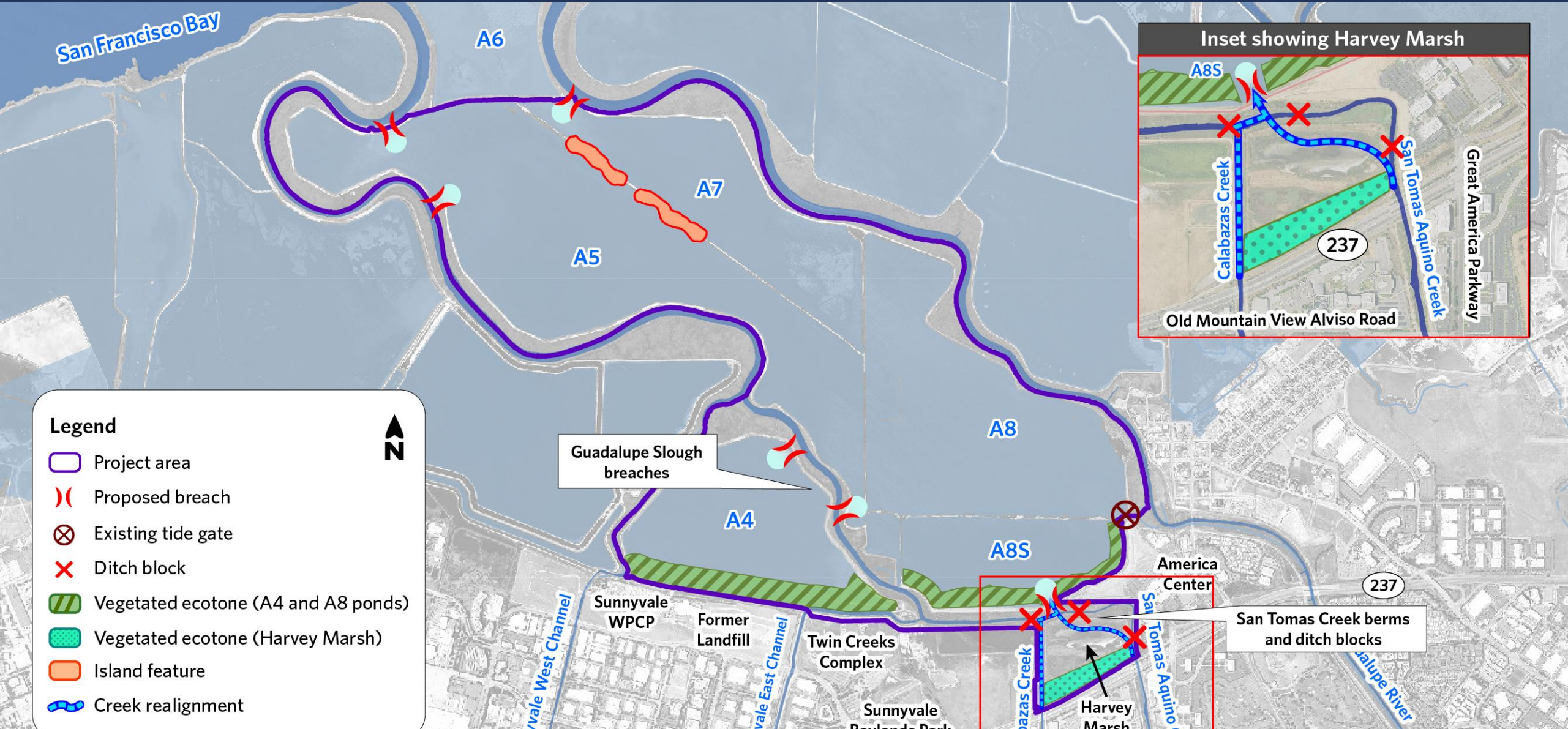
ALTERNATIVE



4

**Max. Sediment Transport,
Guadalupe Slough breaches**

ALT. 4 – MAX. SEDIMENT TRANSPORT, GUADALUPE SLOUGH BREACHES



ALTERNATIVE



5

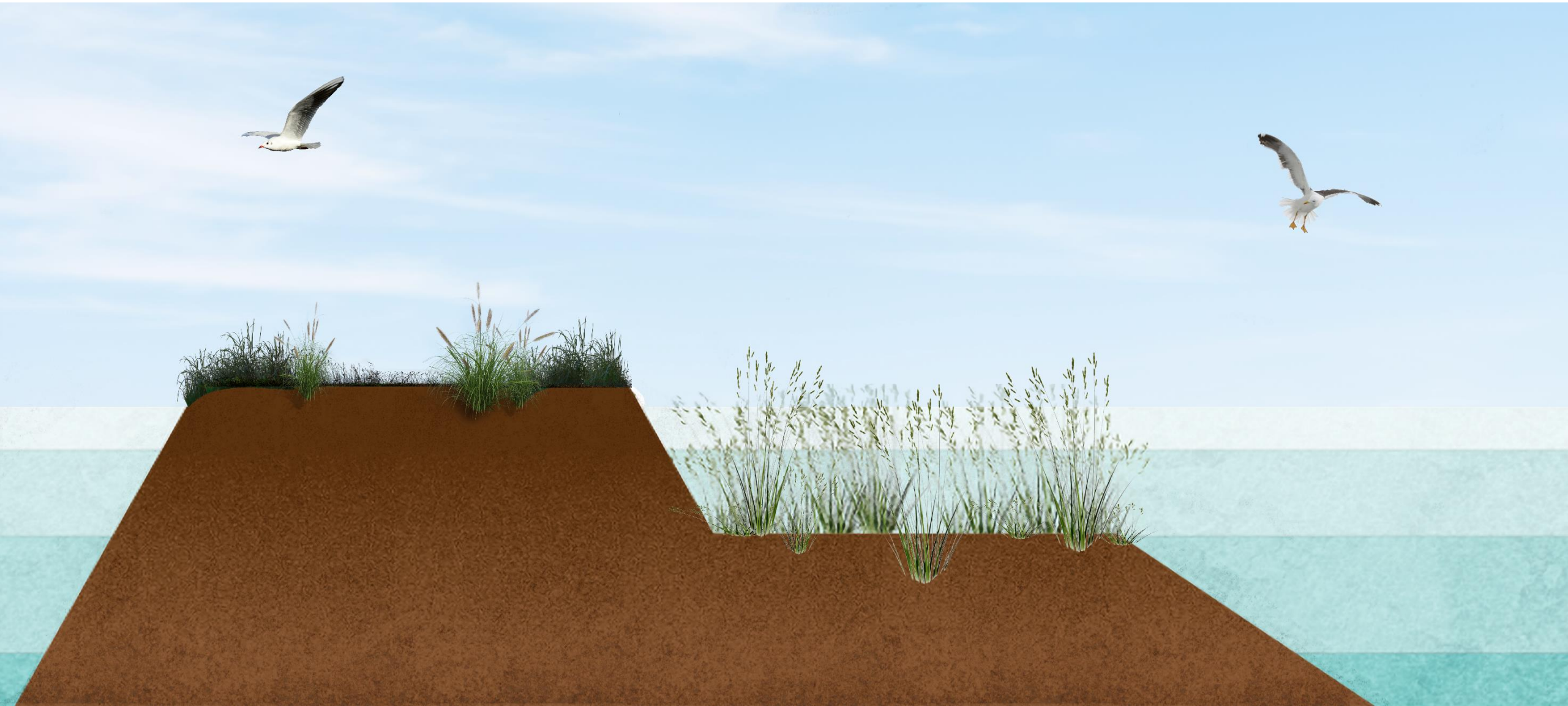
Maximum Tidal Connectivity

ALTERNATIVE 5 – MAXIMUM TIDAL CONNECTIVITY



RESTORATION ELEMENTS

Wetland Bench



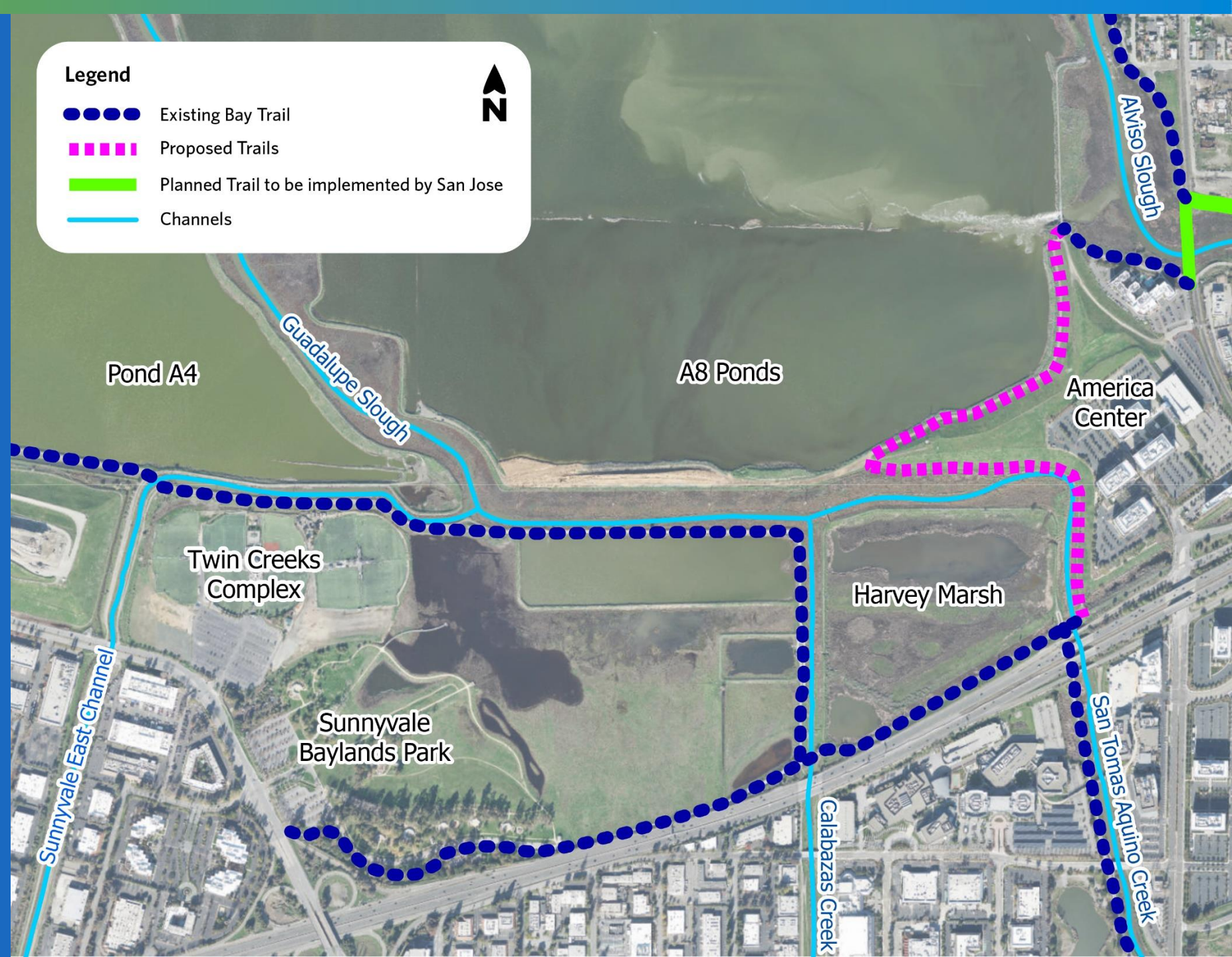
PRELIMINARY TRAIL CONCEPTS

- Conceptual Alternatives do not impact existing trail plans
- Preliminary Trail Enhancement Considerations:
 - Improve Public access/gaps in Bay Trail shoreline access
 - Protection of sensitive habitats
 - Construction and maintenance costs

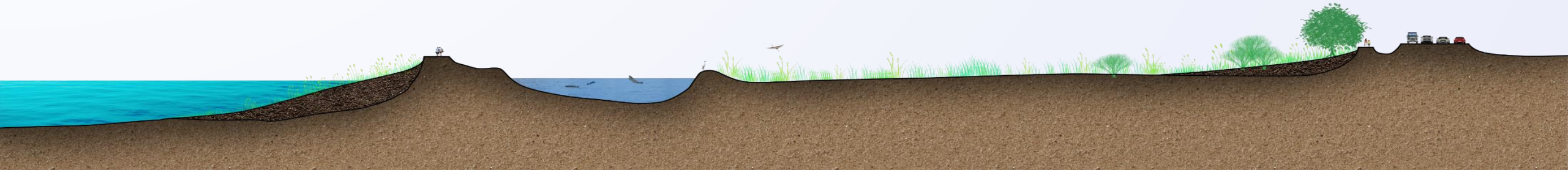


PLANNED BAY TRAIL CONCEPT

Bay Trail Reach 9 and support for City of San Jose efforts on future Alviso connection



NEXT STEPS



QUESTIONS

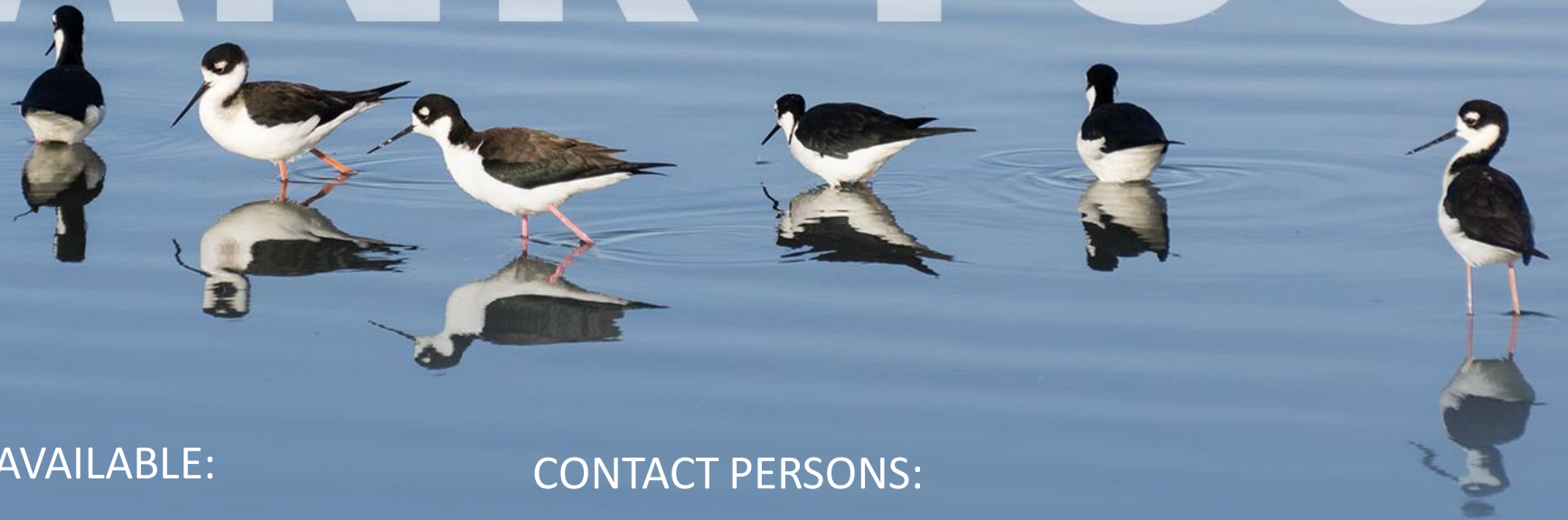


QUESTIONS AND ANSWERS GUIDANCE

- Questions in the room will be addressed before zoom.
- Please use the “raised hand” function to be added to the queue.
- For those joining by phone only, dial *9 to “raise your hand”.
- Please use question & answer box.



THANK YOU



REFERENCE MATERIALS AVAILABLE:



<https://delivr.com/2kmea>

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jescobar@valleywater.org



Valley Water

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