



**SCHAAF & WHEELER**  
CONSULTING CIVIL ENGINEERS

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# Brisbane Lagoon Watershed Sea Level Rise Adaptation Plan

Community Open House

October 21, 2025

# Agenda

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- Project overview
- Overview of the Brisbane Lagoon
- Climate change threats
- Possible engineering mitigation measures
- Possible nature based and habitat enhancement measures
- Community engagement
- Questions



# Project Overview

The goal of the project is to develop and adopt a Brisbane Lagoon Watershed Sea Level Rise Adaptation Plan (Plan).

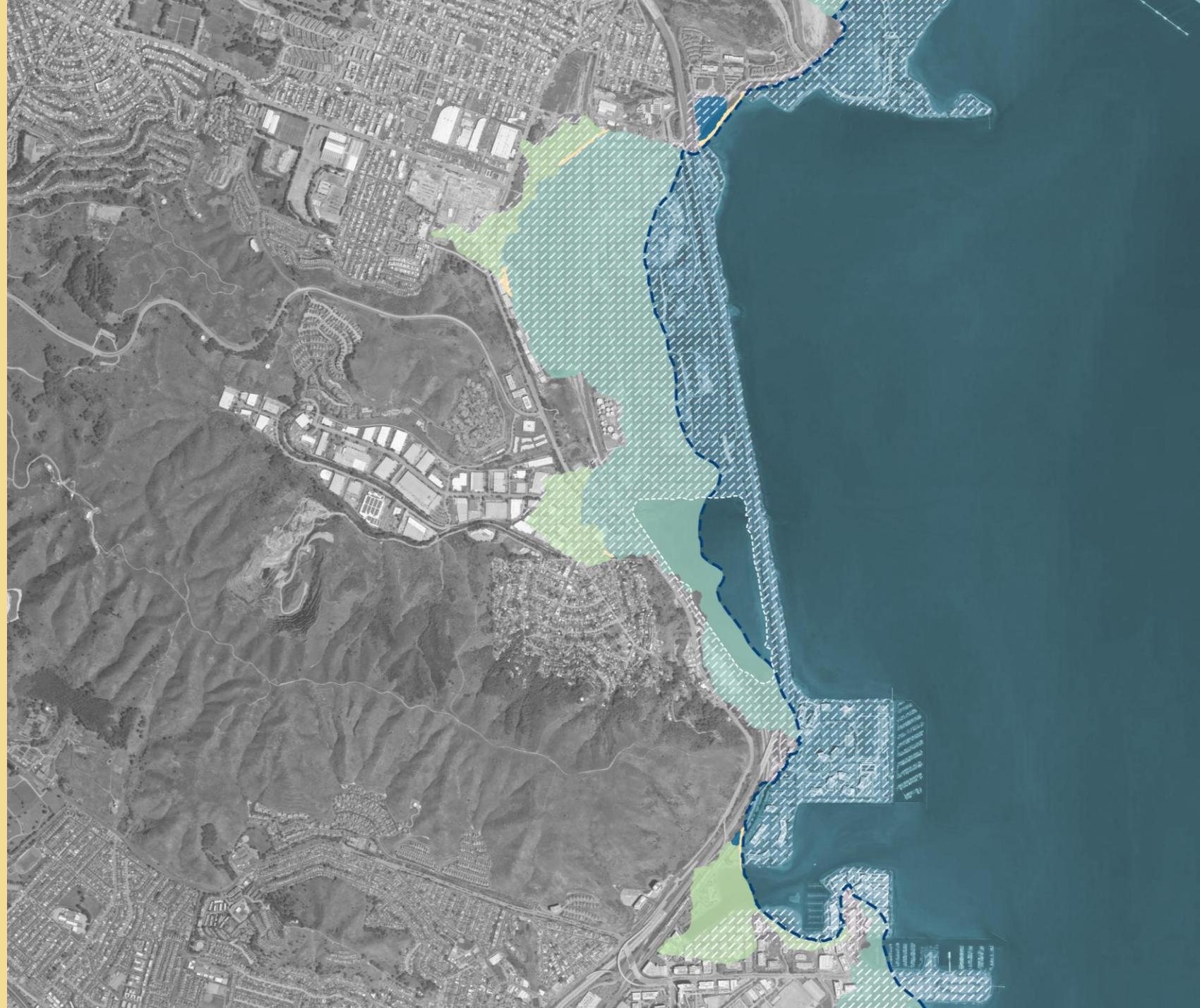
The Plan will identify solutions that:

- **Protect Brisbane residents and Highway 101 from flooding impacts related to climate change**
- Enhance lagoon resilience to sea level rise, while supporting natural systems
- Improve ecological function and habitat continuity
- Explore opportunities to improve existing public access



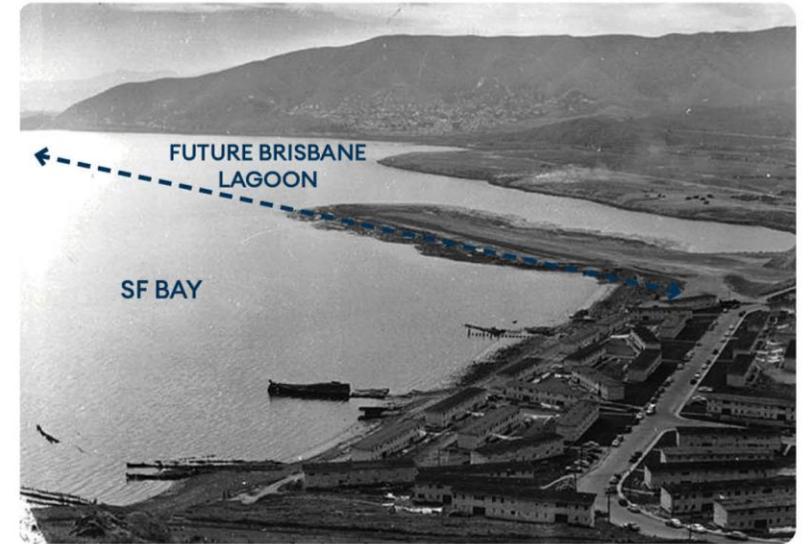
# Historic Ecology Map

-  Marsh
-  Tidal Flat
-  Beach
-  Lagoon
-  Bay
-  Fill
-  SF Bay Historic Shoreline



# Overview of the Brisbane Lagoon

- Developed for Highway 101 construction
- Majority of City drains into lagoon
- Lagoon protects critical infrastructure
  - Caltrain tracks
  - Highway 101
  - Businesses



1940 - PRE CONSTRUCTION OF HWY 101



1997 - POST CONSTRUCTION OF HWY 101



# Baylands Proposed Development



**Hydrology Plan** – Stormwater management system with green infrastructure and detention areas



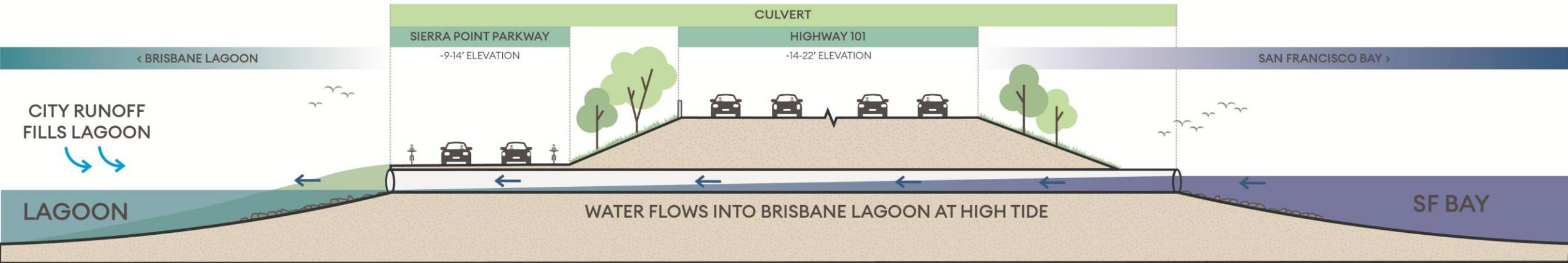
**Open Space Plan** – Lagoon Park, a largely naturalized area with some recreational uses and extension of Bay Trail



# Existing Conditions



# Lagoon Filling – High Tide

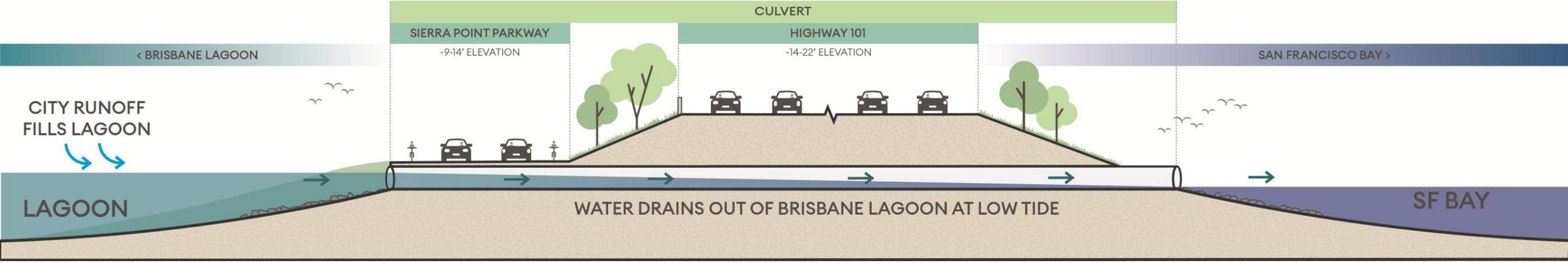


# Lagoon Filling

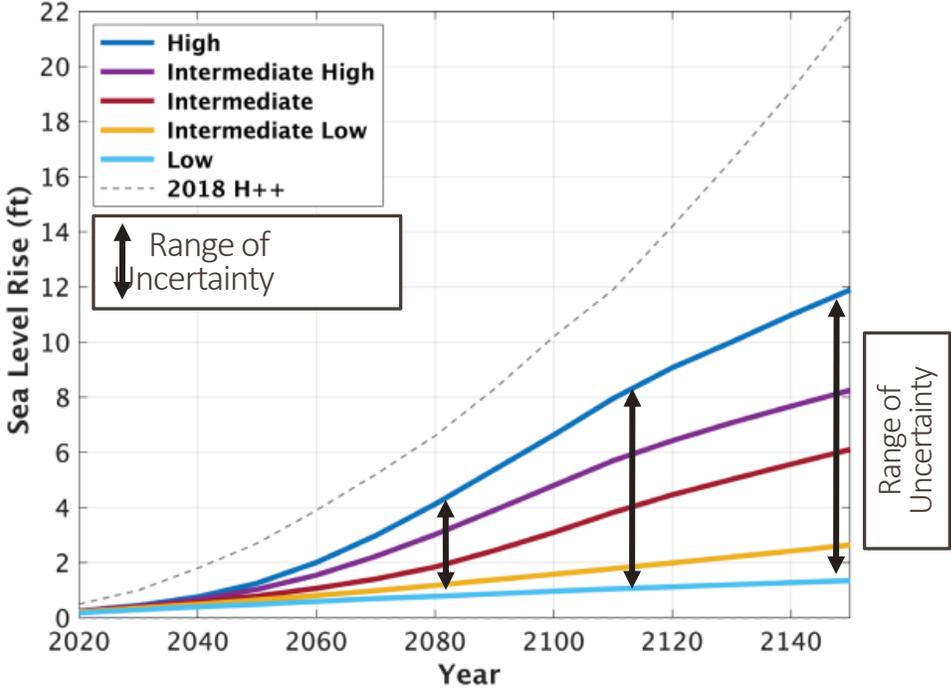
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# Lagoon Draining – Low Tide



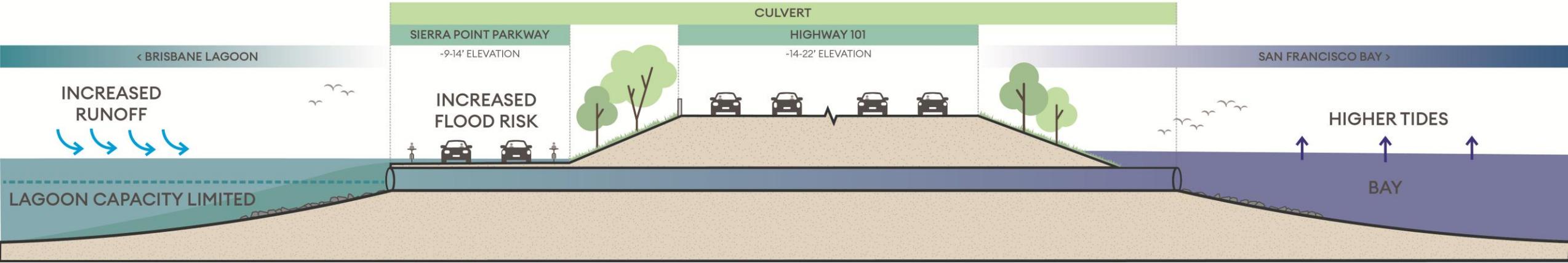
# Climate Change Threats



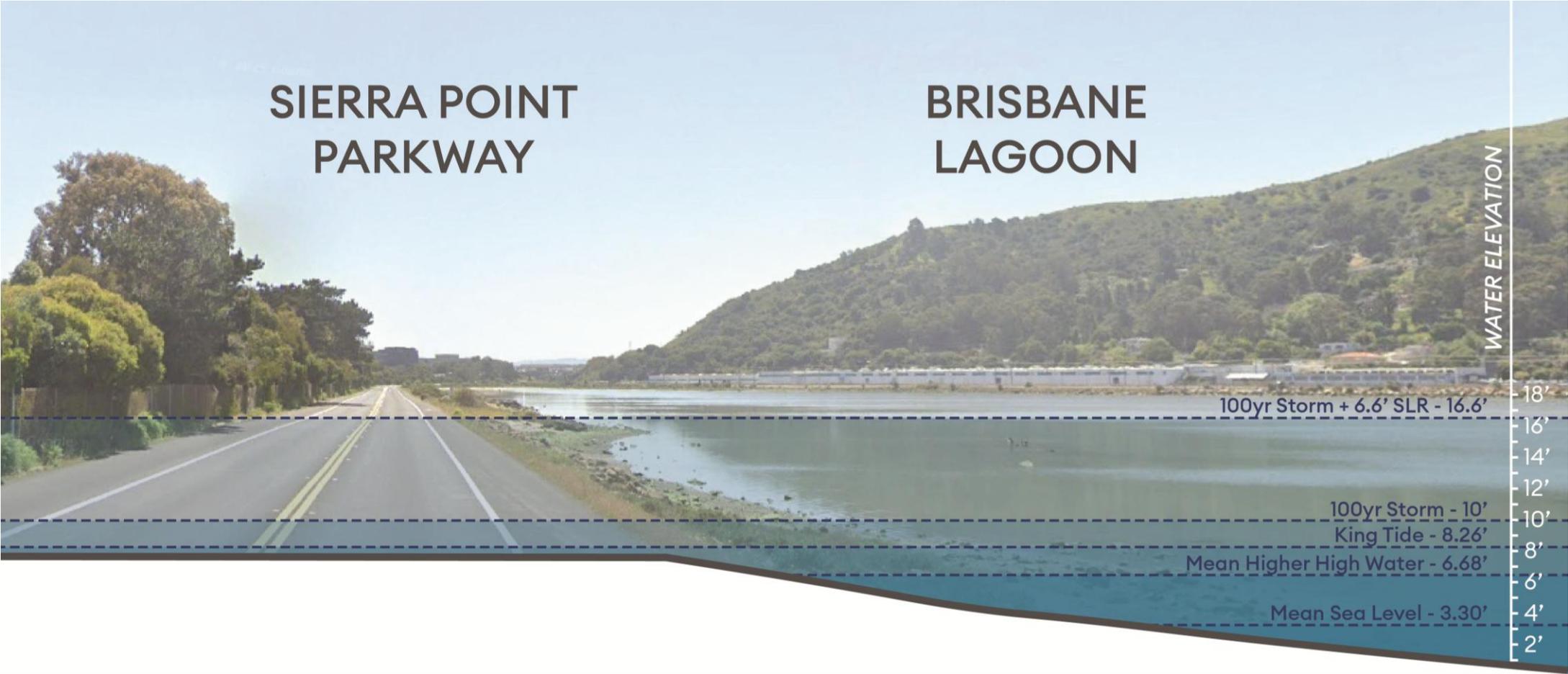
**FIGURE 2.3.** Sea Level Scenarios from 2020 to 2150, in feet, with a baseline of 2000. For comparison, the H++ from the 2018 California Sea-Level Guidance is included illustrating that this scenario is above scientifically plausible sea level rise for all dates.



# Climate Impacts to Lagoon



# Existing Conditions





King Tide, January 2023 ~ 8-ft NAVD

*Photo Credit: Lee Panza*



August 15, 2025 ~ 5-ft NAVD

*Photo Credit: Schaaf & Wheeler*

# Possible Nature Based and Habitat Enhancement Measures

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Enhancement of existing wetlands

Ex: Heron's Head Park (SF)



Coarse Beach

Ex: Point Pinole (Richmond)



Ecological armoring

Ex: Crane Cove Park (SF)



Naturalized embankment shoreline

Ex: Palo Alto Baylands

# Possible Engineering Mitigation Measures

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Tide gate

Ex: Palo Alto



Flood Walls

Ex: Coyote Creek (SJ)



Raise Road/Trail

Ex: Foster City



Pump Station

Ex: Mission Bay (SF)



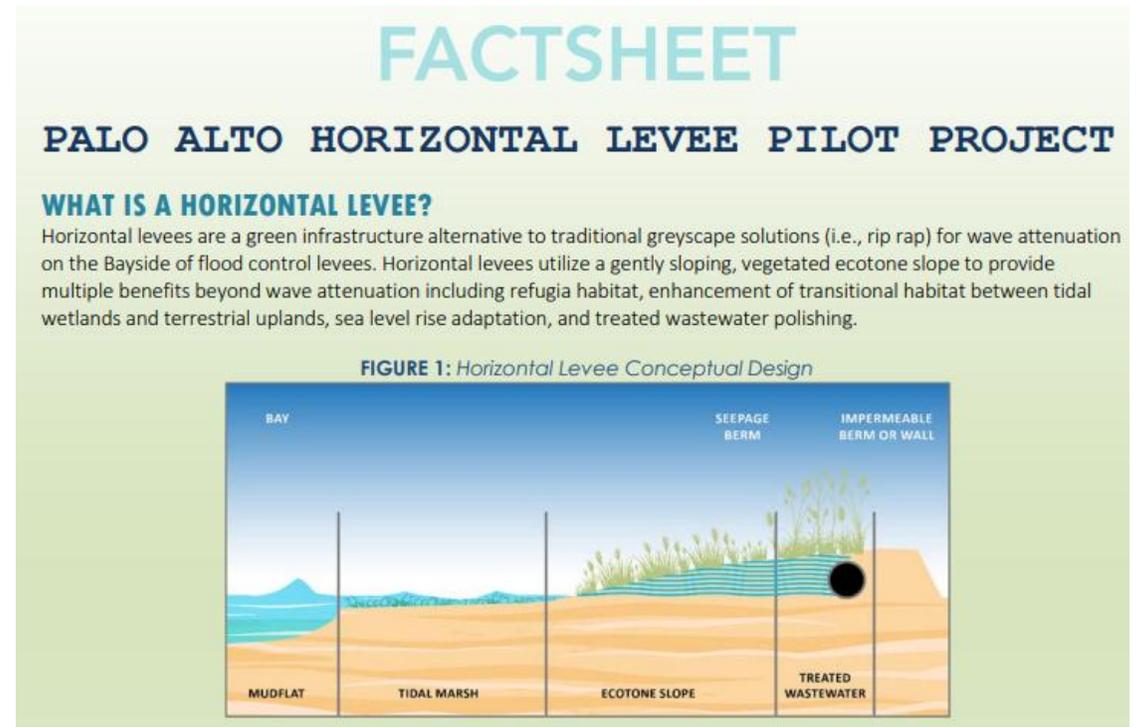
Increased detention

Ex: Hamilton Airfield (Novato)



# Local NBS + Engineering – Palo Alto Baylands

- Combines engineering + NBS
- Wall and levee protects from flooding
- Horizontal levee dissipates waves
- Creates habitat



<https://abag.ca.gov/news/first-its-kind-palo-altos-horizontal-levee-construction-begins>

# Local NBS + Engineering – Hamilton Wetlands

- Wetlands creates habitat
- Levee and wall protect neighborhood
- Tidal lagoon serves as detention



# Local NBS – Heron’s Head Park (SF)

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- Protects marsh and ponds from erosion
- Protection against wave and boat wakes
- Extends longevity of wetlands

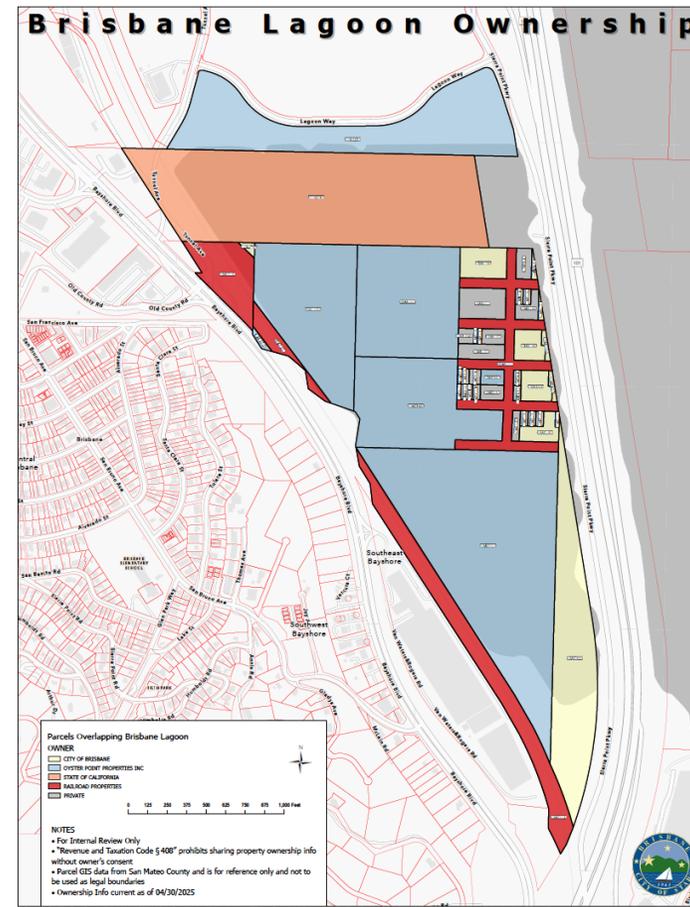


- <https://esassoc.com/projects/herons-head-park-shoreline-resilience-project/#:~:text=Located%20at%20a%20beloved%20urban,improves%20sea%2Dlevel%20rise%20resilience>



# Overview of the Brisbane Lagoon

- Majority of land is privately owned
- Fisherman's park is mitigation for marina
- Lagoon protects critical infrastructure
  - Caltrain tracks
  - Highway 101
  - Businesses



City of Brisbane

Oyster Point Properties

State of California

Private

Railroad Properties



# Community Engagement

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Fall 2025

- Community meeting  
10.21.25

Spring 2026

- Community meeting and  
farmer's market pop up  
to get feedback on the  
draft project alternatives

Winter 2026/27

- Community  
meeting to share  
Final plan



# Project Vetting Partners

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- Project Advisory Committee

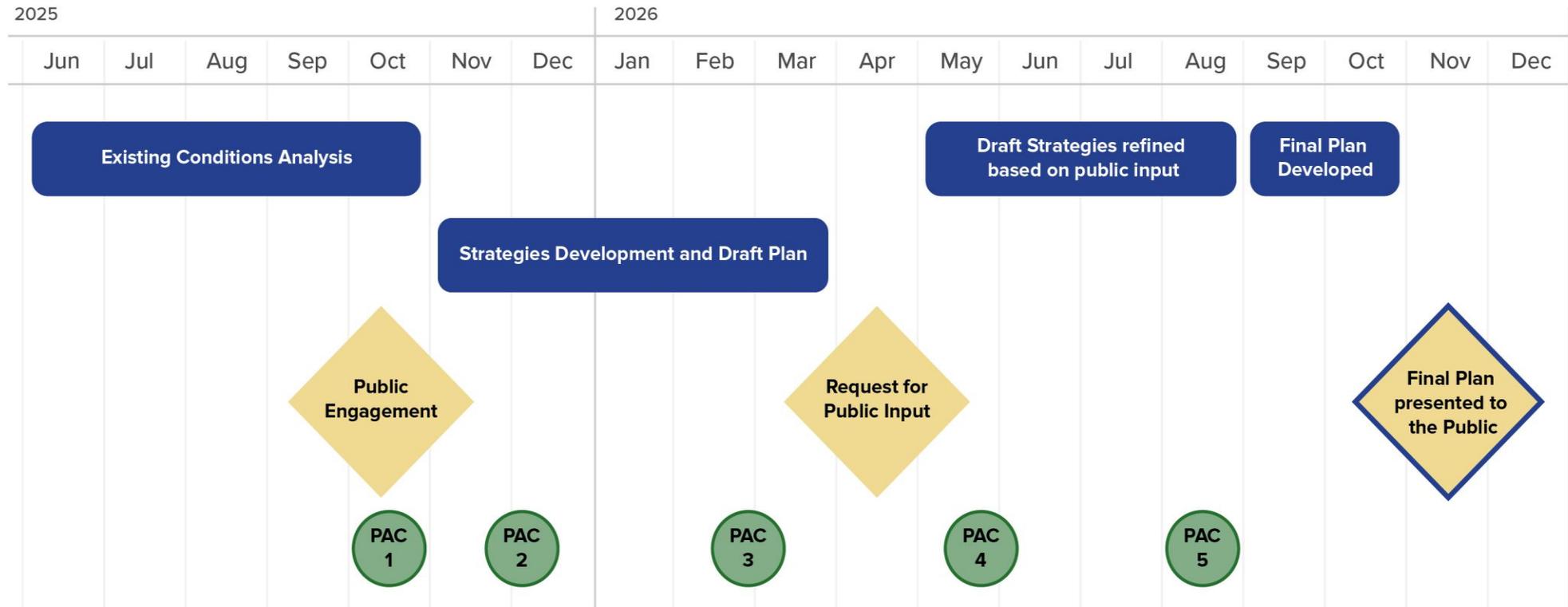
- Caltrans D4
- Baylands Development Inc.
- OneShoreline
- Caltrain – Peninsula Corridors Joint Powers Board
- High Speed Rail Authority
- San Mateo County Department of Emergency Management
- San Francisco Bay Conservation and Development (BCDC)
- Sierra Point Owners Association
- Association of Ramaytush Ohlone

- Key Community Based Groups

- San Bruno Mountain Watch
- Brisbane Lions Club
- Mothers of Brisbane (MoB)
- Sierra Point Yacht Club
- Brisbane Chamber of Commerce
- Brisbane Frog Habitat Stewards
- Friends of the Brisbane Library
- Schools
- Brisbane Elementary School
- Panorama Elementary School
- Lipman Middle School
- Fisherpeople
- Bike commuters



# Project Timeline - DRAFT



 = Public Advisory Committee meeting



# Questions?

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FOR MORE INFORMATION, PLEASE CONTACT:  
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