



# South Bay Salt Pond Restoration Project

*Restoring the Wild Heart of the South Bay*



April 2008



September 2009



May 2010



October 2010

SALT POND A21 SOUTH BAY SALT POND RESTORATION PROJECT

Kite aerial photographs of a small channel in the northeast corner following the 2006 breach to tidal flow. Field of view is ~ 120 feet. . C. Benton

**Science Symposium**

**May 11, 2022**

**Dave Halsing, Executive Project Manager**

# Introductions



# USFWS - Don Edwards SF Bay National Wildlife Refuge

**Matt Brown, Project Leader**  
**Chris Barr, Deputy Project Leader**  
**Rachel Tertes, Wildlife Biologist**



# **CDFW – Eden Landing Ecological Reserve**



**John Krause,  
Sr. Environmental Scientist  
Supervisor**



**Becca Carniello,  
Environmental Scientist/  
Reserve Manager**

# CA State Coastal Conservancy

**Laura Cholodenko, Project Manager**

**Shalini Kannan, Deputy Project Manager**

**Evyan Borgnis Sloane, Deputy Manager SF Bay Program**



# Lone Wolves



**Donna Ball, Lead Scientist**

**Ariel Ambruster, Outreach and Engagement Coordinator**

**Dave Halsing, Executive Project Manager**

# Valley Water



**Judy Nam, Sr. Water  
Resource Specialist**



**Nick Mascarello,  
Environmental Planner**



**Sunshine Julian, Capital  
Engineering Manager**



**John Bourgeois, Deputy  
Officer - Watersheds**

# U.S. Army Corps of Engineers



**Neil Hedgecock,  
Program Manager,  
South Bay Shoreline  
Project**

**Elizabeth Murray,  
Research Biologist**





# Ducks Unlimited

**Steve Carroll,  
Regional Engineer**



**Taylor Lancelot,  
Regional Engineer**



**Renee Spenst,  
Regional Biologist**



**Colin Dudley,  
Regional Engineer**



**Nick Torrez,  
Regulatory  
Specialist**

# Partners, Collaborators, Etc.

- **Cargill**
- **Cris Benton**
- **San Francisco Bay Bird Observatory**
- **Save The Bay**
- **San Francisco Estuary Institute**
- **U.S. Geological Survey**

***Consultants, contractors, environmental groups, material providers, neighboring cities & counties, flood control districts, regulators, funders...***

# History and Status

- **SBSP Restoration Project Overview**
- **Phase 2 Status Updates**



# **SBSP Restoration Project**

- **Began in 2003**
- **Acquisition of 15,100 acres from Cargill**
- **Time to build program 2003-2007**
- **Restoration began in 2007**
- **Phase 1 complete in 2014**
- **Phase 2 underway now**

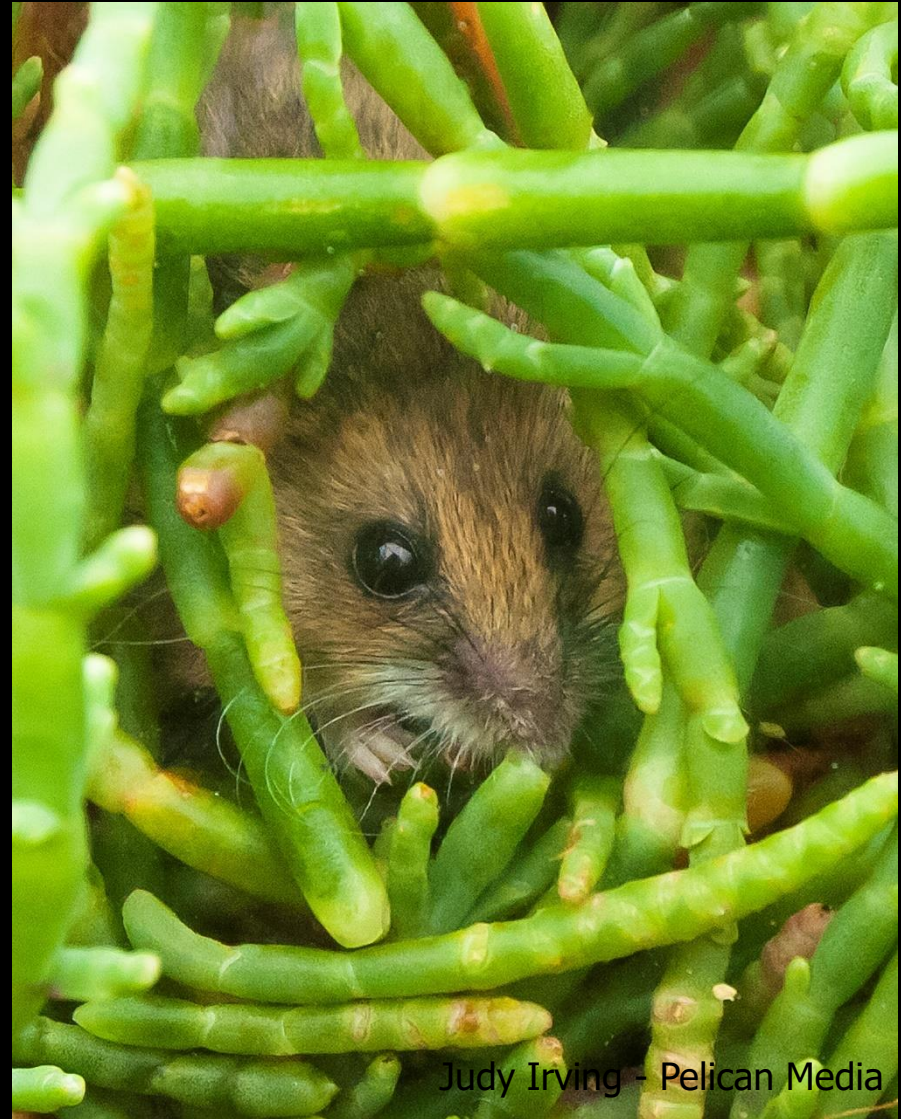




Callie Bowdish



## Habitat Restoration



Judy Irving - Pelican Media



# Flood Risk Management

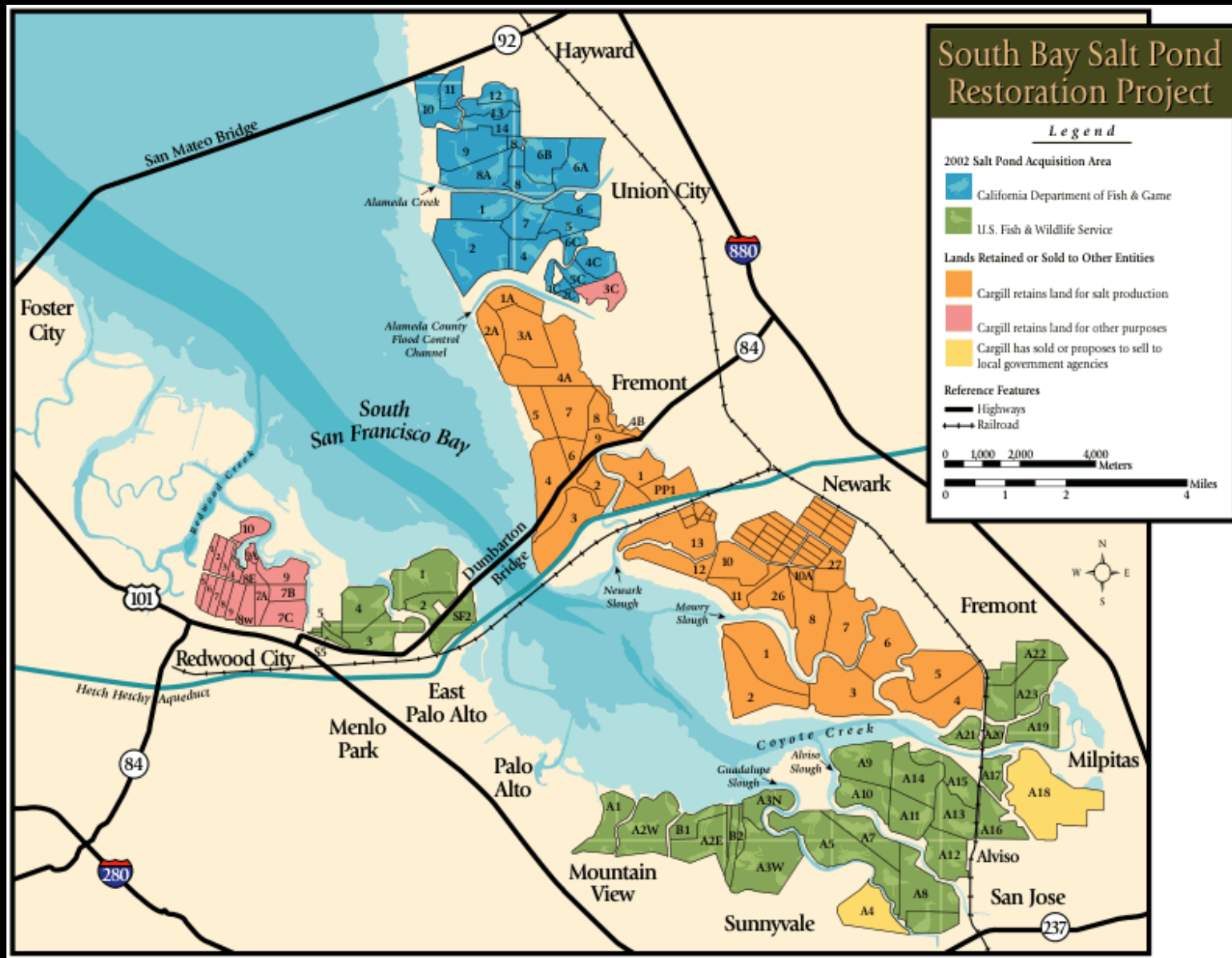




# Public Access and Recreation

Jack Morris

# SBSP Restoration Project





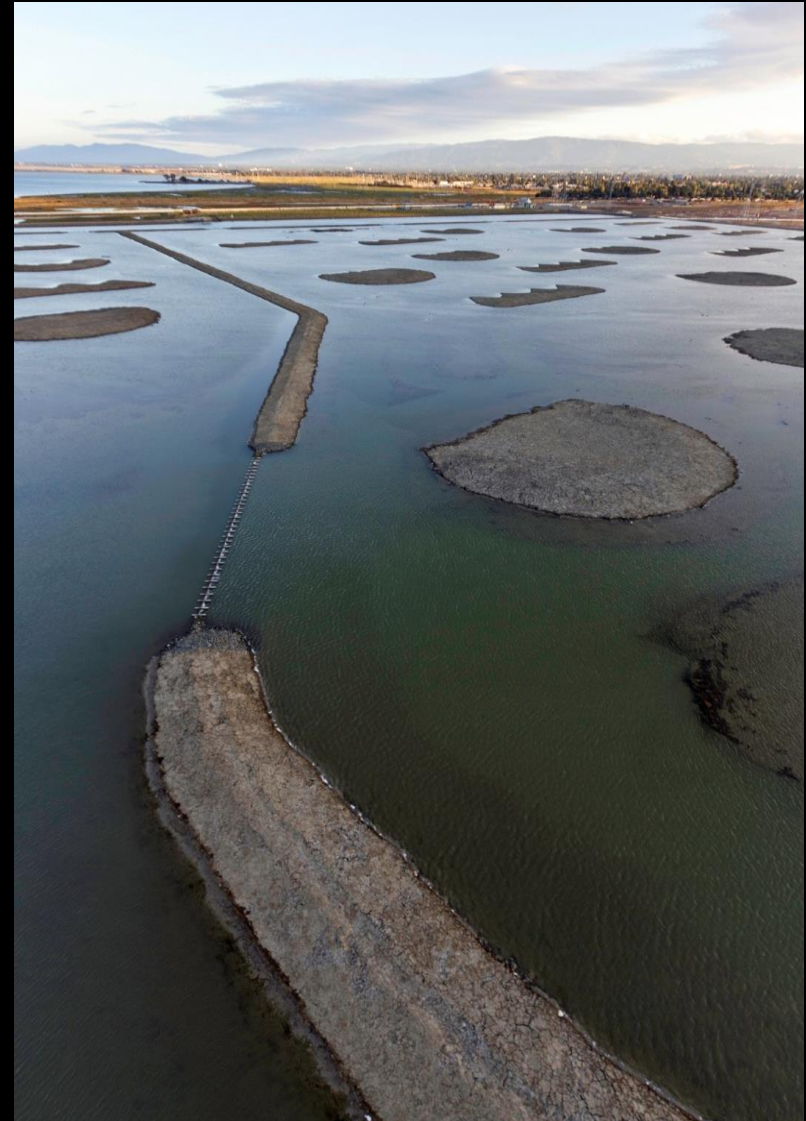
# Phase 1 Outcomes



**1,600 acres tidal restoration**  
**1,440 acres muted tidal**

# Phase 1 Outcomes

**710 acres reconfigured  
managed ponds**



# Phase 1 Outcomes



**7 miles of new trails**

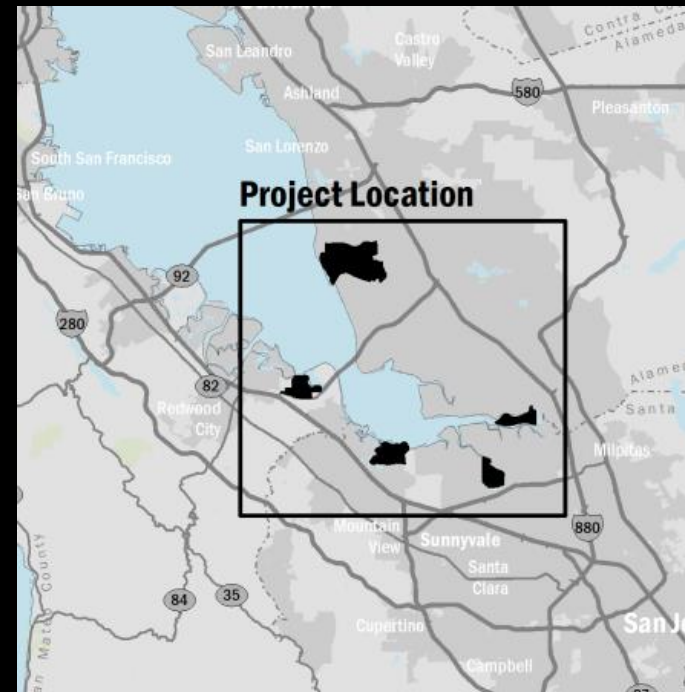
**Viewing platforms**

**Kayak launch**



# Phase 2 Project Areas

- **Refuge – 4 locations**
  - **Alviso - Island Ponds**
  - **Alviso - A8 Ponds**
  - **Alviso – Mtn View Ponds**
  - **Ravenswood Ponds**
- **Eden Landing**
  - **Entire southern half**





# South Bay Salt Pond Restoration Project

*Restoring the Wild Heart of the South Bay*

**2002 Salt Pond Acquisition Area**

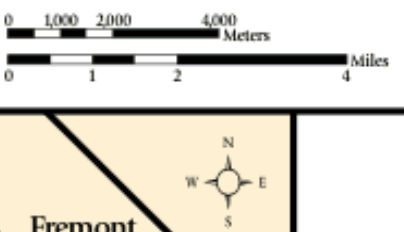
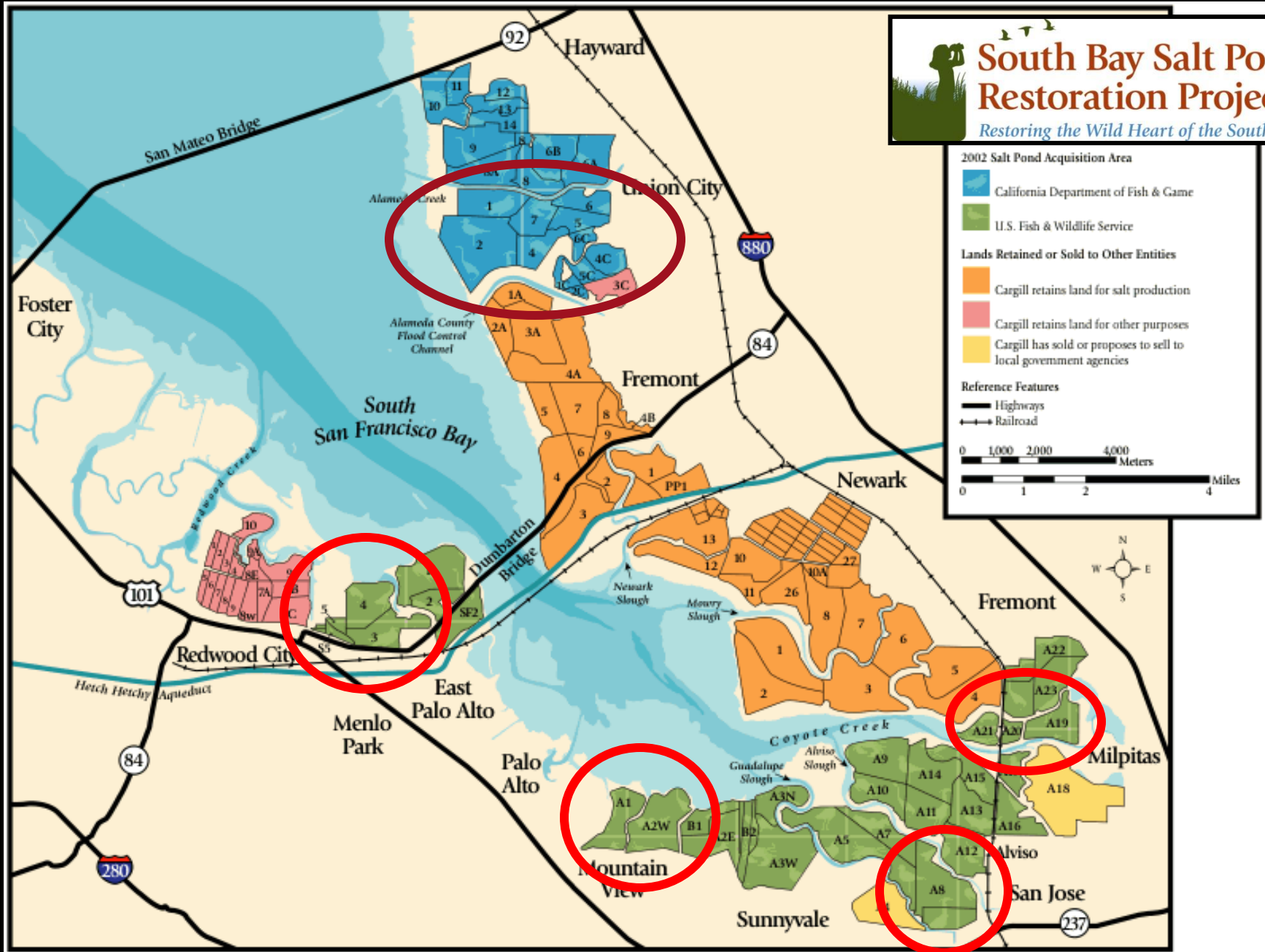
- California Department of Fish & Game
- U.S. Fish & Wildlife Service

**Lands Retained or Sold to Other Entities**

- Cargill retains land for salt production
- Cargill retains land for other purposes
- Cargill has sold or proposes to sell to local government agencies

**Reference Features**

- Highways
- Railroad

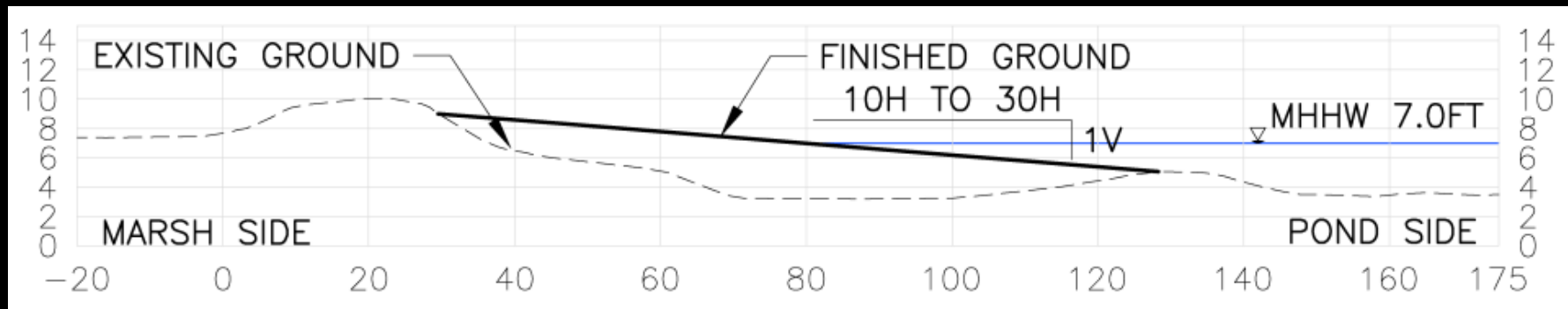
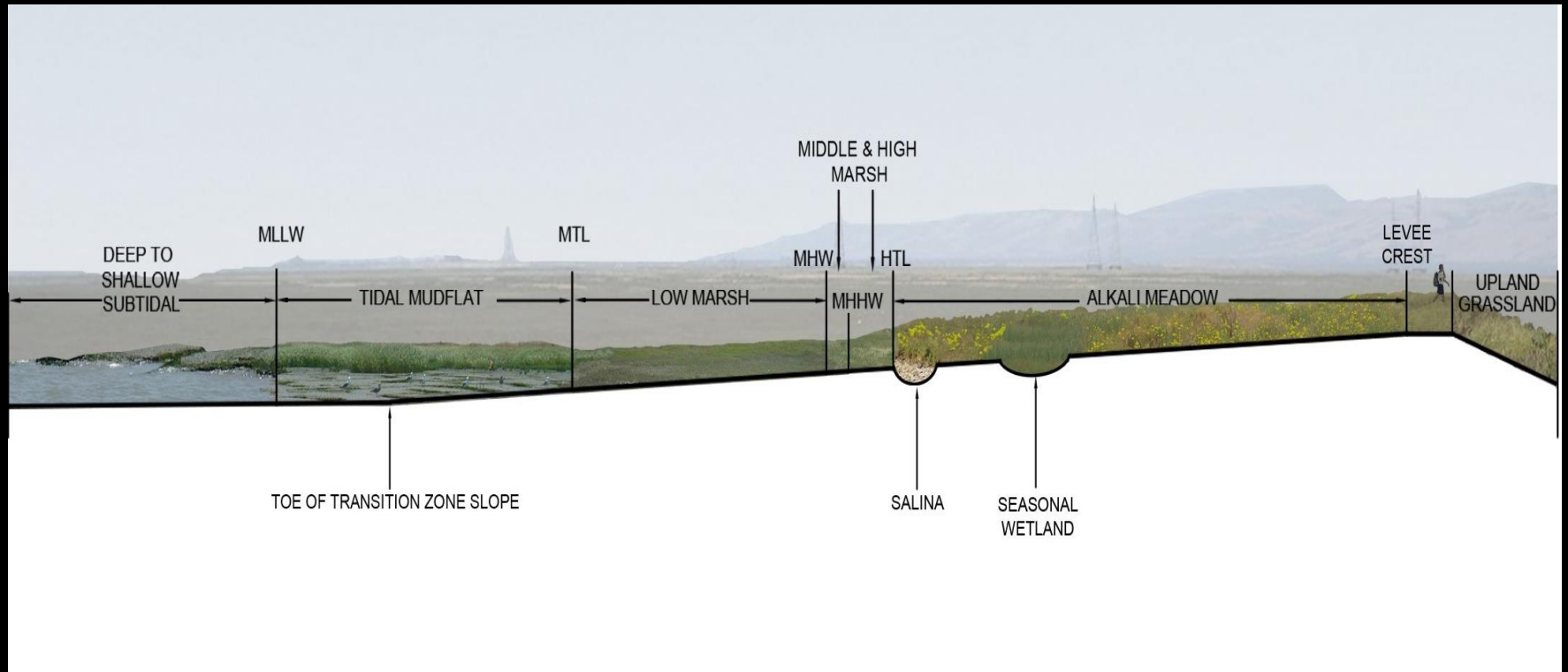
# Island Ponds – Complete



# A8 Ponds – Ongoing

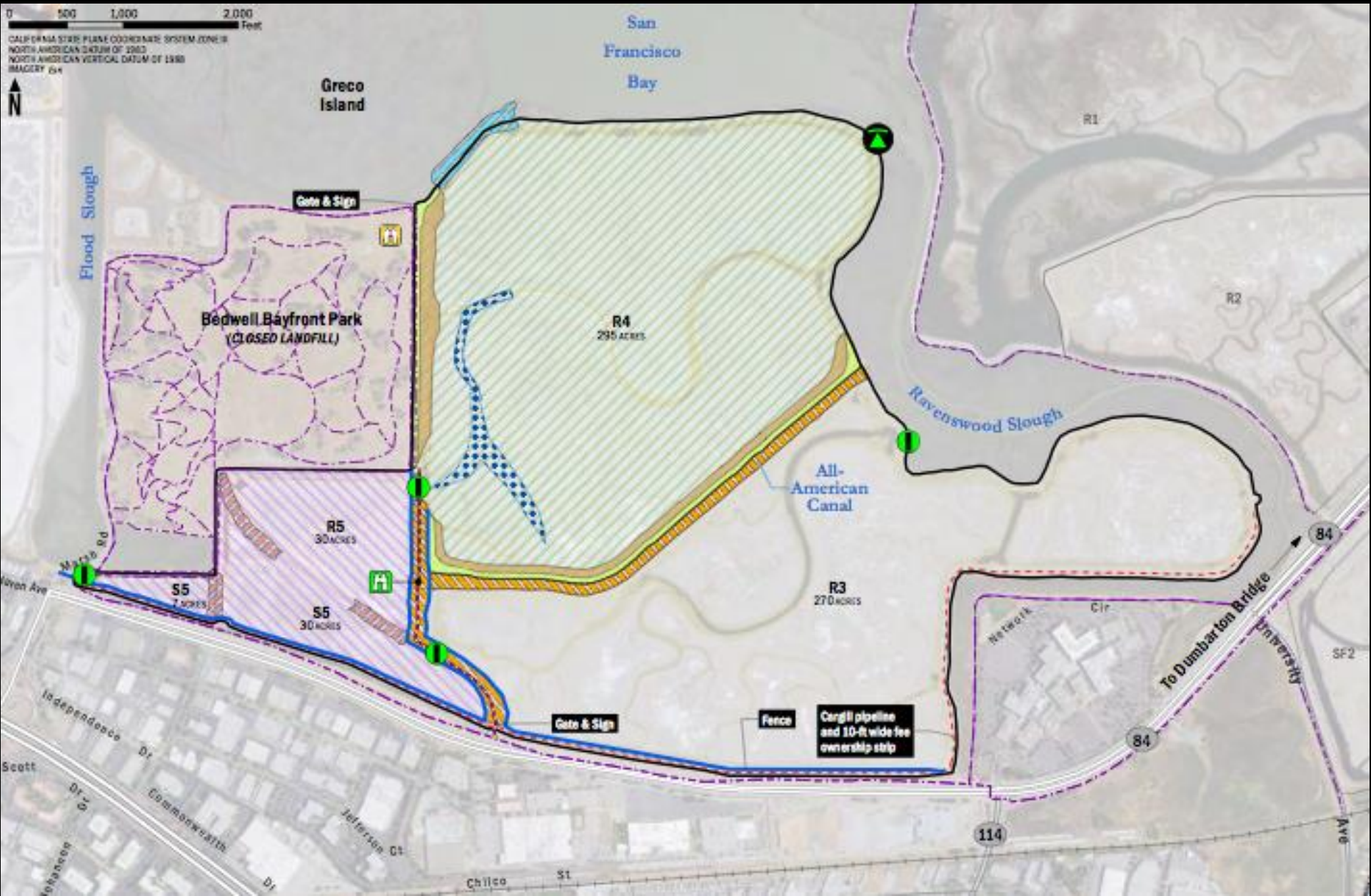


# Habitat Transition Zones





# Ravenswood – Underway

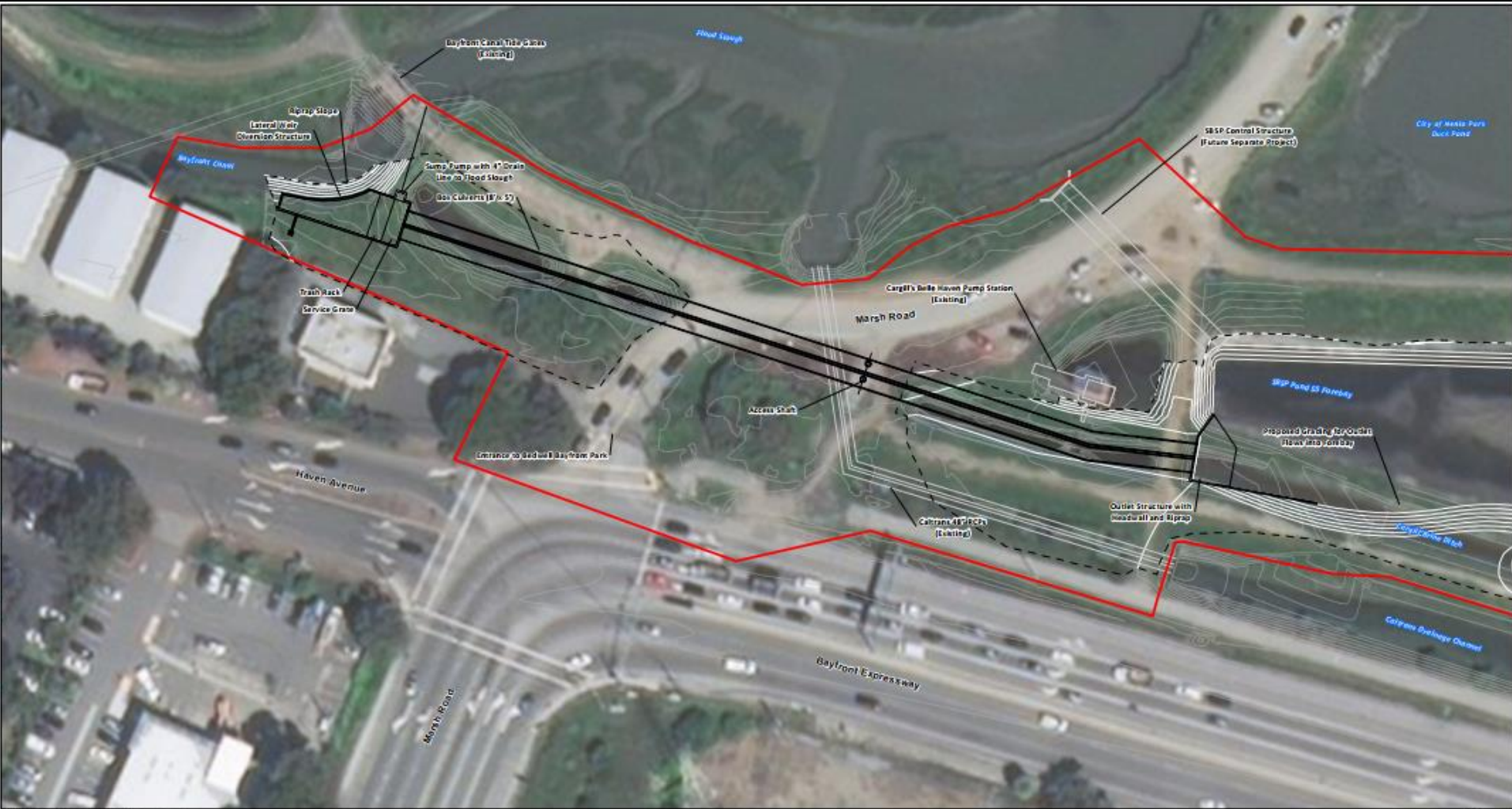


# Phase 2 at Ravenswood

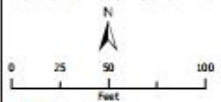
- **Imported over 130,000 cubic yards**
- **Water control structures installed**
- **Much Phase 2 earthwork completed**
- **Import, earthwork, public access, breach – in 2022**

***ALSO: Bayfront Canal & Atherton Channel Project construction complete***

# Bayfront Canal & Atherton Channel



Source: Sources: Sources: 314, DigitalGlobe, GeoEye, Earthstar, GeoEye, CNR, 2006, 2007, 2008, 2009, 2010, 2011, and the USGS



- Project Limits
- Proposed Project Structures
- Limits of Grading

Figure 4  
Conceptual Site Plan - Bypass Culverts

# Mtn View Ponds

0 500 1,000 2,000 Feet

CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE III  
NORTH AMERICAN DATUM OF 1983  
NORTH AMERICAN VERTICAL DATUM OF 1988  
IMAGERY ©H



Palo Alto  
Flood Basin

Charleston  
Slough  
115 acres

Coast Casey  
Forebay

Sailing  
Lake

Permanent  
Creek

Mountain  
View  
Marsh

Mountain View  
Shoreline Park  
(CLOSED LANDFILL)

Golf  
Course

Blvd

Stevens  
Creek  
Marsh

Creek

San  
Francisco  
Bay

Construct new PG&E  
access boardwalk

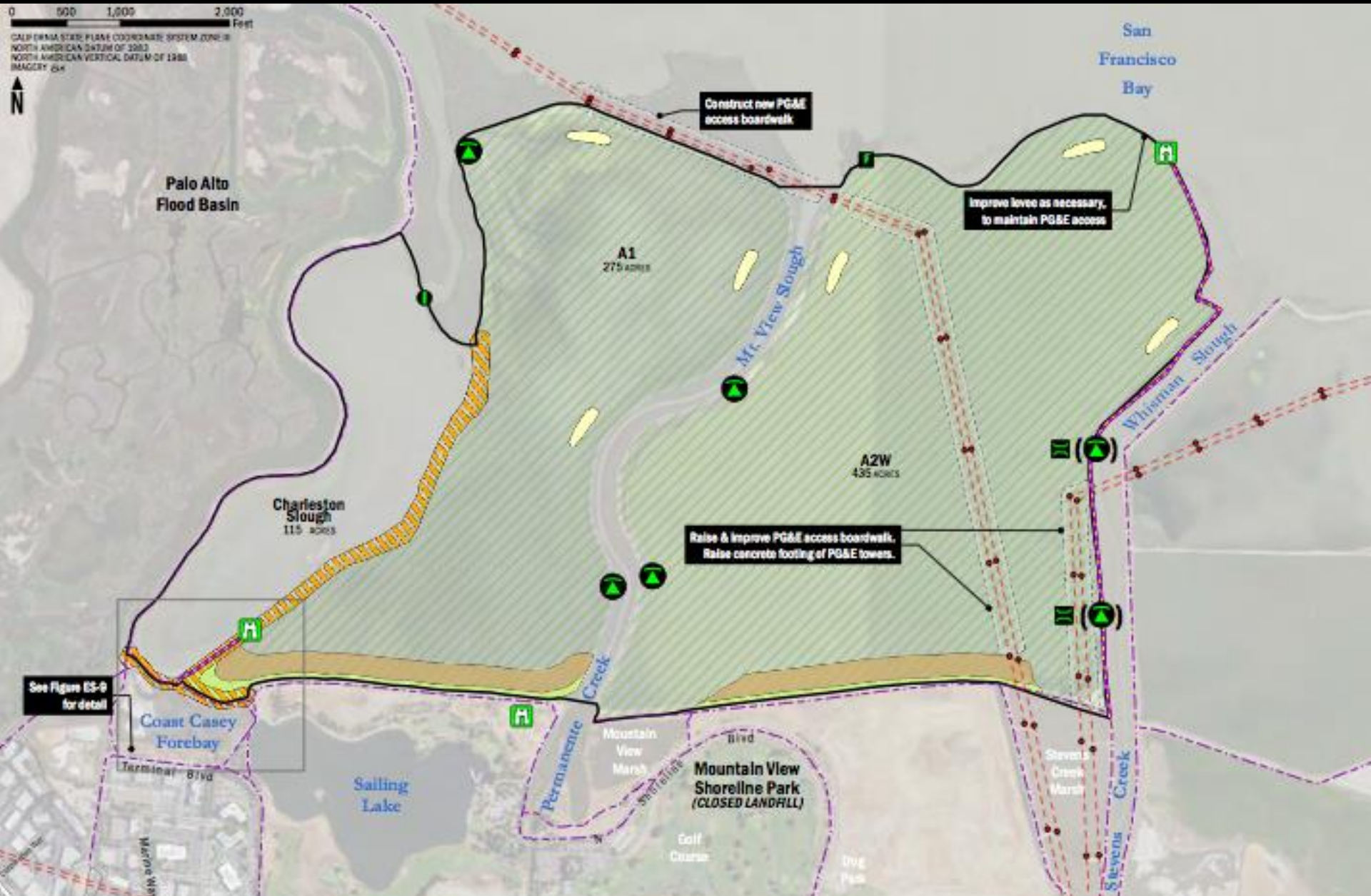
Improve levee as necessary,  
to maintain PG&E access

A1  
275 acres

A2W  
435 acres

Raise & improve PG&E access boardwalk.  
Raise concrete footing of PG&E towers.

See Figure ES-9  
for detail



# Phase 2 at Mountain View

- **Addressed City concerns**
- **Pond A2W first; Pond A1 to follow**
- **Easement agreements in progress**
- **Import began in March; 20% done**
- **Full import & construction: 2022/23**

# Phase 2 at Eden Landing



# Phase 2 at Eden Landing

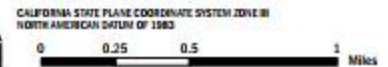
- **2,200 acres total**
  - **1,400 acres tidal marsh**
  - **800 acres enhanced ponds & muted tidal**
- **Enhancing 3 rows of berms**
- **Bay Trail spine thru Eden Landing**
- **Includes gravel beach pilot project**
- **Separating permitting & construction into 2 'stages'**

# Stage A of Phase 2



Proposed Design - South Bay Salt Pond Restoration Project, Eden Landing Phase 2

Project Location: Alameda County  
Aerial Imagery: NAIP 2018 Aerial Imagery





# Phase 2 at Eden Landing

- **Design at 60%**
- **Permit apps all submitted**
  - **Expect issuance in fall 2022**
- **Alameda Co. Flood Control District**
  - **Prop 68 grant for modeling, design, and joint project work**
  - **Addressing District concerns**

# Related Updates

- **Modifying QAPP to allow more reuse of upland material**
- **Expanded material provider market**
- **Outside projects and fundraising**
  - **A8 – Creeks connections w/ Valley Water**
  - **SAFER Bay**
  - **South Bay Shoreline**