South Bay Salt Pond Restoration Project

Restoring the Wild Heart of the South Bay

Stakeholder Forum Meeting, 28 October 2010, 1-4 p.m.

Today's Agenda

- Introductions and Welcome
- Track Our Progress: Highlights of 2010
  - Project Management & Funding
  - Phase 1 Construction
  - Science Program Update
- Looking Ahead: Preliminary Phase 2 concepts
- South San Francisco Bay Shoreline Study Update

Tracking Our Progress
2010

Project Management & Funding

Project Funding

- Federal funds
  - Appropriations
  - Grants
- Mitigation/penalty funds
- Local funds
- State funds (bonds)

Federal Funds - Appropriations

- USFWS appropriations for construction
  - $4.9 million FY 08
  - $4 million FY 09
  - $2.5 million FY 10
- USGS appropriations for science
  - $0.5 million FY 08
  - $0.5 million FY 09
  - $1.0 million FY 10

Federal Funds - Grants

- NOAA-ARRA
  - $1.6 million – Pond A6
  - $1.0 million – Pond A8
  - $3.2 million – Ponds E8A/9/8X
  - $1.6 million – Invasive *Spartina* Control
- USFWS-NCWC
  - $1.0 million – Ponds E8A/9/8X
- USEPA/SFEP
  - $0.4 million – Applied Studies

Mitigation/Penalty Funds

- $1.1 million Caltrans Ravenswood Pier
- $0.49 million Menlo Park Bay Account
- $0.58 million NFWF (Leopard Shark)

Local Funds

- Santa Clara Valley Water District
  - Pond A8
  - South Bay Shoreline Study
- Alameda County Flood Control District
  - Ponds E8A/9/8X

Santa Clara Valley Water District SM

ALAMEDA COUNTY
Flood Control & Water Conservation DISTRICT

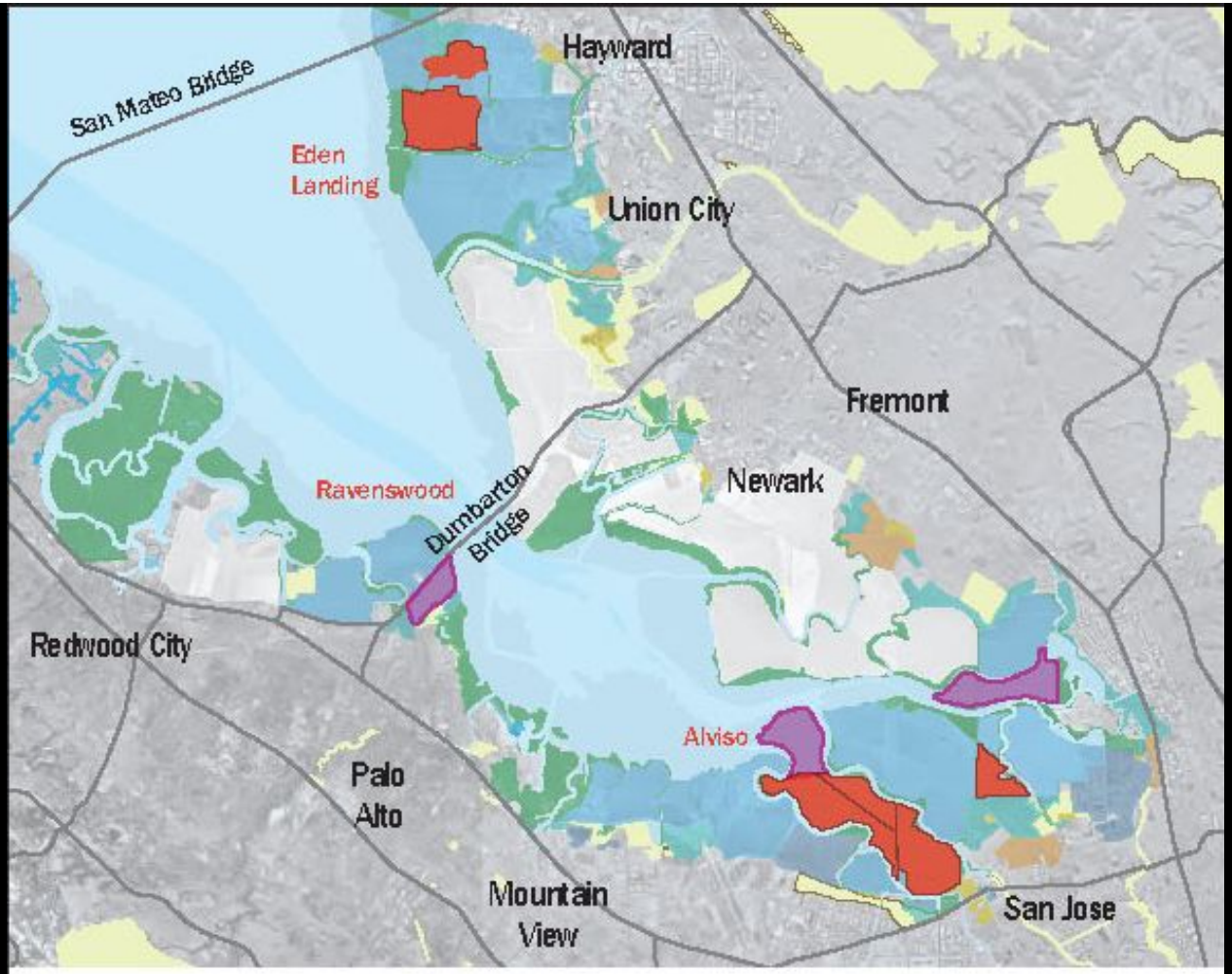
State Funds

- Coastal Conservancy
  - Design and public participation contracts
  - $1.5 million – Pond SF2 => Ponds E8A/9/8X
  - $0.75 million – Applied Studies now
  - $0.75 million – Applied Studies future
- Wildlife Conservation Board
  - $10 million – Restoration future

WCB
State of California
Wildlife Conservation Board

Coastal
Conservancy

Tracking Our Progress: Project-wide Phase 1 Construction



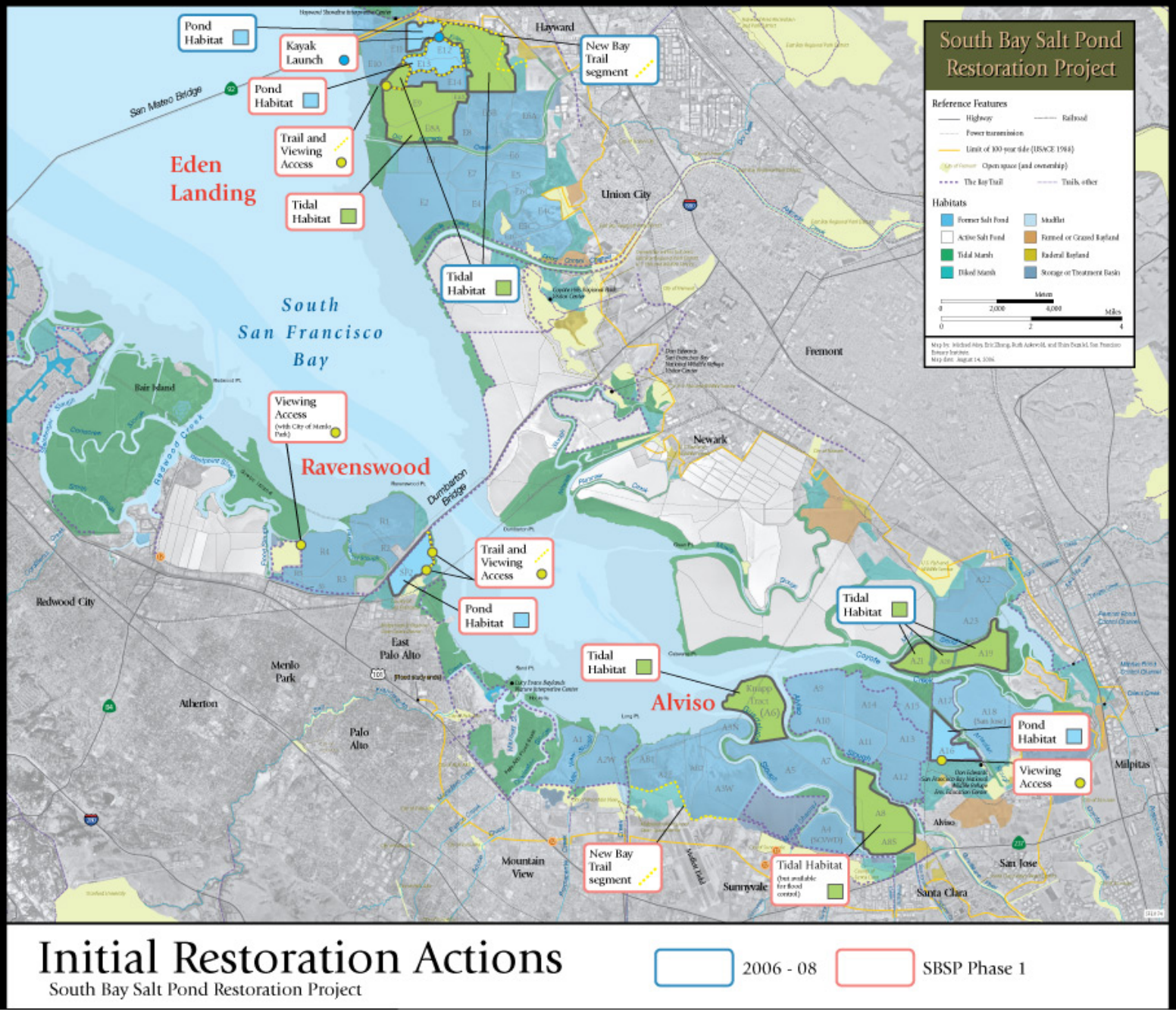
Habitats

- Former Salt Pond
- Active Salt Pond
- Tidal Marsh
- Diked Marsh
- Mudflat
- Farmed or Grazed Bayland
- Ruderal Bayland
- Storage or Treatment Basin
- Parks and Open Space
- Highway
- Areas restored to pond or tidal habitat 2006-2010
- Areas to be restored 2011-2014

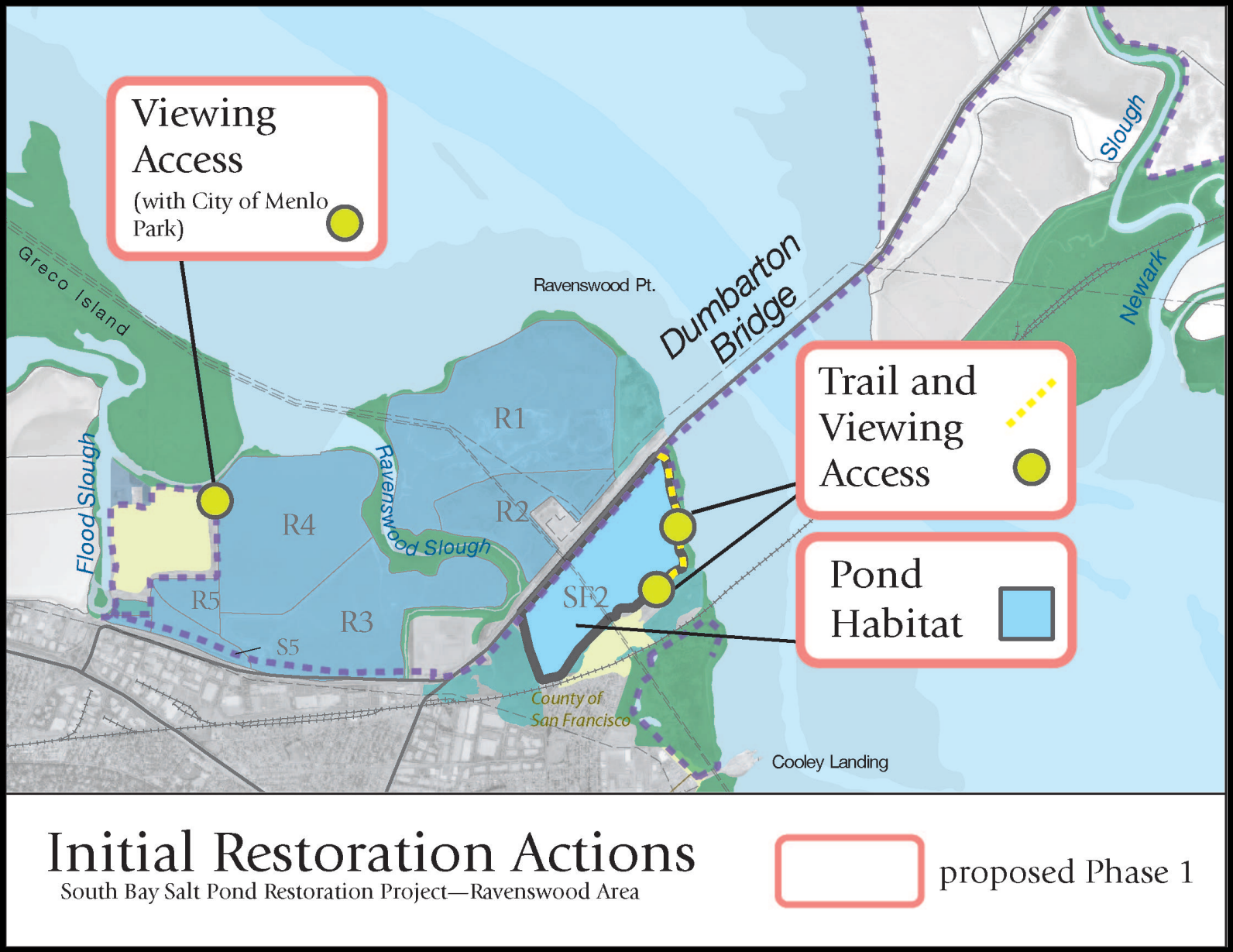
Miles

0 2 4

Tracking our Progress: Phase One Actions

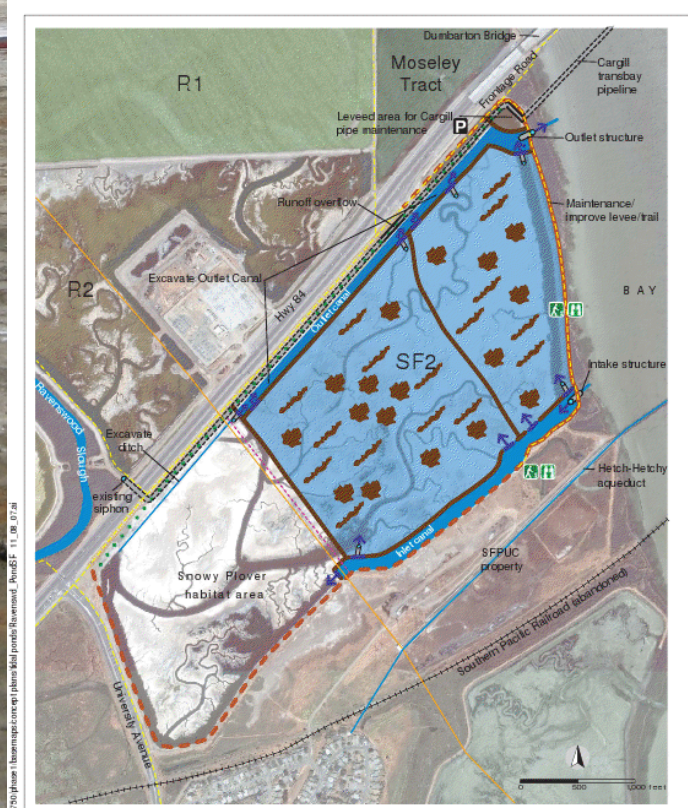


PHASE ONE: RAVENSWOOD PONDS



Pond SF2

Proposed: Managed pond reconfiguration with nesting islands



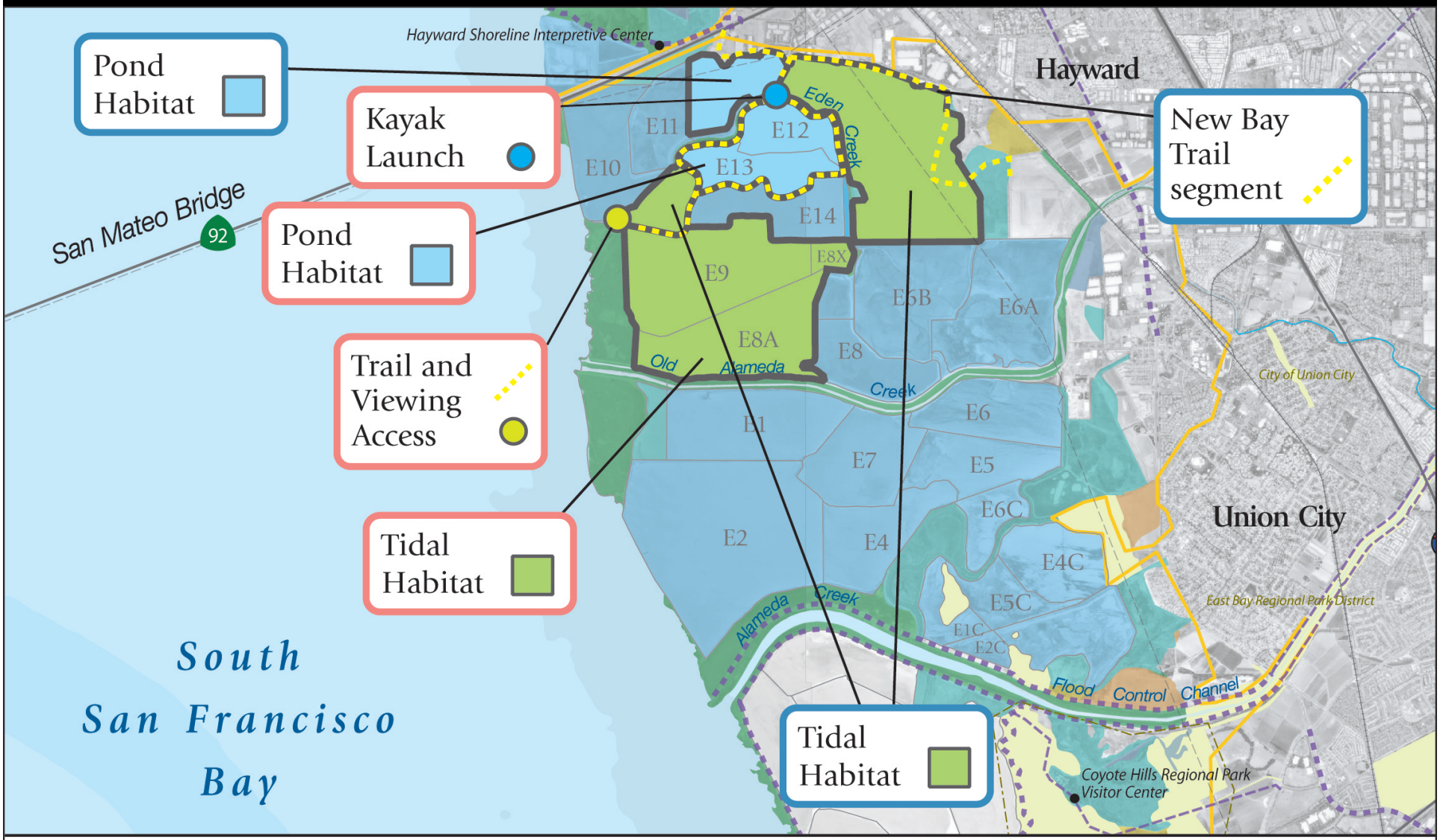
Construction

Status: Construction complete.
Opened on September 7, 2010

Photo Credits: Chris Benton & Judy Irving

Bedwell Bayfront Park:
interpretive signage
installed summer, 2010

PHASE ONE: EDEN LANDING



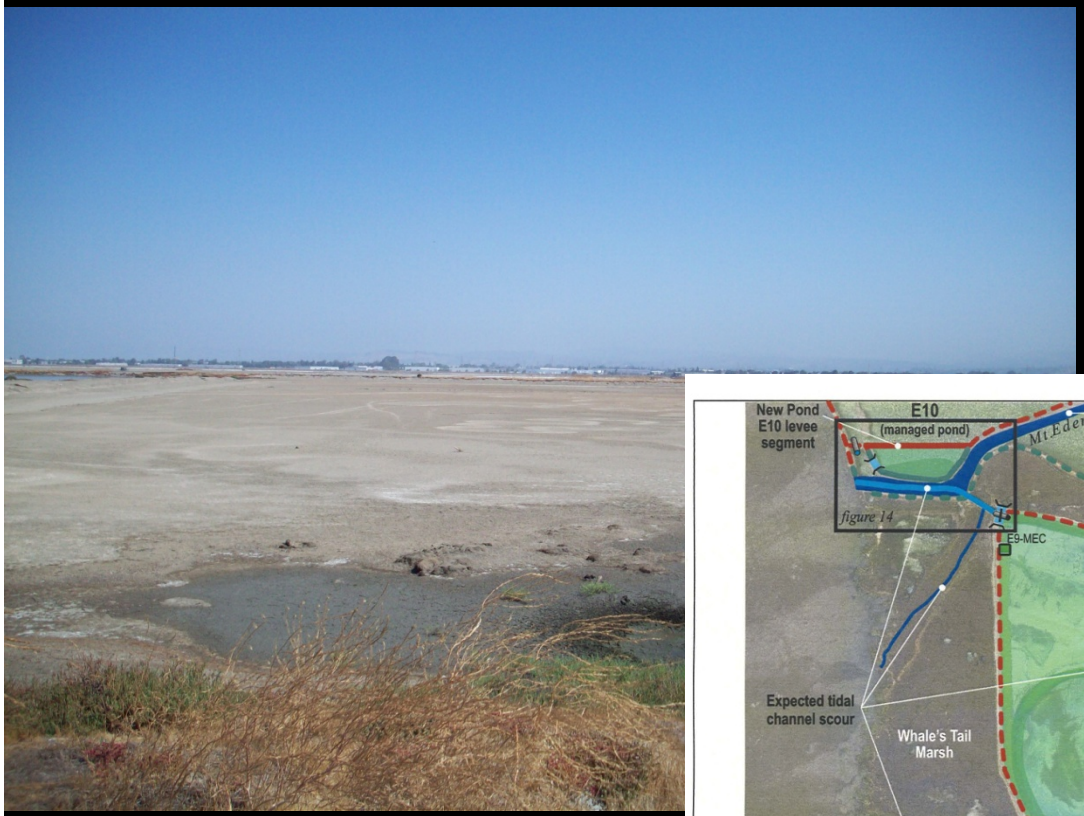
Initial Restoration Actions

South Bay Salt Pond Restoration Project—Eden Landing Area

2006 - 08

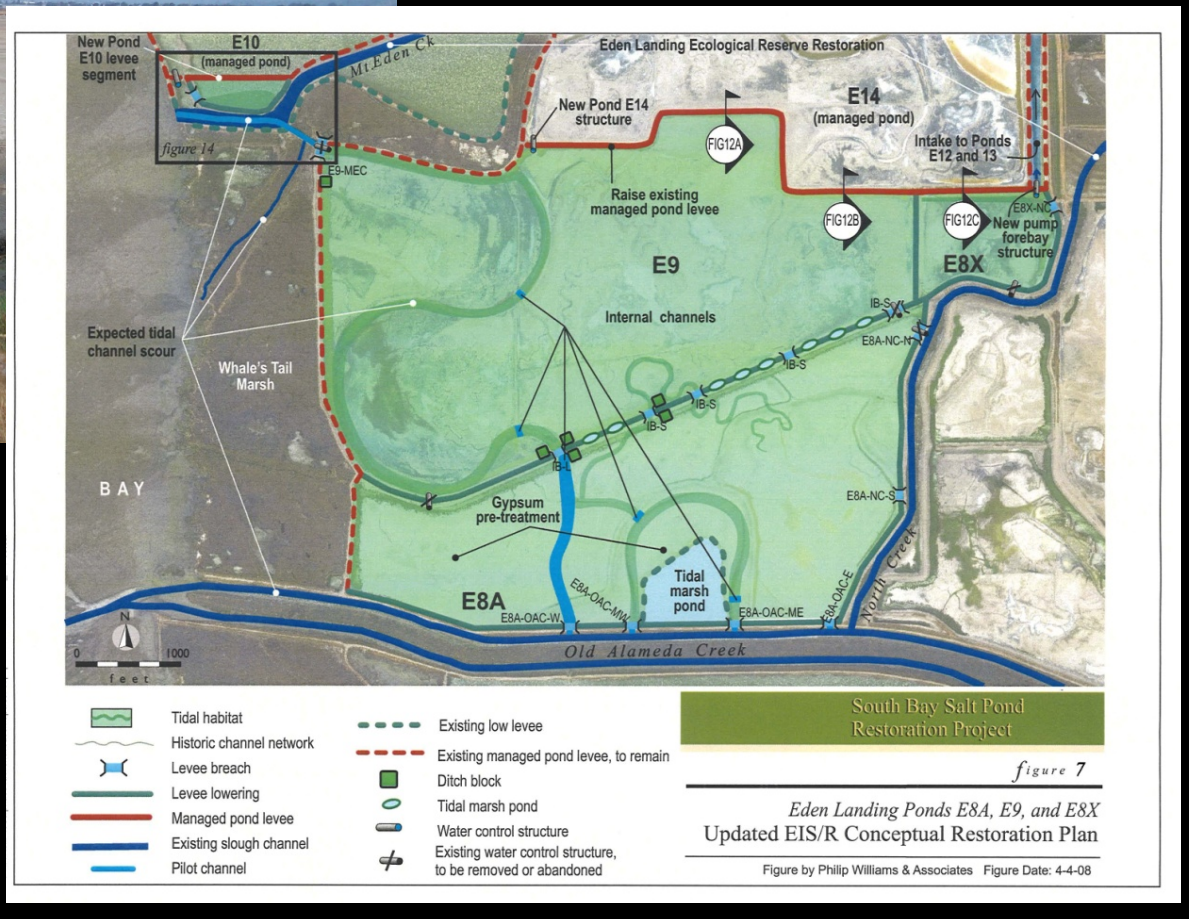
SBSP Phase 1

PHASE ONE: EDEN LANDING



Ponds E8A/E9/E8X

Proposed: Tidal Marsh (630 acres)



Ponds E8A/E9/E8X

Status:
Under construction

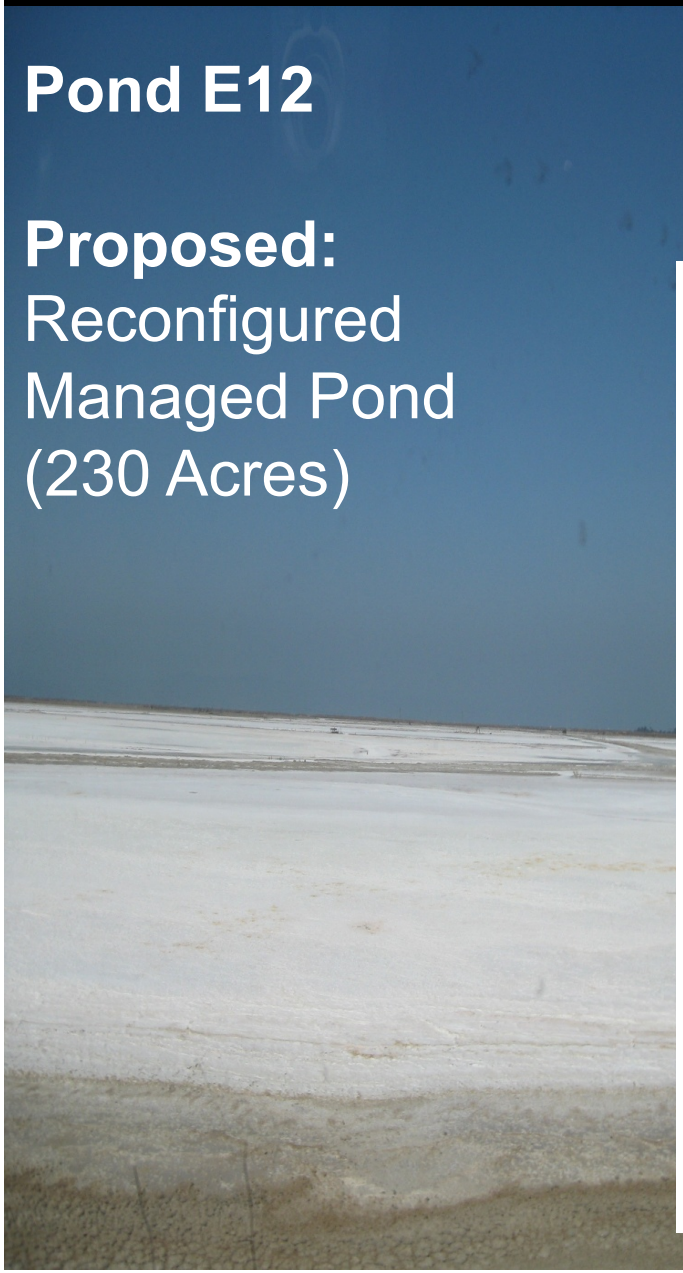
Completion expected
Fall 2011

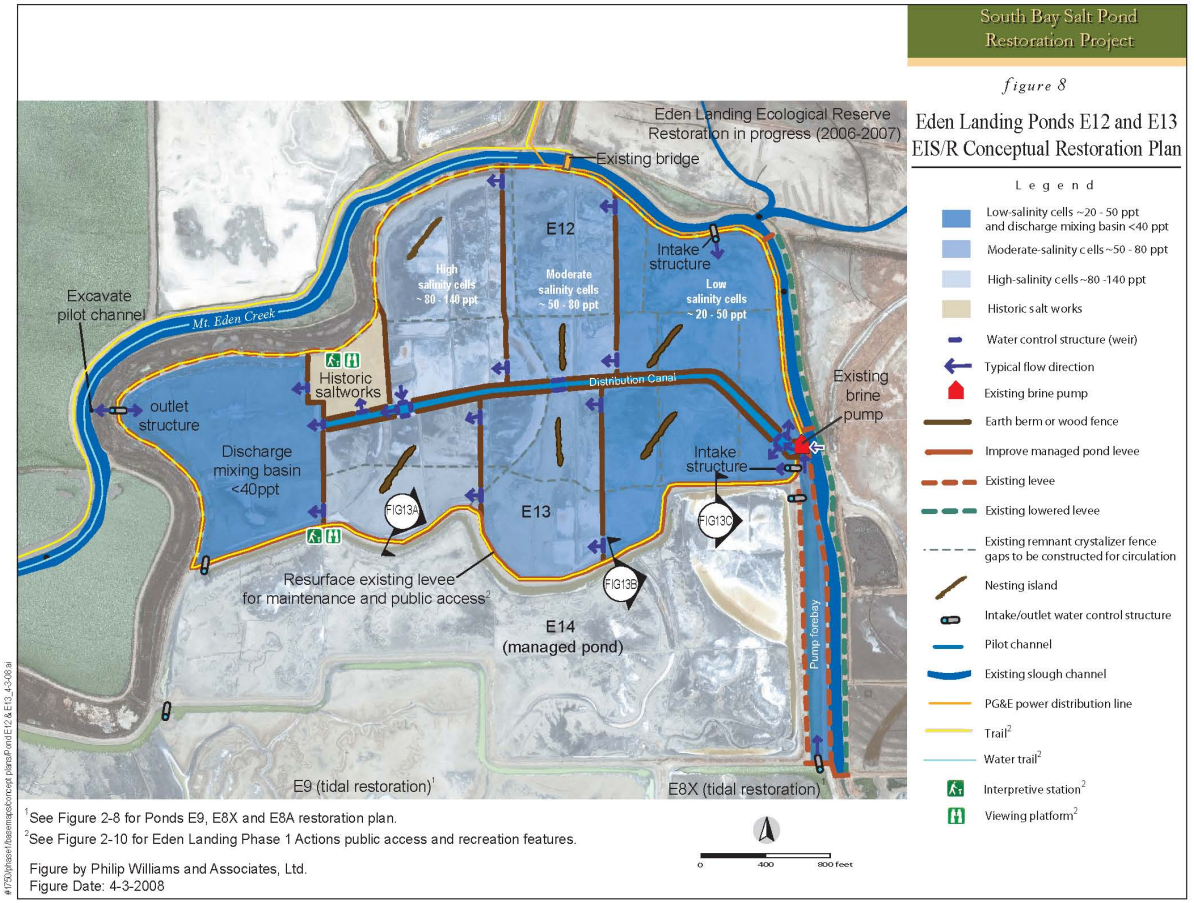
PHASE ONE: EDEN LANDING

Pond E12

Proposed:
Reconfigured Managed Pond (230 Acres)

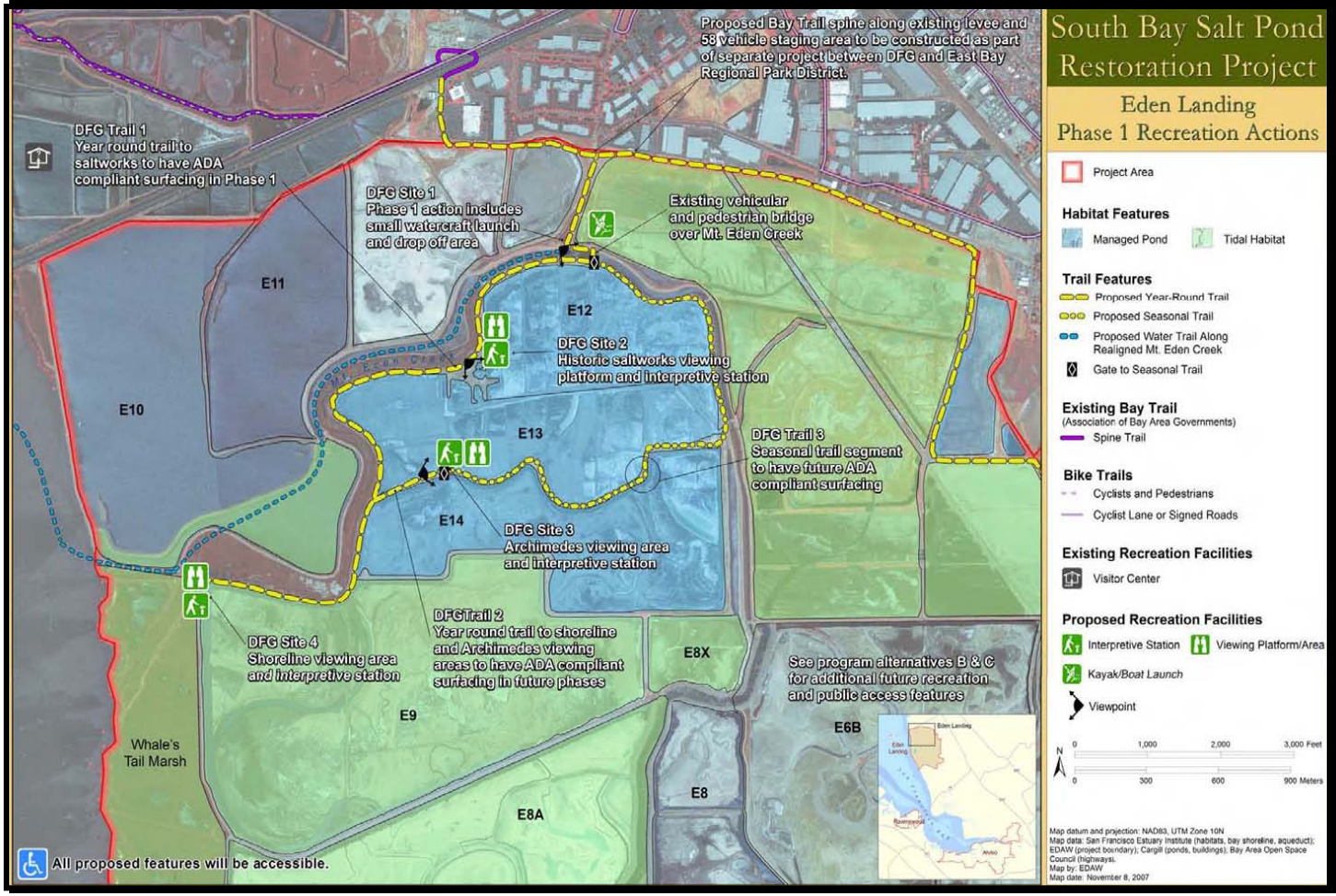
Status: Final design underway, 60% plans by March 2011





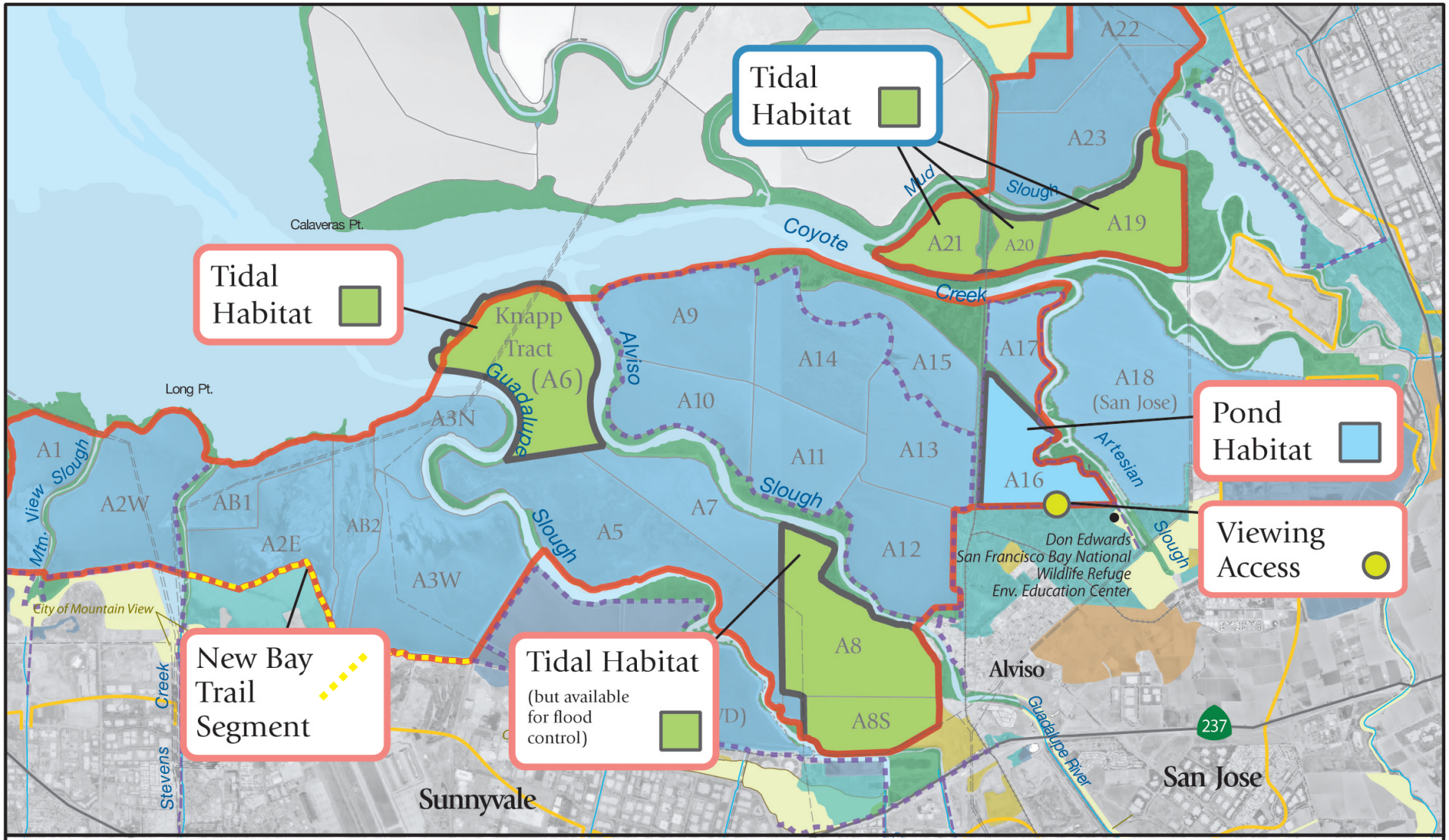
PHASE ONE: EDEN LANDING

Proposed:
3.8 mile trail
Viewing platforms
Kayak launch



Status:
Final designs complete

PHASE ONE: ALVISO



Initial Restoration Actions

South Bay Salt Pond Restoration Project—Alviso Area

2006 - 07

Proposed Phase 1

Ponds A19, 20, 21 (the Island Ponds)

Proposed: Tidal marsh restoration

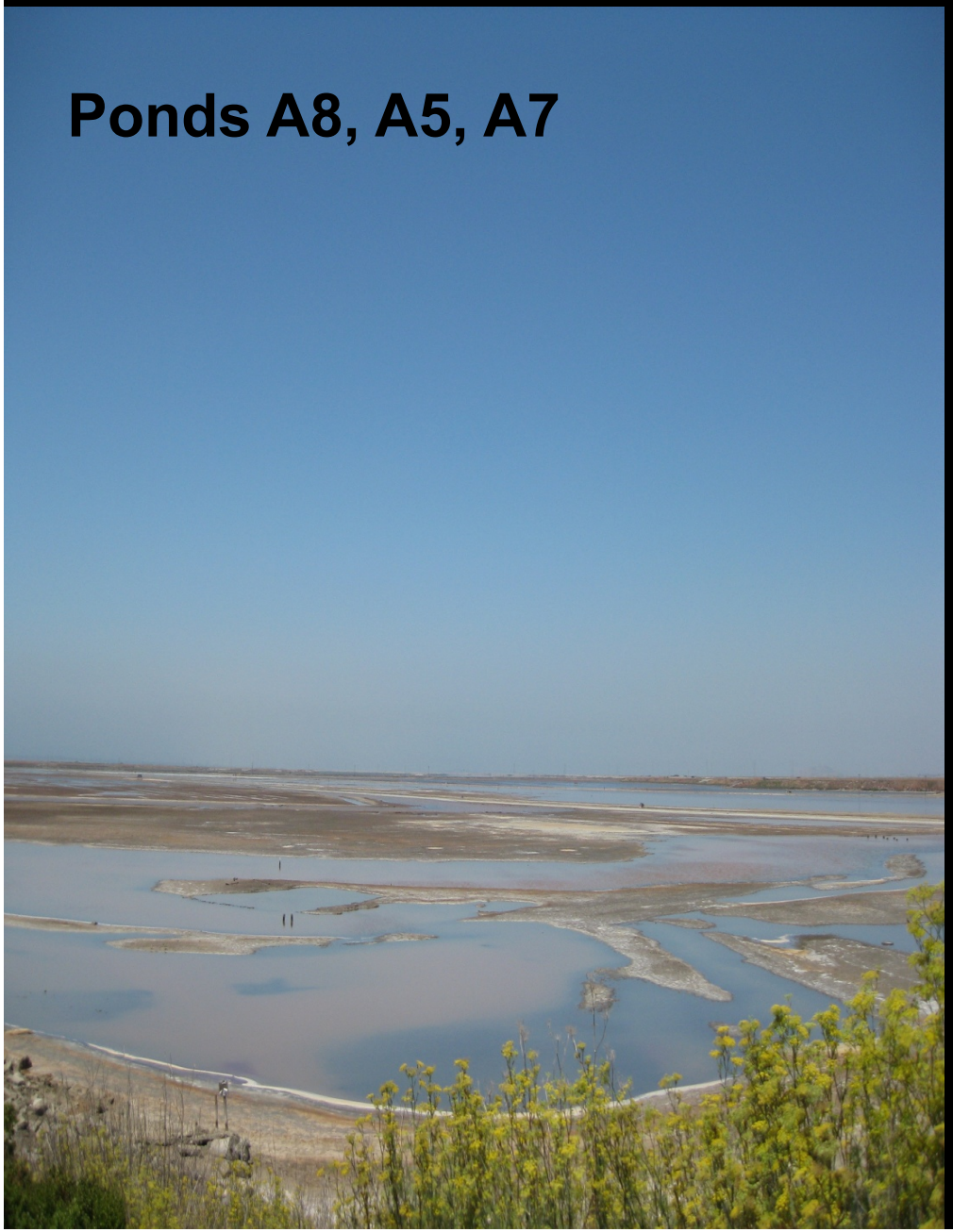
Status: Restored in 2006


April 2007


September 2009
Salt Pond A21

Habitat evolution after restoration

PHASE ONE: ALVISO



Proposed: shallow tidal habitat with new marsh (1400 acres)

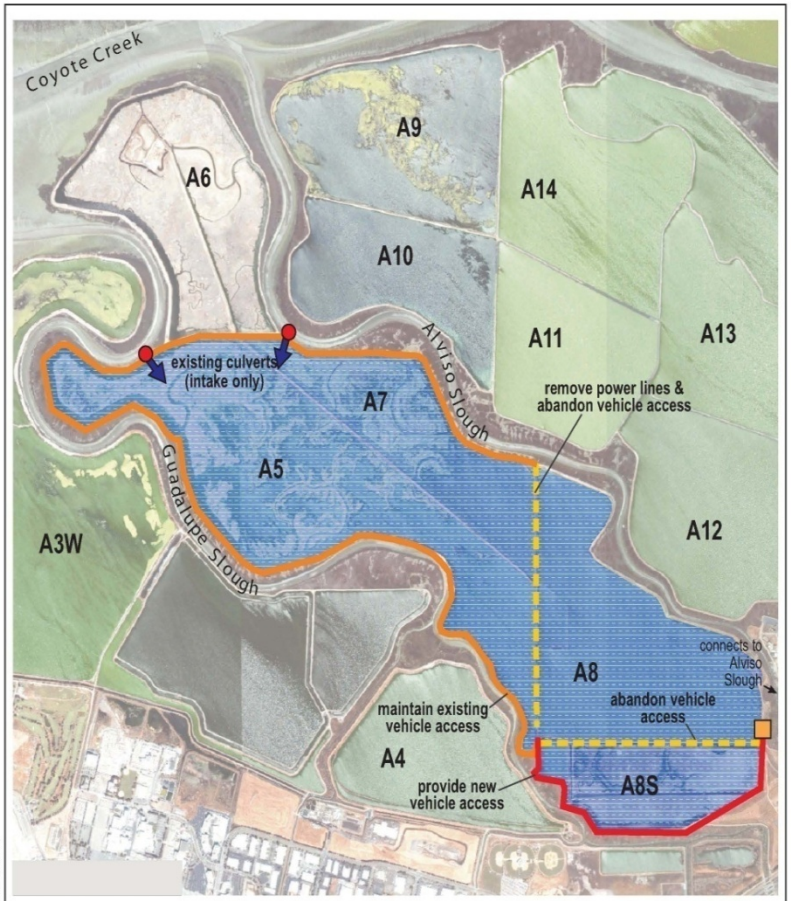


Photo Credit: Chris Benton

Before Construction

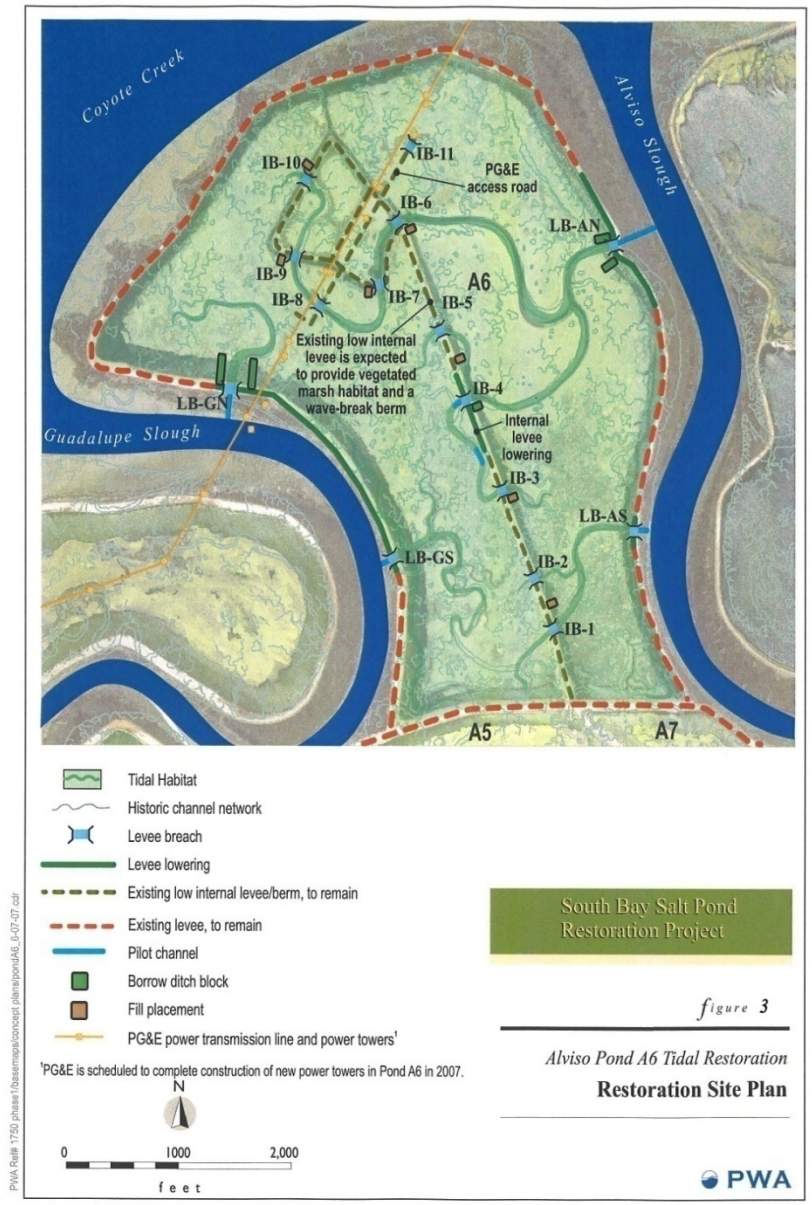
And After

Status: Gates to be opened in Spring 2011

PHASE ONE: ALVISO

Pond A6

Proposed:
Tidal Marsh (330 acres)



Pond A6

Status:
Under construction

To be breached in November 2010

PHASE ONE: ALVISO

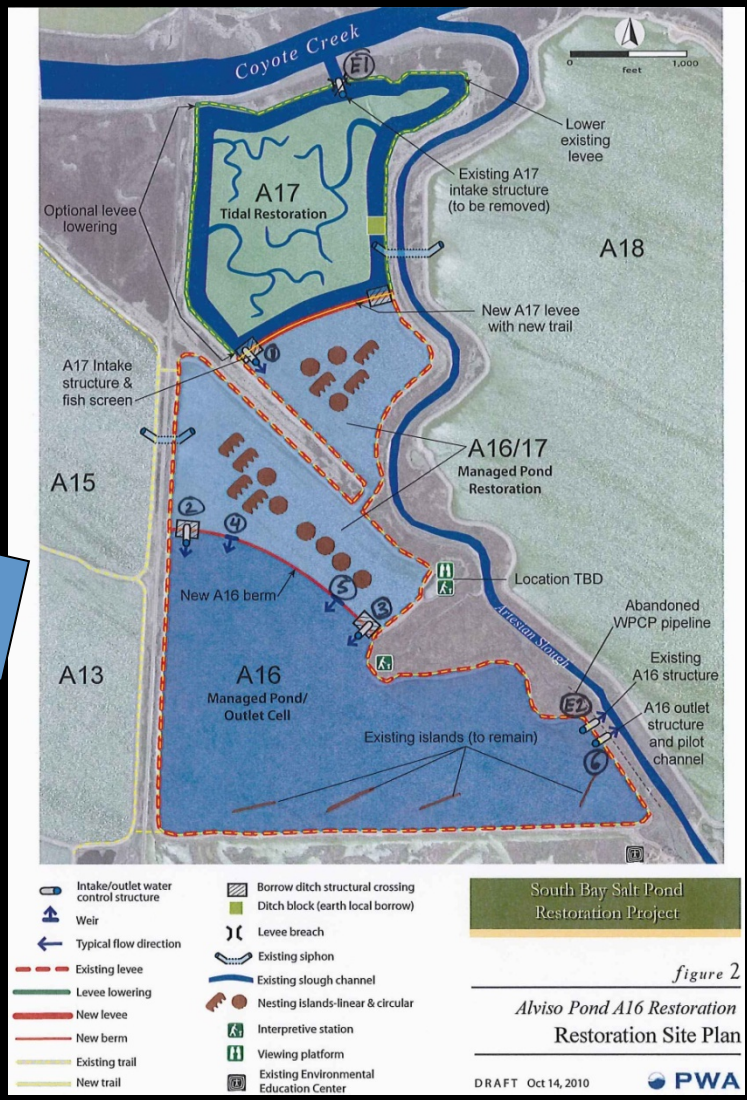
Now Open! 2.4 Mile Moffett Bay Trail Segment

Status: Trail Opened on Monday September 20, 2010

PHASE ONE: ALVISO

Pond A16

Proposed: Reconfigured Ponds with nesting islands (243 acres)

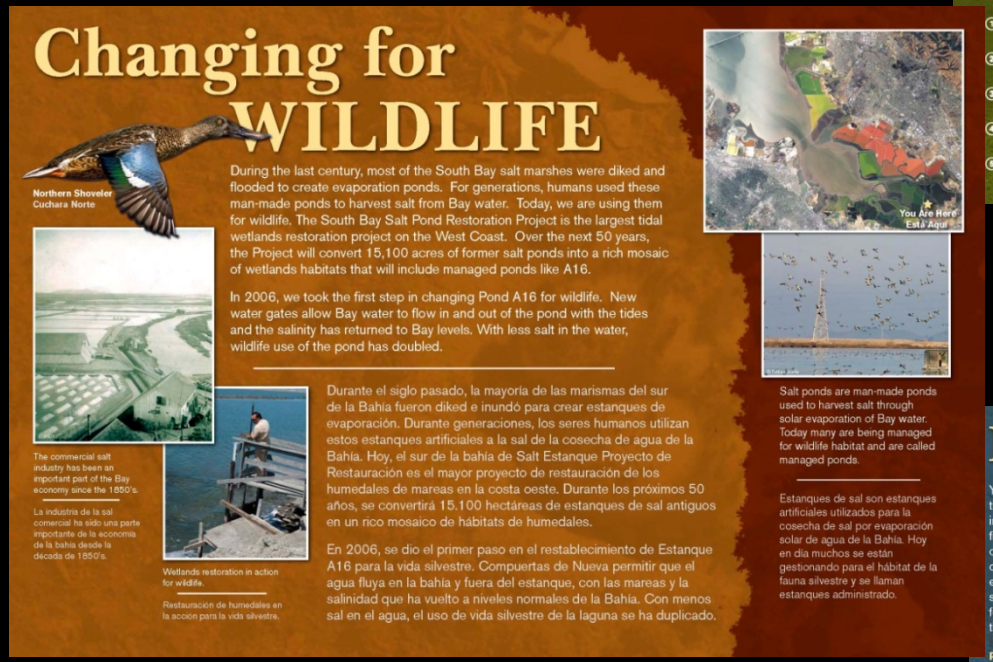


Status: Design modifications underway, 30% plans by February 2011

PHASE ONE: ALVISO

Pond A16

Public Access: Interpretive Signs

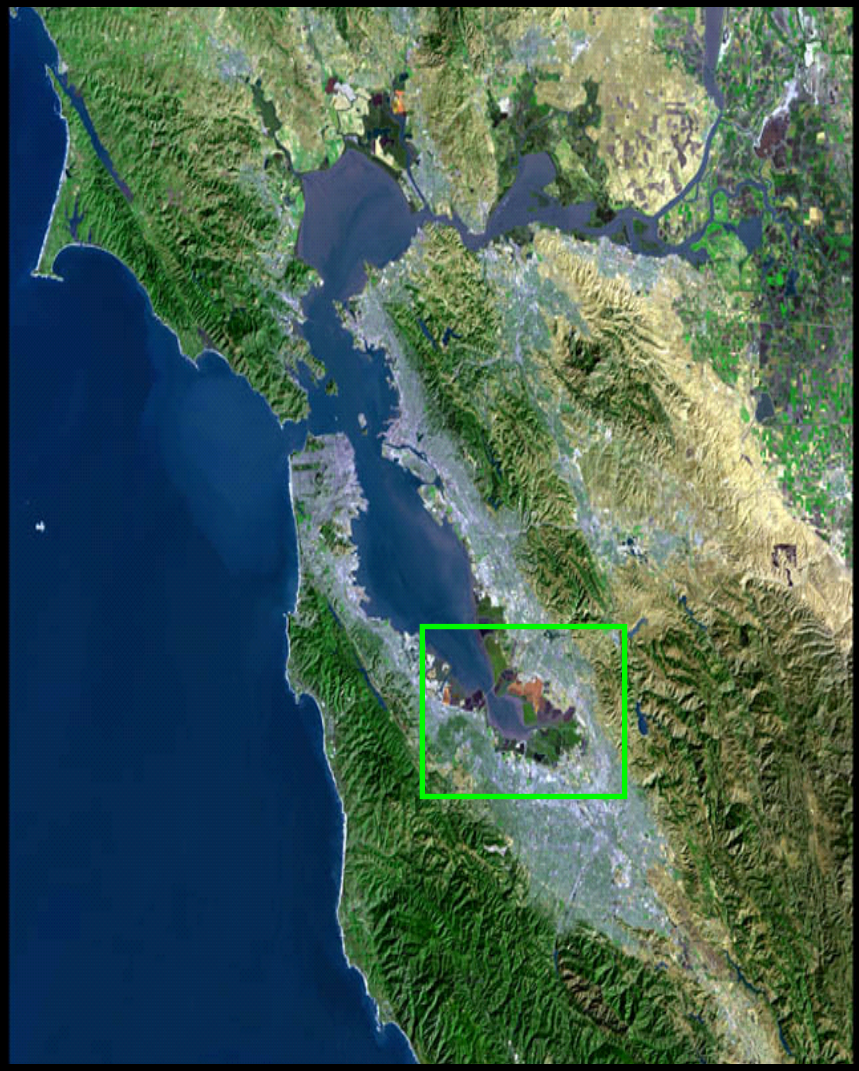


Science Program Update

Laura Valoppi, Lead Scientist

Outline

- Phase 1 Key Uncertainties
- Phase 1 study updates
  - Project wide
  - Alviso
  - Ravenswood
  - Eden Landing

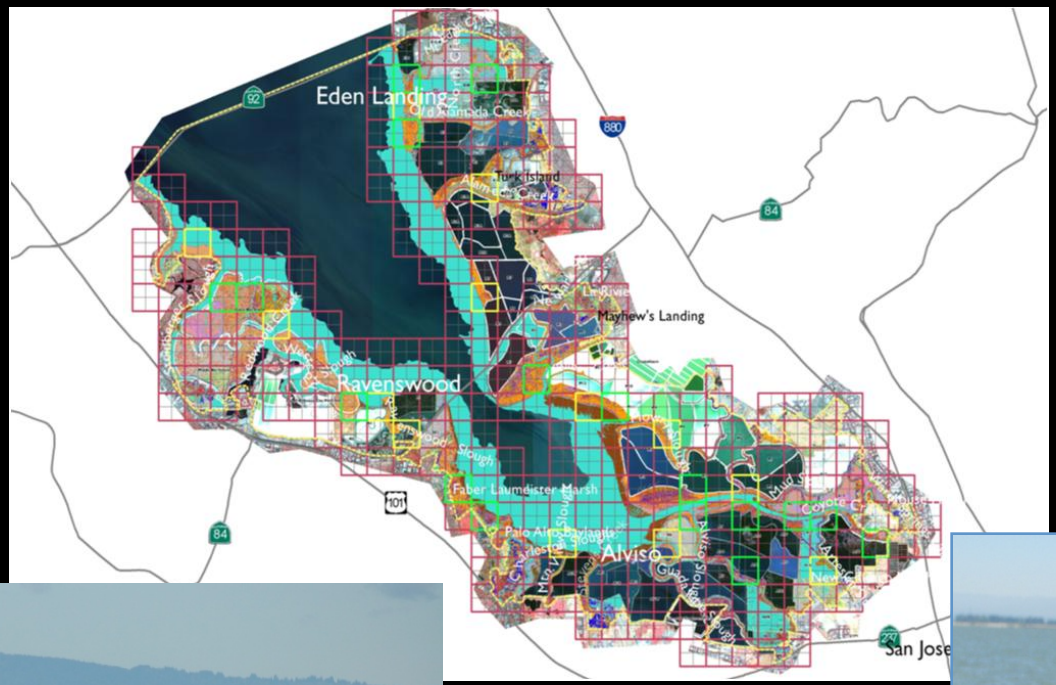


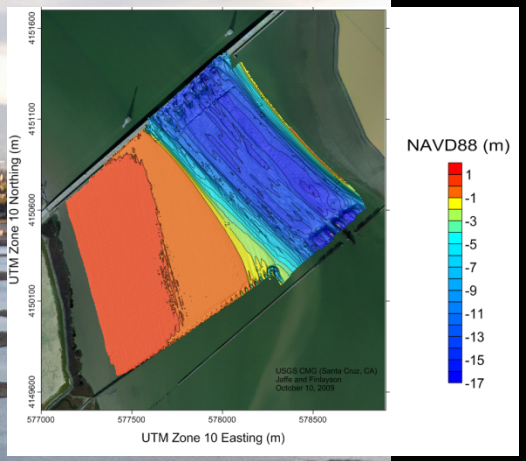
Key uncertainties

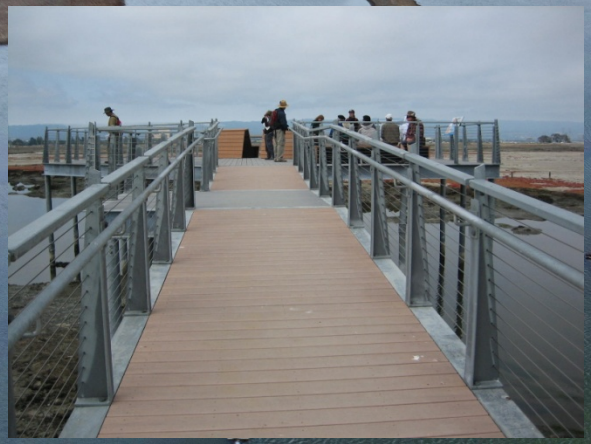
- Wildlife use of changing habitats
- Habitat evolution and sediment dynamics
- Mercury methylation
- Water quality
- Invasive species
- Public access
- Infrastructure support
- Sea level rise and climate change


R. Wilming

Project –wide Studies







Ravenswood Complex

Pond SF2: managed pond reconfiguration

Alviso Complex

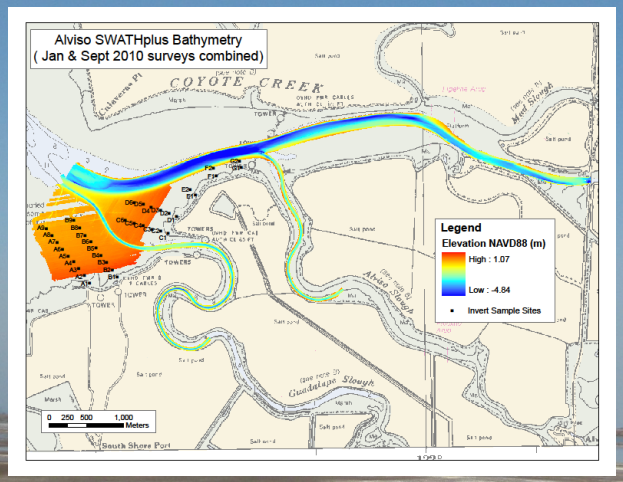
Ponds A19, 20, 21:
tidal marsh restoration

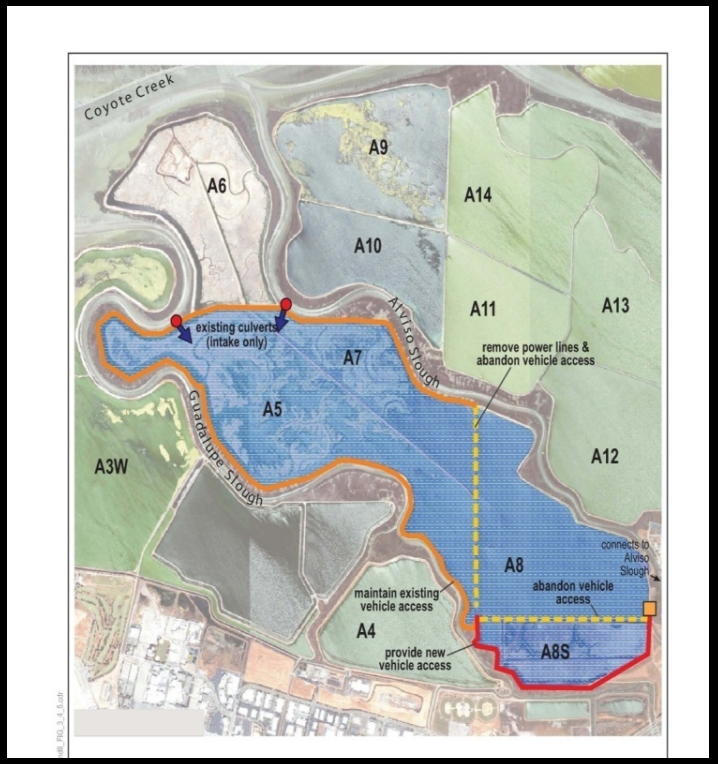
Alviso Complex

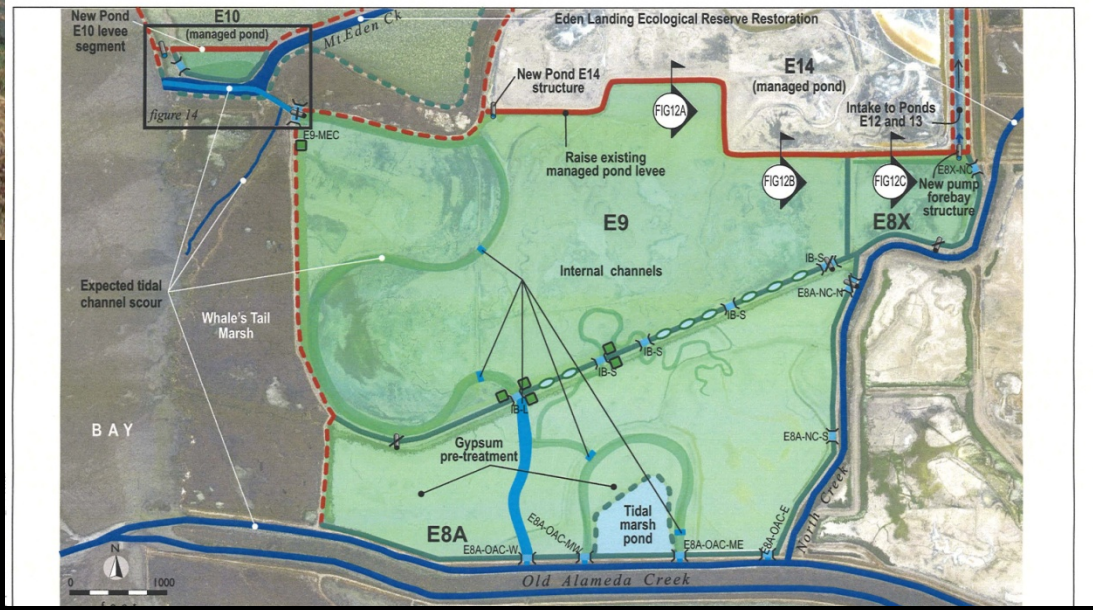
Pond A6: tidal marsh restoration

Alviso Complex

Ponds A8, A5, A7: tidal marsh restoration, with management







Eden Landing Complex

Pond E8A: tidal marsh restoration


Science Symposium
February 3, 2011
USGS Menlo Park
http://www.southbayrestoration.org/science/

Phase 2: Overview

Guiding Principles

"Do no harm": no actions that will increase flood risk

Progress toward 50-50 vision (from EIR)

Primary Evaluation Criteria

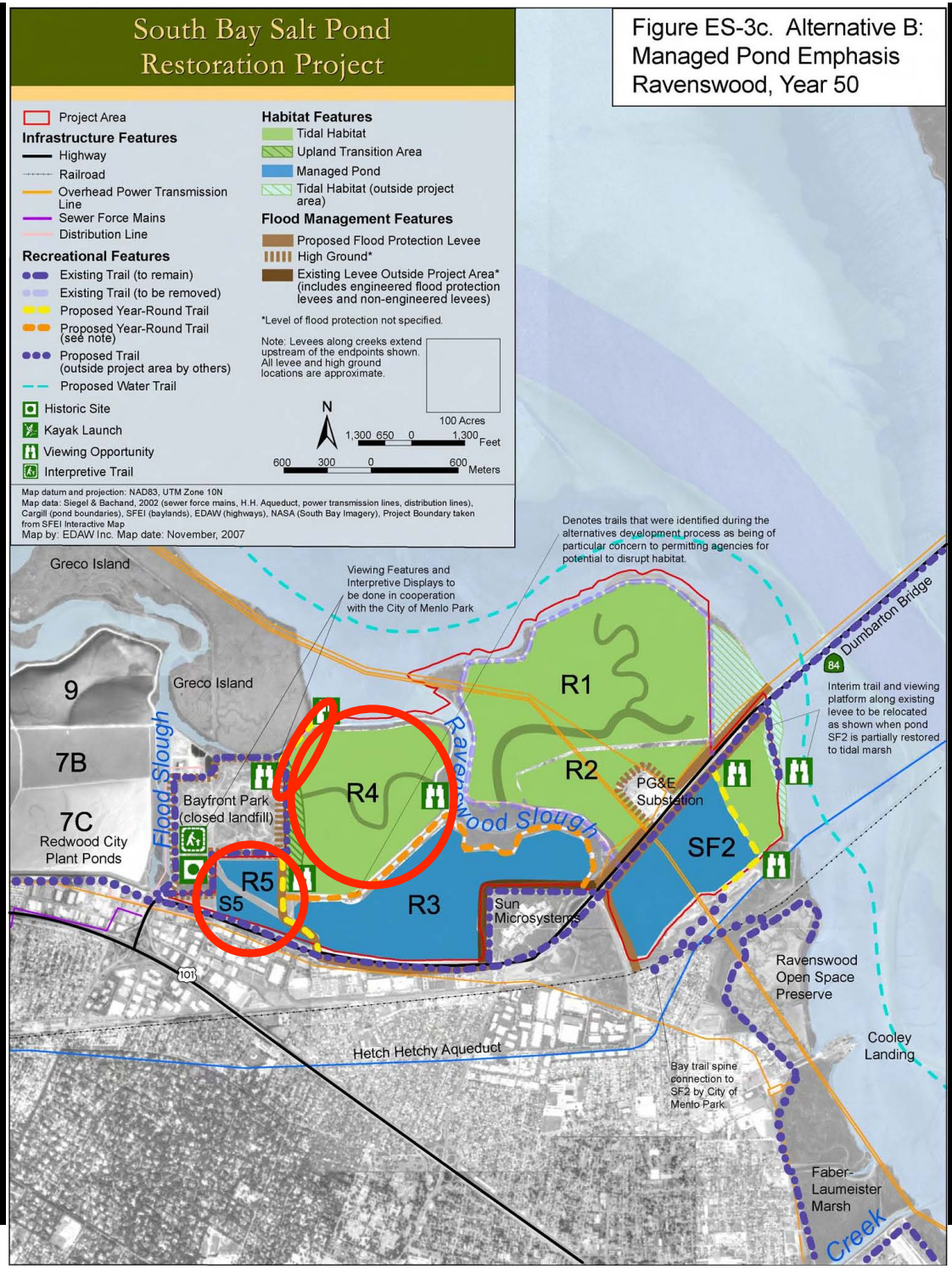
- Likelihood of progress toward Project objectives
- Opportunities for Adaptive Management studies
- Value in building Project support
- Readiness to proceed
- Not dependent on precedent actions (e.g., construction of a flood levee)

Project Wide Actions

- Beneficial re-use of dredge materials
- Subtidal Habitat Goals pilot project
- Public access and recreation study

For each Pond Complex:

- What is your central interest/concern for this complex for Phase 2?
- Does the proposed action/concept meet the test of the Guiding Principles?
- What has the PM Team missed?


South Bay Salt Pond Restoration Project
Figure ES-3c. Alternative B: Managed Pond Emphasis Ravenswood, Year 50
Project Area
Infrastructure Features
Highway
Railroad
Overhead Power Transmission Line
Sewer Force Mains
Distribution Line
Recreational Features
Existing Trail (to remain)
Existing Trail (to be removed)
Proposed Year-Round Trail
Proposed Year-Round Trail (see note)
Proposed Trail (outside project area by others)
Proposed Water Trail
Historic Site
Kayak Launch
Viewing Opportunity
Interpretive Trail
Habitat Features
Tidal Habitat
Upland Transition Area
Managed Pond
Tidal Habitat (outside project area)
Flood Management Features
Proposed Flood Protection Levee
High Ground*
Existing Levee Outside Project Area* (includes engineered flood protection levees and non-engineered levees)
*Level of flood protection not specified.
Note: Levees along creeks extend upstream of the endpoints shown. All levee and high ground locations are approximate.
N
100 Acres
1,300 650 0 1,300 Feet
600 300 0 600 Meters
Map datum and projection: NAD83, UTM Zone 10N
Map data: Siegel & Bachand, 2002 (sewer force mains, H.H. Aqueduct, power transmission lines, distribution lines), Cargill (pond boundaries), SFEI (baylands), EDAW (highways), NASA (South Bay Imagery), Project Boundary taken from SFEI Interactive Map
Map by: EDAW Inc. Map date: November, 2007
Denotes trails that were identified during the alternatives development process as being of particular concern to permitting agencies for potential to disrupt habitat.
Viewing Features and Interpretive Displays to be done in cooperation with the City of Menlo Park
Greco Island
Greco Island
9
7B
7C
Redwood City Plant Ponds
Flood Slough
Bayfront Park (closed landfill)
R1
R2
R3
R4
R5
S5
SF2
Ravenswood Slough
PG&E Substation
Sun Microsystems
Dumbarton Bridge
84
Interim trail and viewing platform along existing levee to be relocated as shown when pond SF2 is partially restored to tidal marsh
101
Hetch Hetchy Aqueduct
Ravenswood Open Space Preserve
Cooley Landing
Bay trail spine connection to SF2 by City of Menlo Park
Faber-Laumeister Marsh
Creek

Questions/Comments on Ravenswood

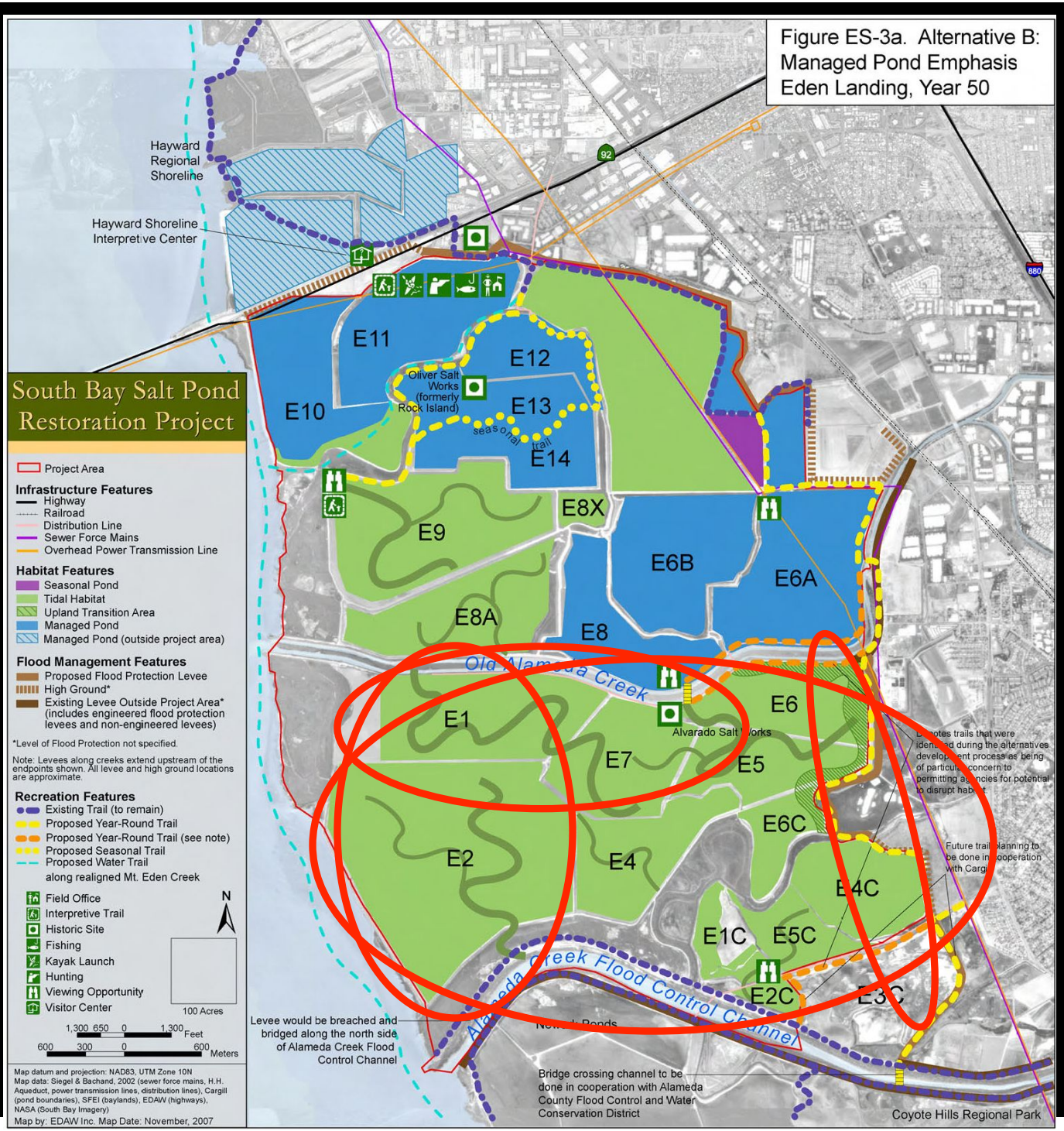


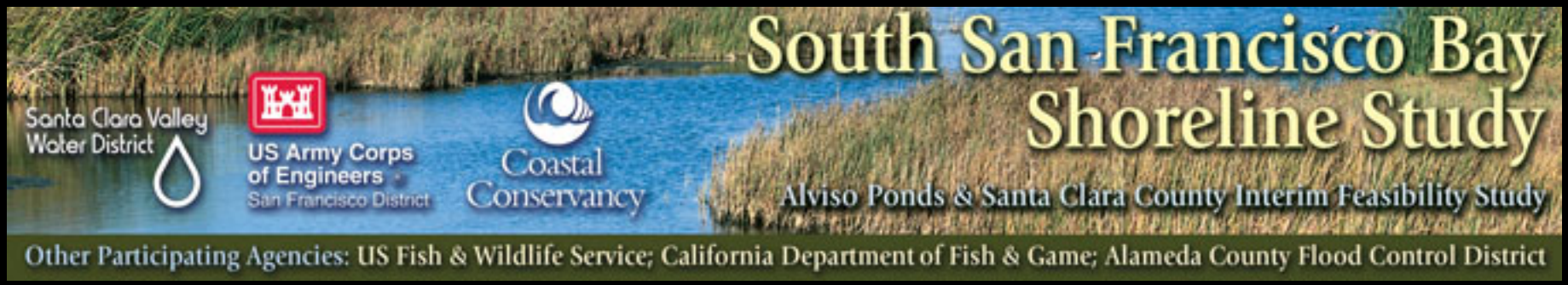
Figure ES-3a. Alternative B: Managed Pond Emphasis Eden Landing, Year 50
Hayward Regional Shoreline
Hayward Shoreline Interpretive Center
92
880
E11
E12
E10
E13
E14
Oliver Salt Works (formerly Rock Island)
seasonal trail
E9
E8X
E6B
E6A
E8A
E8
Old Alameda Creek
E1
E6
Alvarado Salt Works
E7
E5
E6C
E2
E4
E4C
E1C
E5C
E2C
E3C
Alameda Creek Flood Control Channel
Levee would be breached and bridged along the north side of Alameda Creek Flood Control Channel
Bridge crossing channel to be done in cooperation with Alameda County Flood Control and Water Conservation District
Coyote Hills Regional Park
South Bay Salt Pond Restoration Project
Project Area
Infrastructure Features
Highway
Railroad
Distribution Line
Sewer Force Mains
Overhead Power Transmission Line
Habitat Features
Seasonal Pond
Tidal Habitat
Upland Transition Area
Managed Pond
Managed Pond (outside project area)
Flood Management Features
Proposed Flood Protection Levee
High Ground*
Existing Levee Outside Project Area* (includes engineered flood protection levees and non-engineered levees)
*Level of Flood Protection not specified.
Note: Levees along creeks extend upstream of the endpoints shown. All levee and high ground locations are approximate.
Recreation Features
Existing Trail (to remain)
Proposed Year-Round Trail
Proposed Year-Round Trail (see note)
Proposed Seasonal Trail
Proposed Water Trail
along realigned Mt. Eden Creek
Field Office
Interpretive Trail
Historic Site
Fishing
Kayak Launch
Hunting
Viewing Opportunity
Visitor Center
N
100 Acres
1,300 650 0 1,300 Feet
600 300 0 600 Meters
Map datum and projection: NAD83, UTM Zone 10N
Map data: Siegel & Bachand, 2002 (sewer force mains, H.H. Aqueduct, power transmission lines, distribution lines), Cargill (pond boundaries), SFEI (baylands), EDAW (highways), NASA (South Bay Imagery)
Map by: EDAW Inc. Map Date: November, 2007

Questions/Comments on Eden Landing

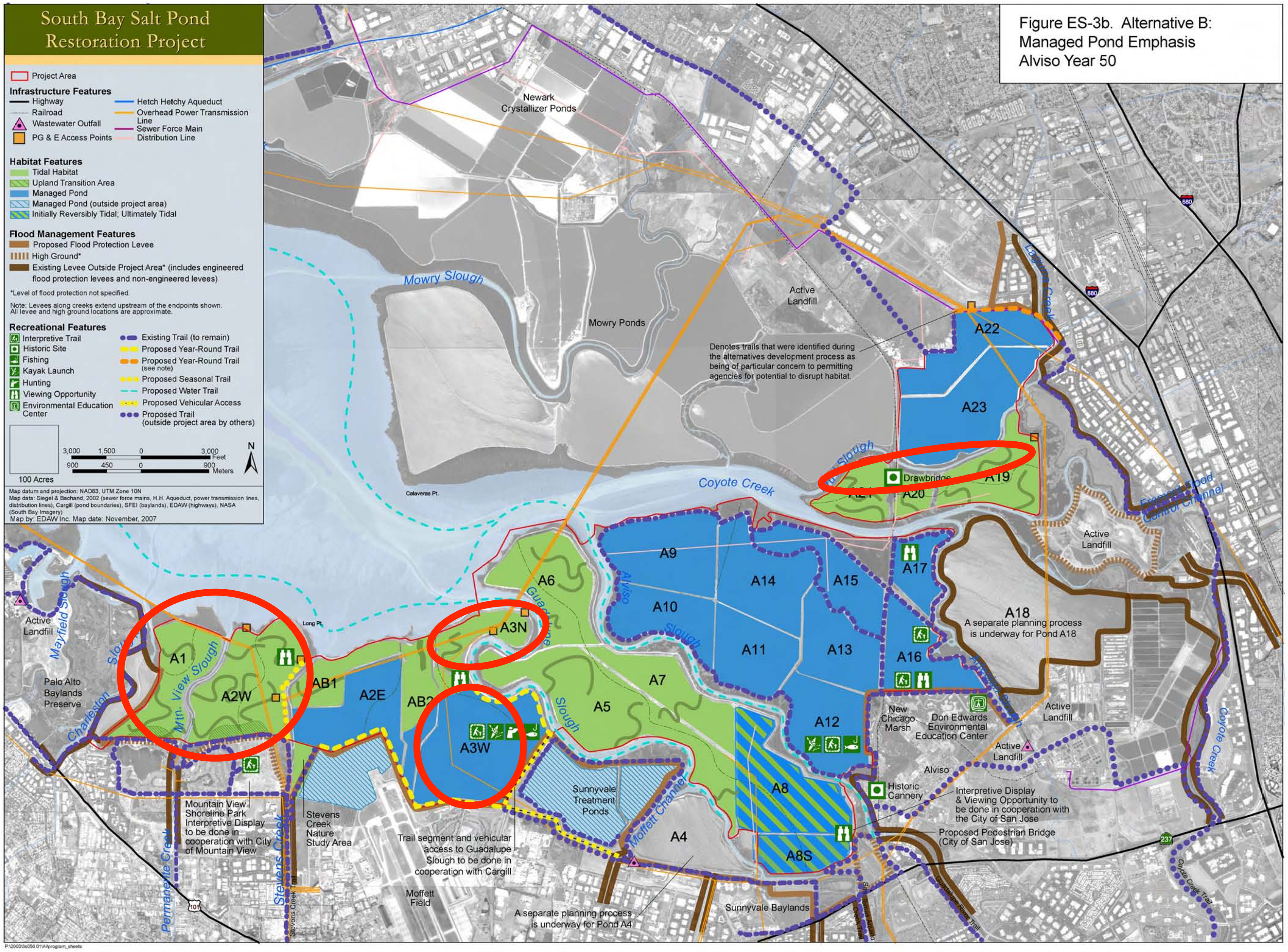
NOTE: slides shown at public meeting on flooding areas were preliminary – not for publication. They will be updated shortly to show final information.

South Bay Shoreline Study Update

Brenda Buxton, Coastal Conservancy



Shoreline Study Issues



South Bay Salt Pond Restoration Project
Figure ES-3b. Alternative B: Managed Pond Emphasis Alviso Year 50
Project Area
Infrastructure Features
Highway
Railroad
Wastewater Outfall
PG & E Access Points
Hetch Hetchy Aqueduct
Overhead Power Transmission Line
Sewer Force Main
Distribution Line
Habitat Features
Tidal Habitat
Upland Transition Area
Managed Pond
Managed Pond (outside project area)
Initially Reversibly Tidal; Ultimately Tidal
Flood Management Features
Proposed Flood Protection Levee
High Ground*
Existing Levee Outside Project Area* (includes engineered flood protection levees and non-engineered levees)
*Level of flood protection not specified.
Note: Levees along creeks extend upstream of the endpoints shown. All levee and high ground locations are approximate.
Recreational Features
Interpretive Trail
Historic Site
Fishing
Kayak Launch
Hunting
Viewing Opportunity
Environmental Education Center
Existing Trail (to remain)
Proposed Year-Round Trail
Proposed Year-Round Trail (see note)
Proposed Seasonal Trail
Proposed Water Trail
Proposed Vehicular Access
Proposed Trail (outside project area by others)
100 Acres
3,000 1,500 0 3,000 Feet
900 450 0 900 Meters
N
Map datum and projection: NAD83, UTM Zone 10N
Map data: Siegel & Bachand, 2002 (sewer force mains, H.H. Aqueduct, power transmission lines, distribution lines), Cargill (pond boundaries), SFEI (baylands), EDAW (highways), NASA (South Bay Imagery)
Map by: EDAW Inc. Map date: November, 2007
Newark Crystallizer Ponds
Mowry Slough
Mowry Ponds
Active Landfill
Denotes trails that were identified during the alternatives development process as being of particular concern to permitting agencies for potential to disrupt habitat.
Coyote Creek
Calaveras Pt.
A22
A23
Drawbridge
A19
A20
A21
Active Landfill
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A separate planning process is underway for Pond A18
A6
A3N
A7
A5
A3W
A2W
A1
AB1
A2E
AB2
A4
A8
A8S
Long Pt.
Active Landfill
Palo Alto Baylands Preserve
Mayfield Slough
Charleston Slough
Mtn. View Slough
Guadalupe Slough
Alviso Slough
Stevens Creek
Permanente Creek
Moffett Channel
Coyote Creek
Mountain View Shoreline Park Interpretive Display to be done in cooperation with City of Mountain View
Stevens Creek Nature Study Area
Trail segment and vehicular access to Guadalupe Slough to be done in cooperation with Cargill
Moffett Field
Sunnyvale Treatment Ponds
A separate planning process is underway for Pond A4
Sunnyvale Baylands
New Chicago Marsh
Don Edwards Environmental Education Center
Active Landfill
Alviso
Historic Cannery
Interpretive Display & Viewing Opportunity to be done in cooperation with the City of San Jose
Proposed Pedestrian Bridge (City of San Jose)
Coyote Creek Trail
101
237
880
680

Questions/Comments on Alviso

Phase 2 Applied Study Ideas

- Invasive *Spartina* issues
- Subtidal habitat
- Public access/use
- Upland transition zones/ ecotone
- Use of dredge materials
- Mercury and water quality monitoring

Questions/Comments on Applied Studies

Next Steps

-E-mail Phase 2 comments to: Jbourgeois@coastalconservancy.ca.gov

-Newsletter updates and input

-Revised Phase 2 concepts and permitting activities: Fall 2011

Upcoming Events/Meetings

- Regulatory Agency Meeting November 4, 2010
- Pond A6 breach, late November
- Southern Eden Landing Comprehensive Planning
- Early 2011:
  - Local Government Forum
  - Eden Landing Work Group
  - Ravenswood Work Group

South Bay Salt Pond Restoration Project

Restoring the Wild Heart of the South Bay

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California Coastal Conservancy
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Brenda Buxton
California Coastal Conservancy
bbuxton@scc.ca.gov or 510/286-0753

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Eric Mruz
Don Edwards San Francisco Bay National Wildlife Refuge
Eric_Mruz@fws.gov or 510/792-0222

John Krause
California Department of Fish and Game
jkrause@dfg.ca.gov or 415/250-0243

www.southbayrestoration.org or, follow us on Facebook