



# South Bay Salt Pond Restoration Project

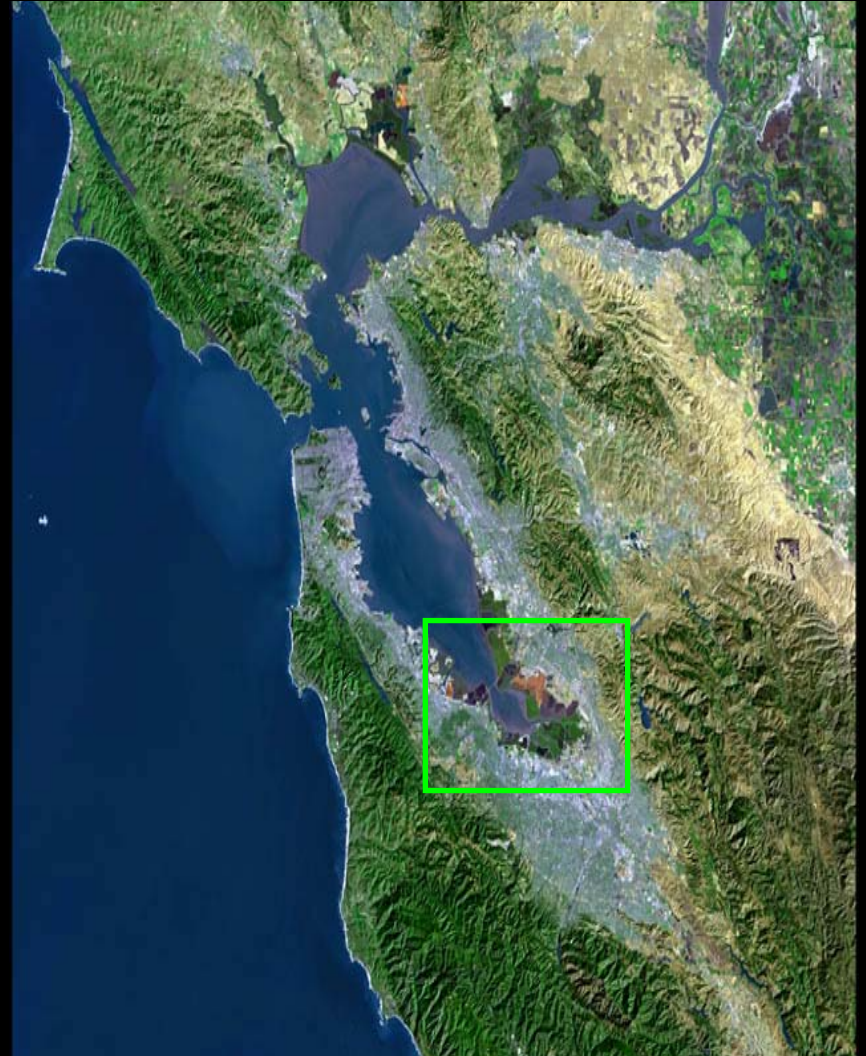
*Restoring the Wild Heart of the South Bay*



**Laura Valoppi, Lead Scientist**  
**Cheryl Strong, Refuge Biologist**  
**John Bourgeois, Project Manager**

# Presentation Outline

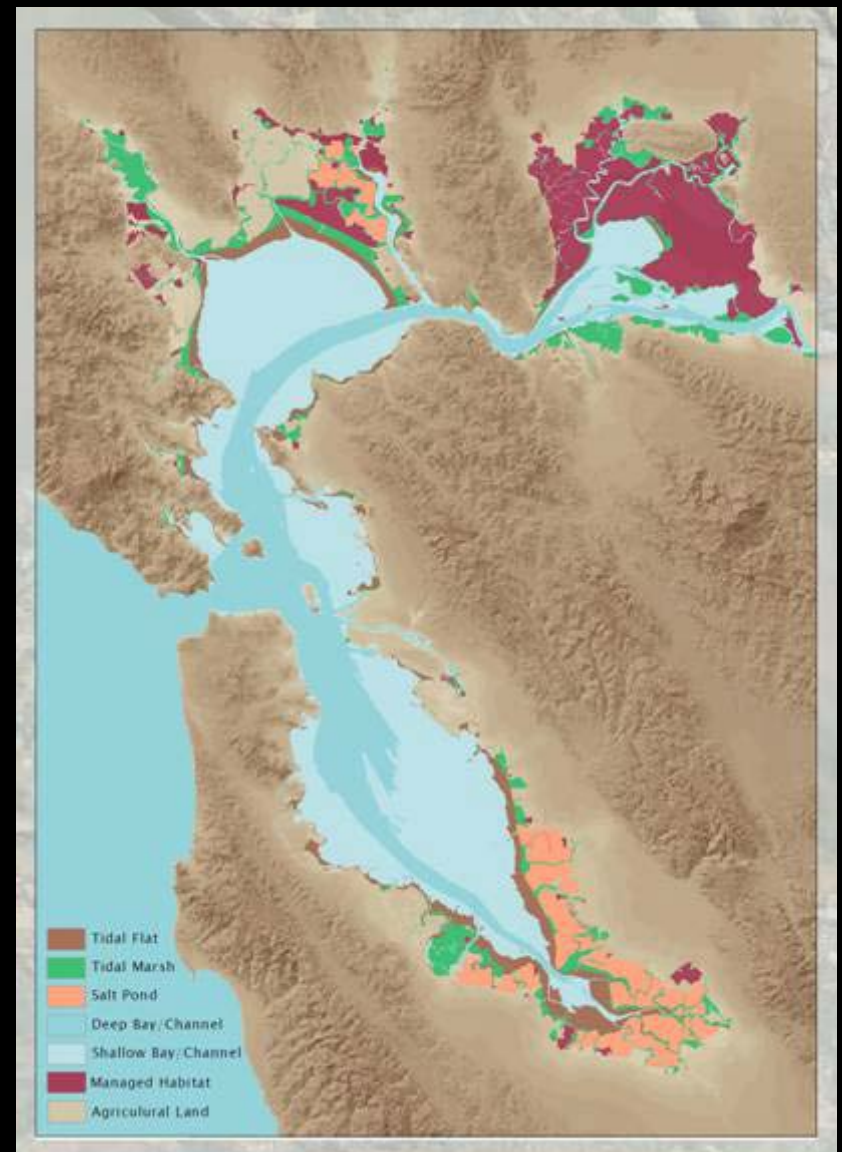
- San Francisco Bay restoration setting
- Uncertainties and the adaptive management approach
- Phase 1 project updates



Present (~2000)



Past (~1850)



# Acquisition in 2003: A Public/Private Partnership

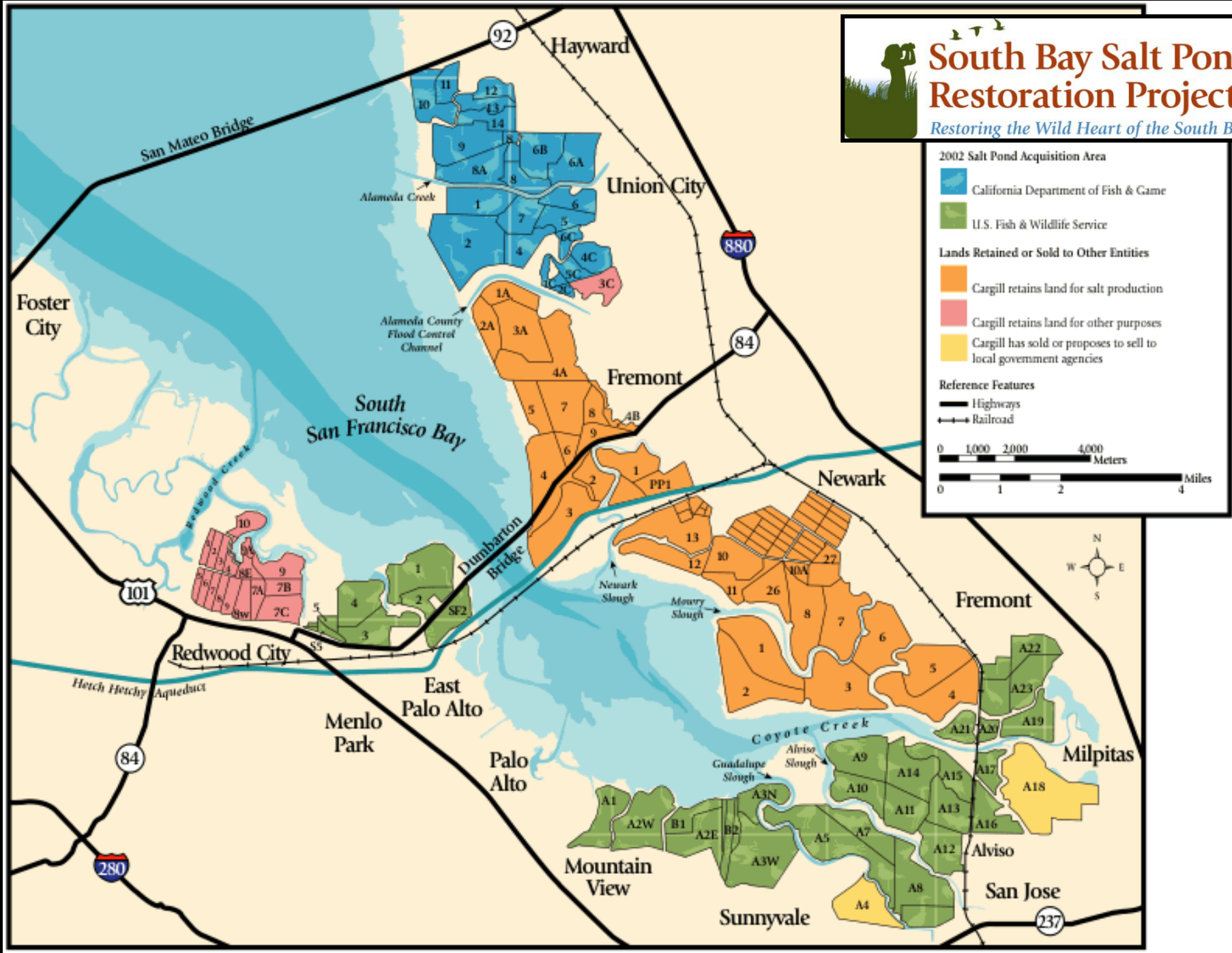
- 16,500 acres
  - 15,100 in South Bay
  - 1,400 along Napa River
- \$100 million cost
  - State, Foundations and Federal dollars





# 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

0 1000 2000 4000 Meters  
0 1 2 4 Miles

# Why restore tidal wetlands?

- 90% tidal marshes lost
- tidal marsh species threatened or endangered
- flood control and water quality benefits



# Why manage ponds?



Key habitats for migratory birds in migration and winter

The San Francisco Bay hosts millions of shorebirds and waterfowl during migration



# Ecological trade-offs

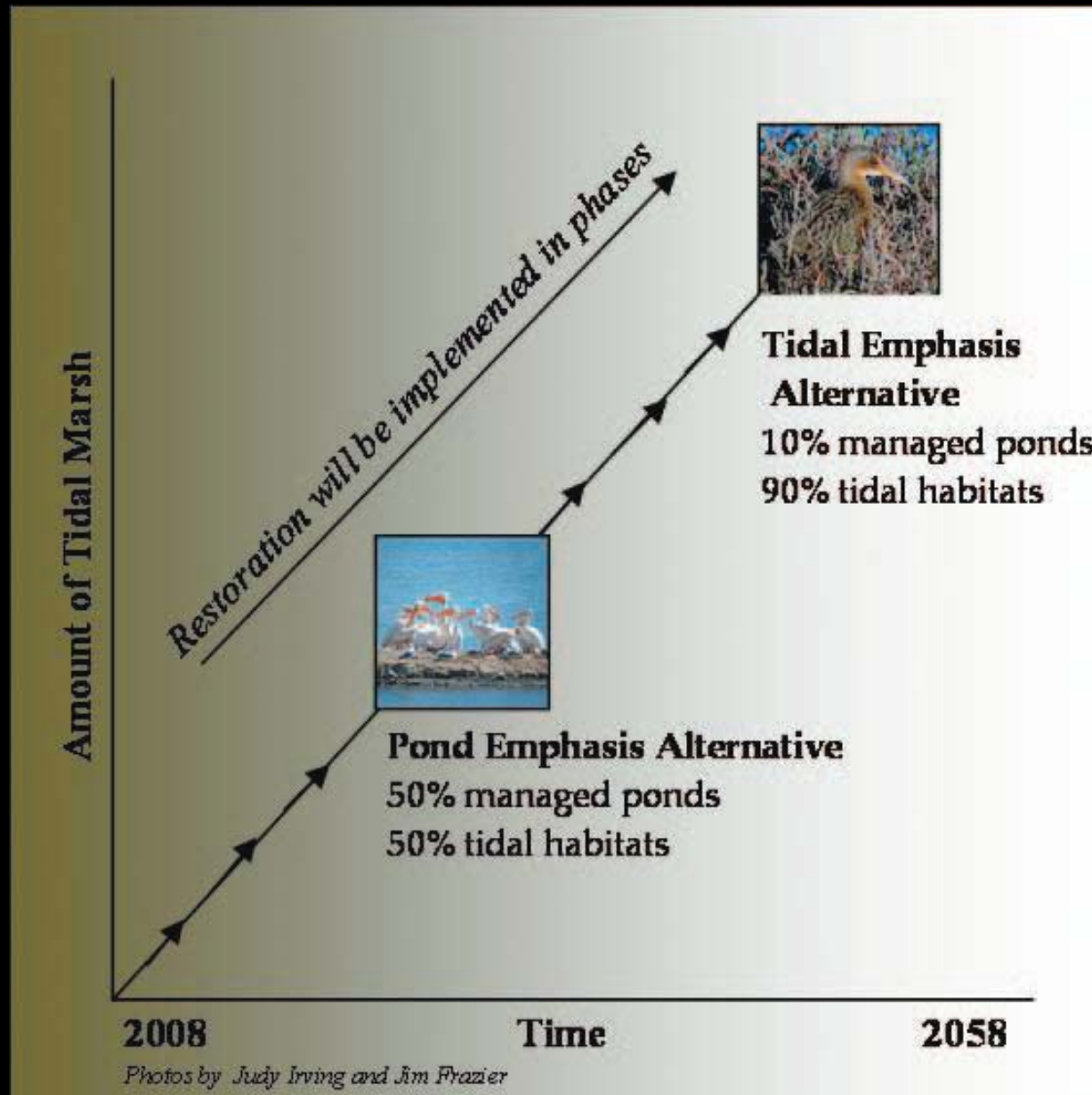
tidal marsh species vs. salt pond species



M. Kern



# Adaptive Management Restoration





# Key uncertainties

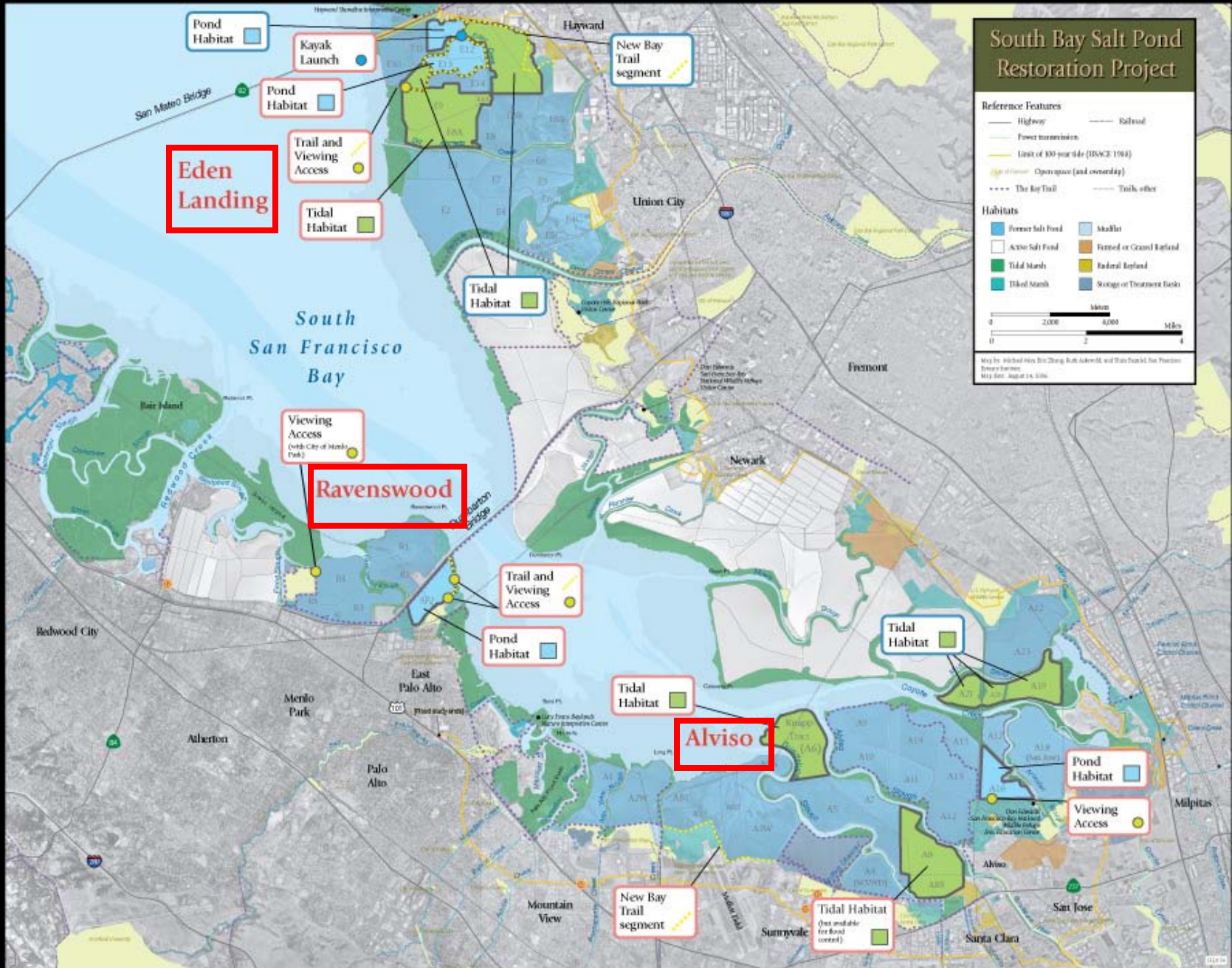
- Wildlife use of changing habitats
- Habitat evolution and sediment dynamics
- Mercury methylation
- Water quality
- Invasive species
- Public access
- Infrastructure support
- Sea level rise and climate change



## *Beginning of a large restoration experiment...*

- Preparation of a scientifically sound, publicly supported restoration and public access plan
- A strong science and applied research program critical for success of the restoration
- Adaptive management only possible with science and monitoring support to track changes and inform decisions





Phase 1 project actions, all with associated applied studies

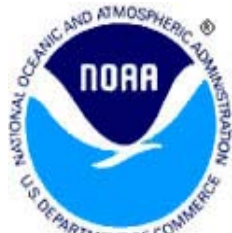
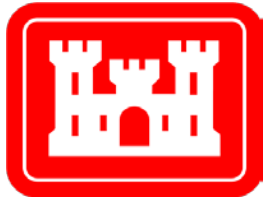


www.southbayrestoration.org

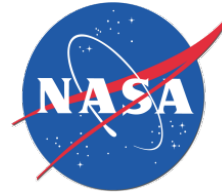
Santa Clara Valley Water District



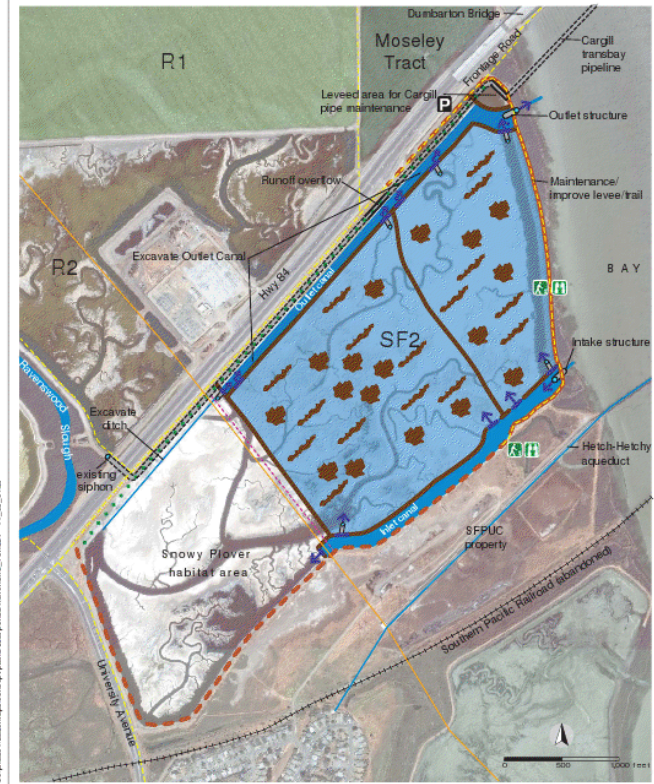
Flood Control & Water Conservation DISTRICT



SANTA CLARA BASIN



# Pond SF2: managed pond reconfiguration



#1750 phase 1 base map conceptual plans for pond SF2 reconfig. PondSF2\_11\_06\_07.rvt



C. Benton

Status: construction complete,  
opened Sept 7, 2010





# Ponds A19, 20, 21: tidal marsh restoration





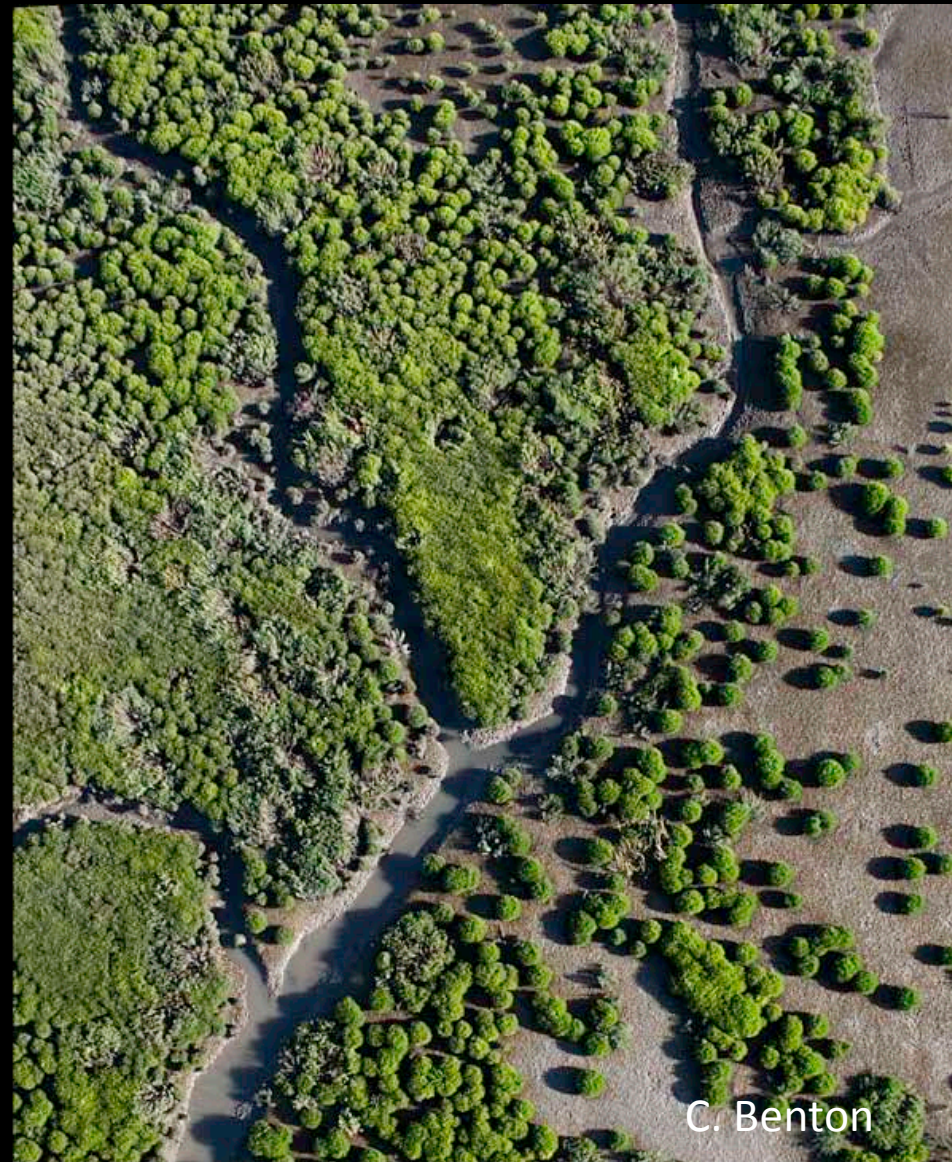
Status: breached to tidal action, 2006

# Vegetation development after breach

April 2008

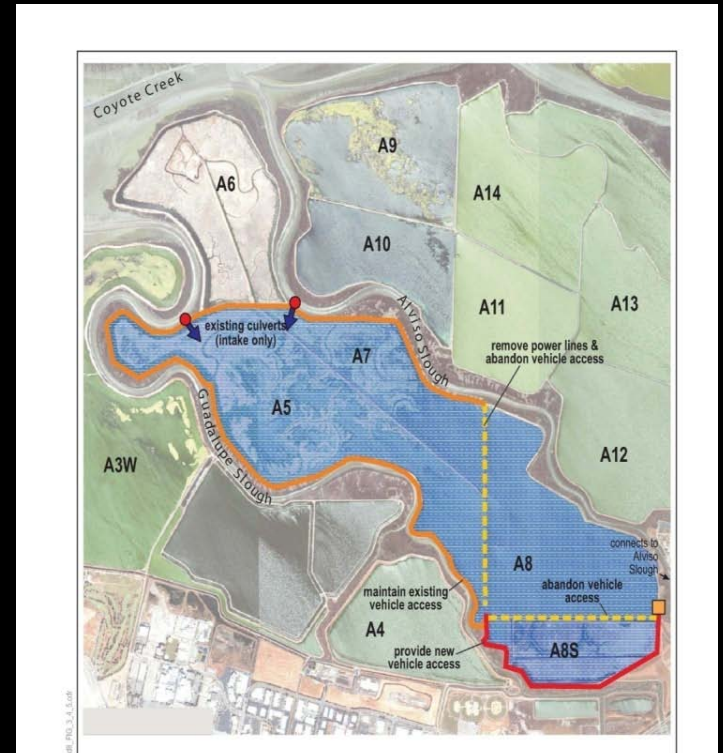


September 2009



C. Benton

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





C. Benton

Status: construction complete, pond to open spring 2011

# Pond A6: tidal marsh restoration



Status: to be  
breached  
October 2010



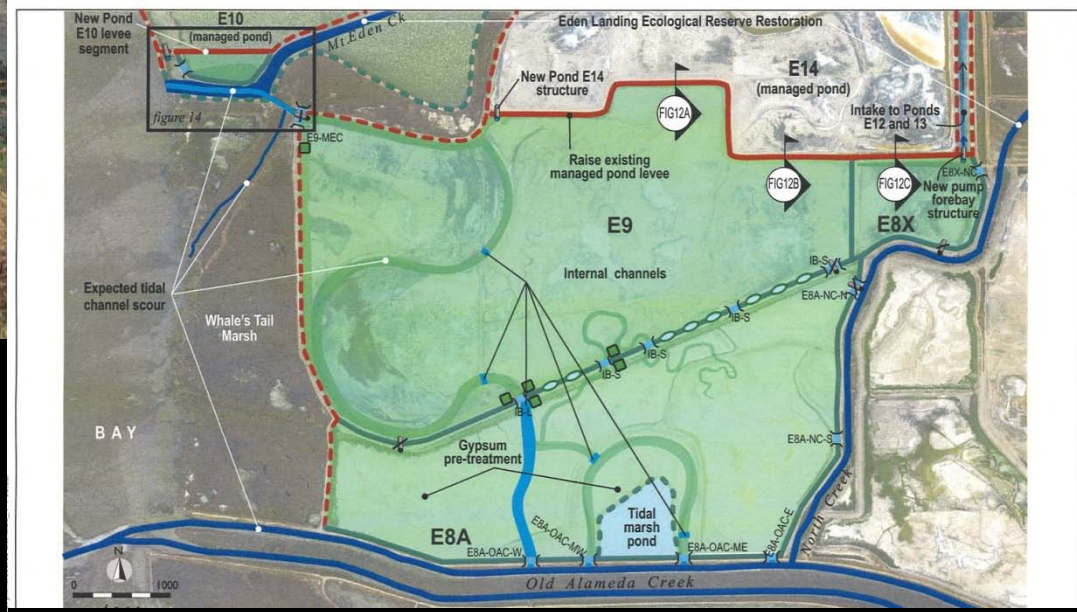
C. Benton

2.4 mile Bay Trail segment:  
opened Sept 20, 2010





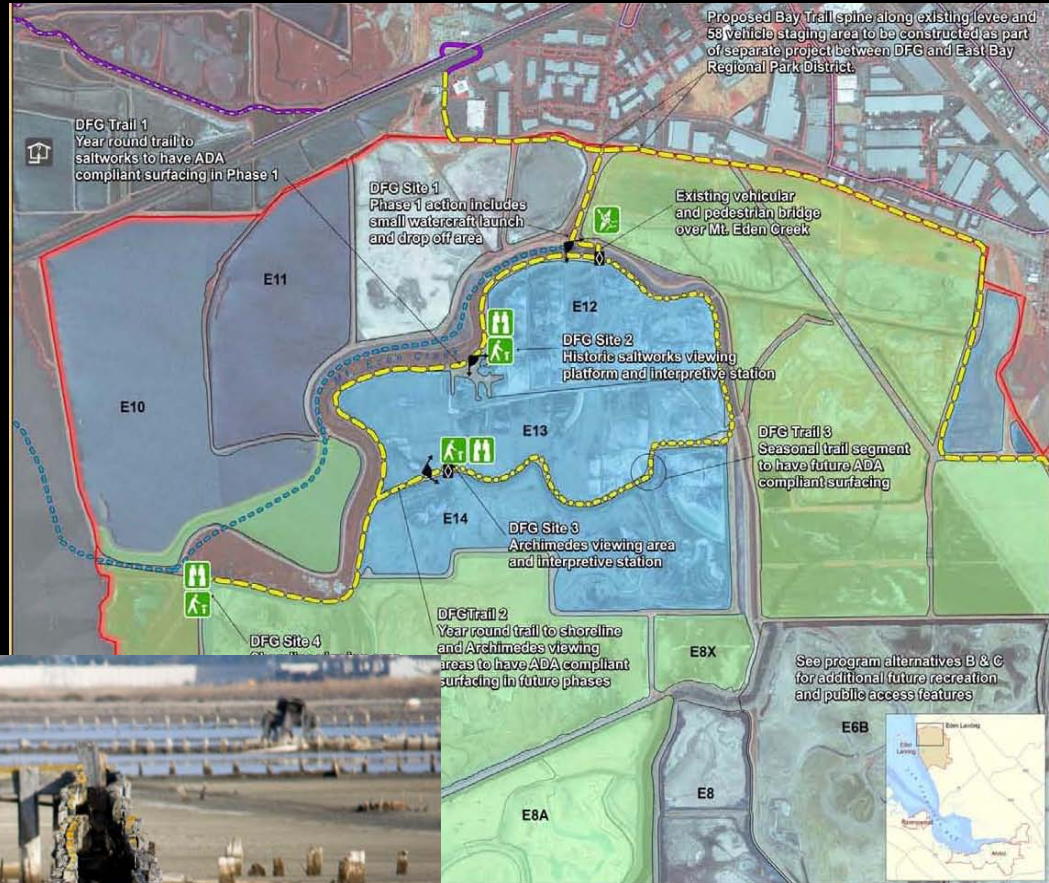
# Pond E8A: tidal marsh restoration



Status: under construction, completion expected fall 2011



# Eden Landing: 3.8 mile trail and kayak launch



Status: final designs complete