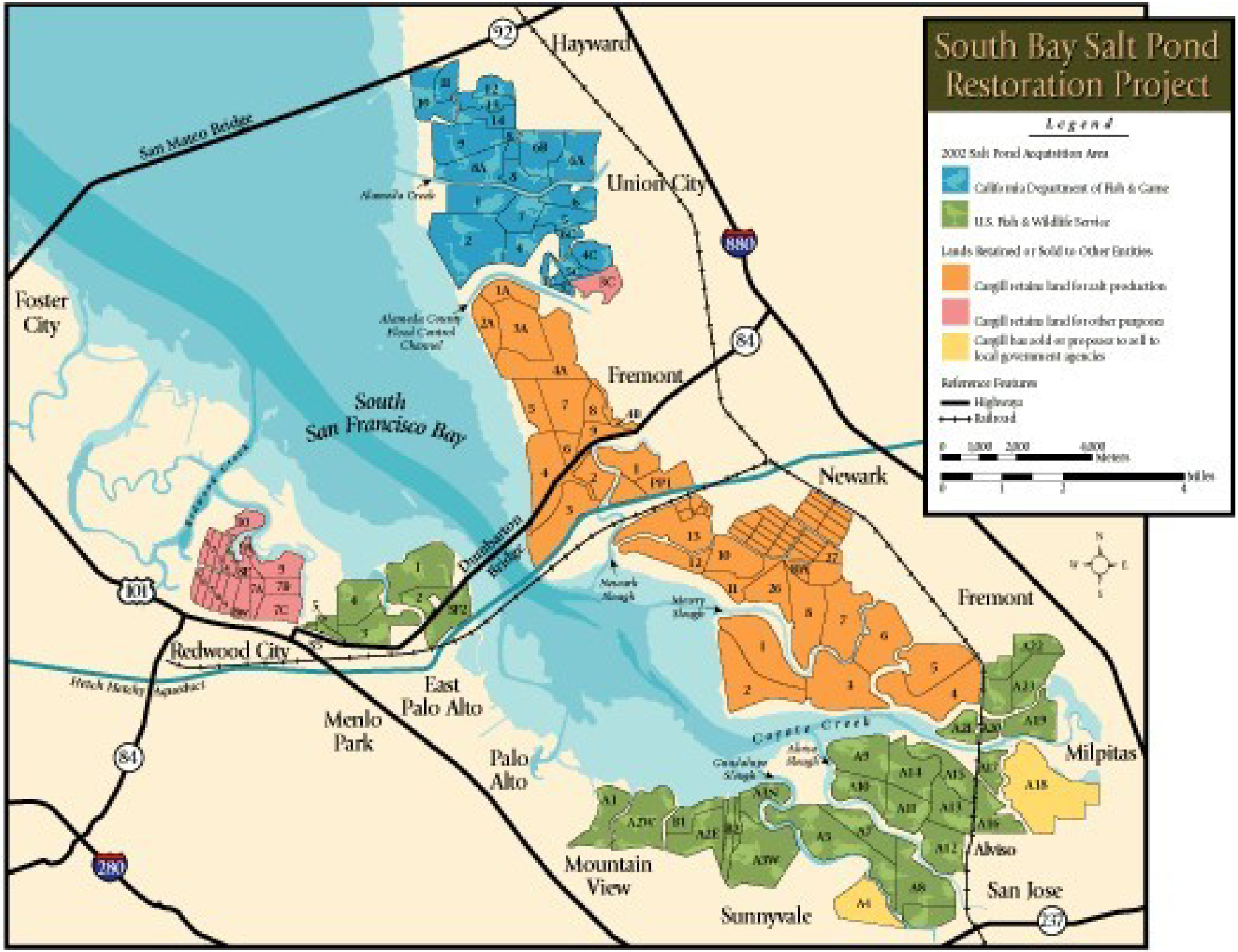
# South San Francisco Bay Salt Ponds

## Long-Term Restoration Planning

# Agenda

- Welcome and Introductions
- Project Overview
  - Acquisition Area
  - Interim Management
  - Long-Term Restoration Planning
- Data Gaps Assessment Framework
- Break-Out Sessions
  - Fish and Wildlife/Other Biological Factors
  - Physical Processes
  - Water Quality/Contaminants


South Bay Salt Pond Restoration Project
Legend
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
Meters
Miles
Hayward
Union City
Fremont
Newark
Foster City
Redwood City
Menlo Park
East Palo Alto
Palo Alto
Mountain View
Sunnyvale
Alviso
Milpitas
San Jose
South San Francisco Bay
San Mateo Bridge
Dumbarton Bridge
Alameda Creek
Alameda County Flood Control Channel
Newark Slough
Mowry Slough
Coyote Creek
Guadalupe Slough
Alviso Slough
Hetch Hetchy Aqueduct
92
880
84
101
280
237

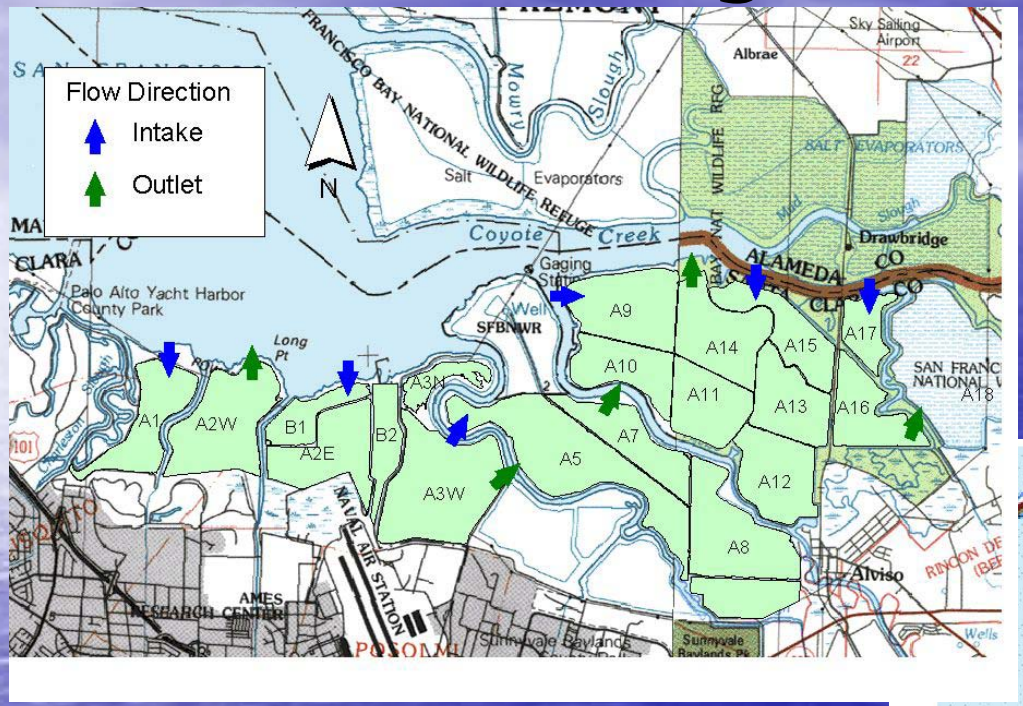
# Cargill Phase Out

- Cargill responsible for management of ponds until they meet Transfer Standard established by RWQCB discharge permit.
- Phase-Out of Salt Production
  - 1-2 years for low salinity ponds (Baumberg and most Alviso ponds)
  - c. 3-6 years for higher salinity ponds (West Bay and Alviso ponds in Fremont)
  - c. 5-7 years for Napa Plant Site
- DFG and FWS to manage acquired salt ponds after phase-out completed and until long-term restoration plan is completed and implemented.

# Interim Management Objectives

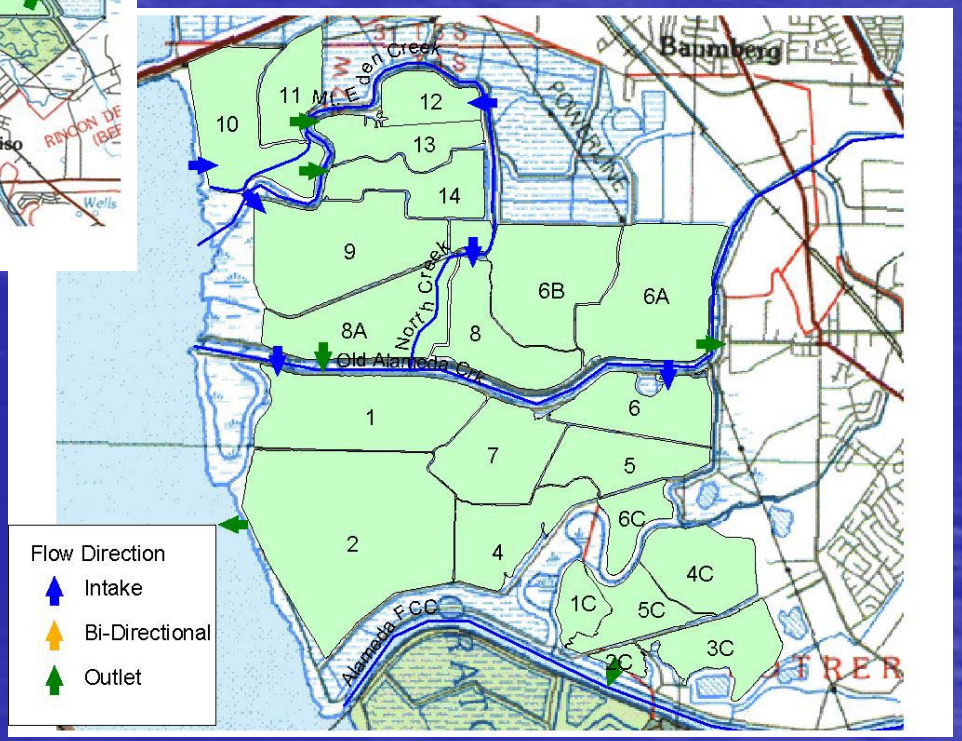
- Maintain habitat values of acquired ponds to the maximum extent feasible
- Assure that the ponds are maintained in a restorable condition during long-term restoration planning period
- Maintain existing levels of flood protection, existing depths of ponds
- Minimize impacts to Bay (from discharge)
- Minimize interim management costs (by avoiding pumping)

# Interim Management




- Alviso

- Baumberg



# Long-Term Restoration Planning

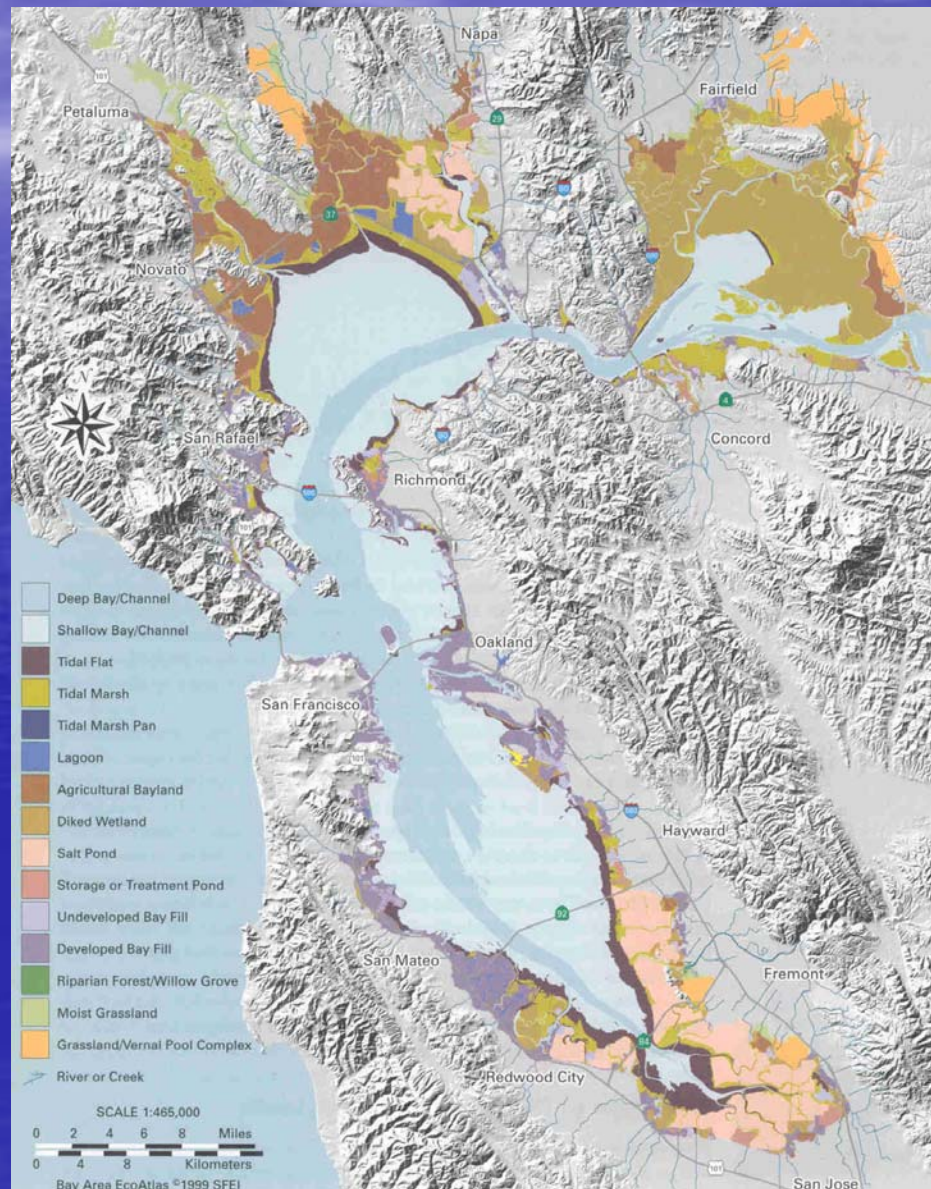
The California Coastal Conservancy, working closely with the California Department of Fish and Game and US Fish and Wildlife Service, the landowners, will facilitate the development of a restoration plan for the 15,100 acres of salt ponds acquired from Cargill in the South Bay.

Mission: "To prepare a scientifically sound and publicly supported restoration and public access plan that can begin to be implemented within five years."

# Project Goals

- wetland restoration
  - tidal wetlands for at-risk species, aquatic species
  - managed ponds for migratory birds
  - associated wetland and upland habitats
- flood management
- wildlife-oriented public access & recreation

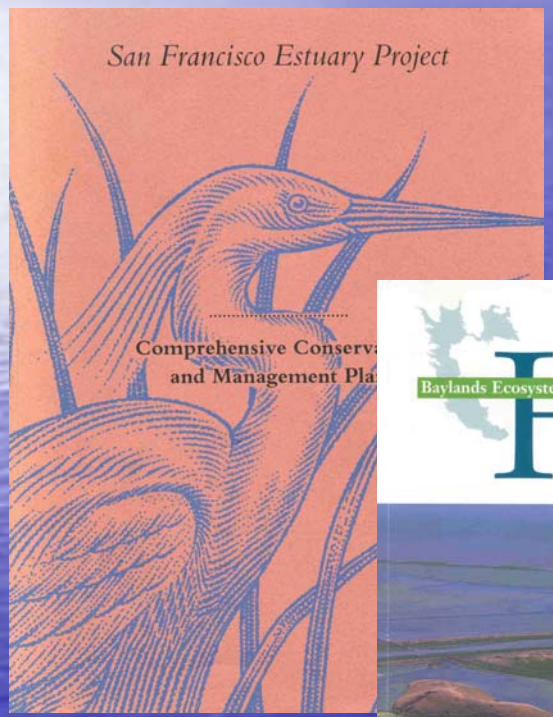
# Wetlands: Past and Present

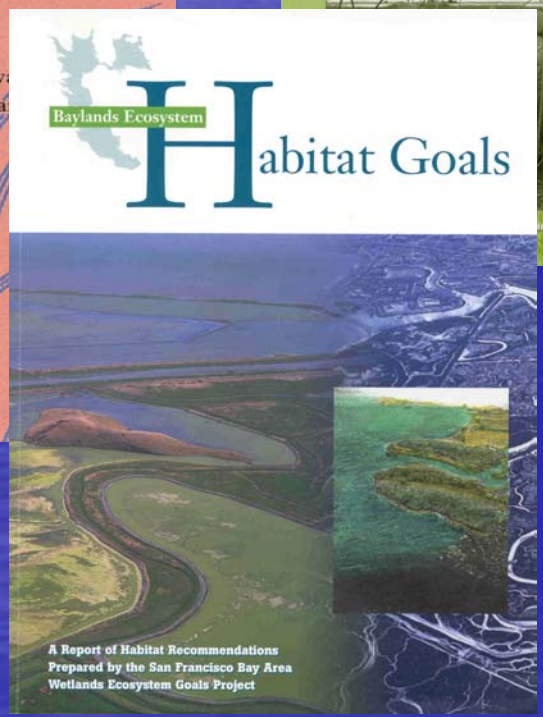
# Learning from Past Restorations

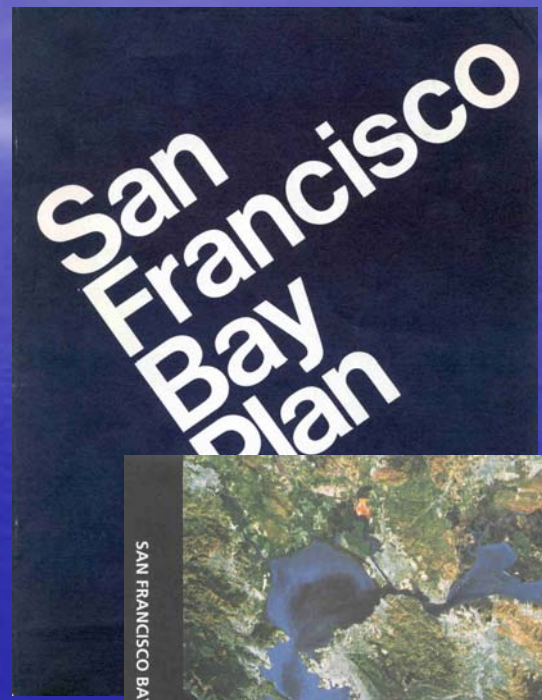
- LaRiviere Marsh: 100 acres of former salt ponds in Fremont at Don Edwards SF Bay Refuge restored in mid-1980s

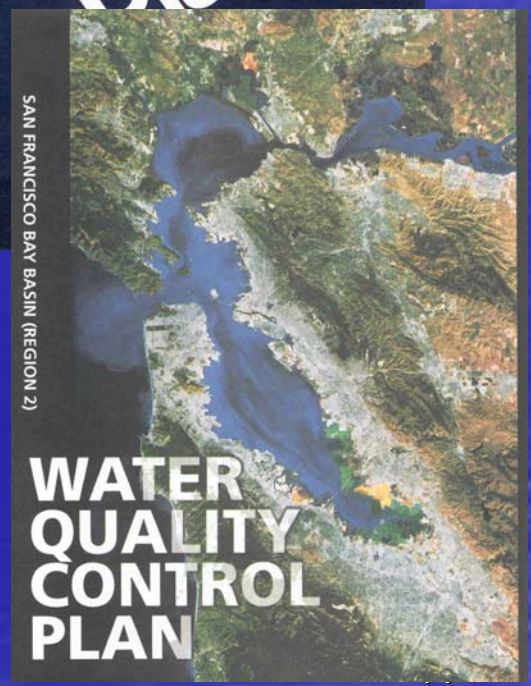
# Regional Planning Efforts



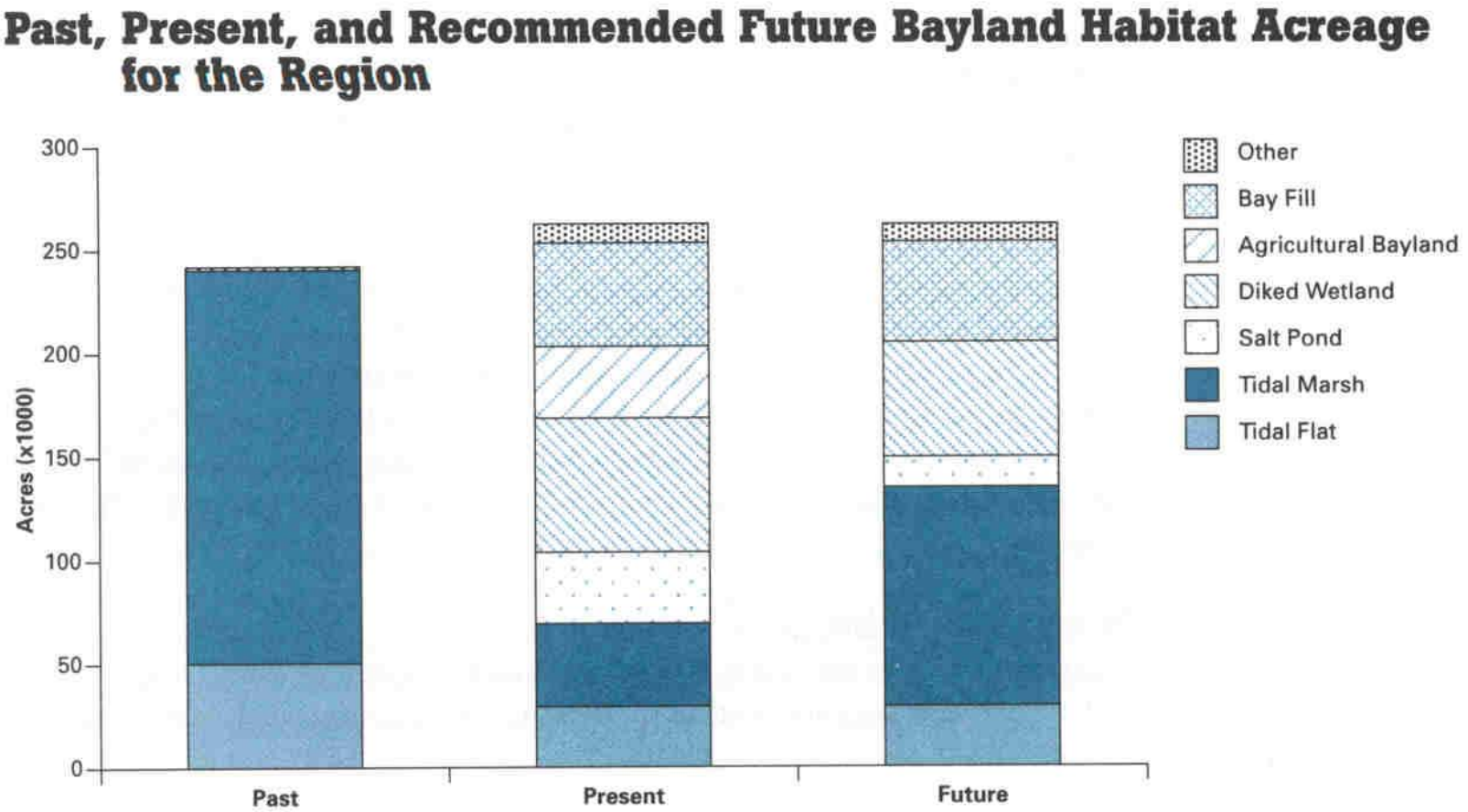




# Recommendations from Goals Report – Mix of Habitats



# Technical/Environmental Issues

- Mix of Habitats to Maintain/Enhance Wildlife Populations
  - Tidal Wetlands
  - Managed Ponds
  - Associated Habitats

- Tidal Wetlands Restoration
  - Subsidence of Ponds (minimal to over 10 feet)
  - Sediment supply
  - Hydrological/Geomorphological Impacts on Bay
  - Resuspension of Pollutants in Bay
  - Methylation of Mercury
- Enhancement of Managed Ponds
  - Water Circulation in Ponds (flow-through vs. one-way system)
  - Optimize pond depths and salinities for migratory birds

# Technical/Environmental Issues

- Flood Management
  - Salt pond levees provide de-facto flood protection
  - Integrate flood management features into future habitat
- Public Access and Recreation
  - Provide access for existing users
  - Enhance/expand recreational access
  - Integrate recreation and wildlife protection
- Introduced Species, e.g.
  - *Spartina*
  - non-native predators
- Existing Infrastructure
- Monitoring/Adaptive Management

# Challenges, Opportunities

- Landscape Scale of project (15,100 acres)
- Urban Setting

# Challenges, Opportunities

- Number of stakeholders

# Structure

## Executive Leadership Group

Agency Leaders of DFG, FWS, SCC oversee long-term restoration planning.

## Implementation Team

A team will develop strategies to fund implementation.

## Executive Council

High level trustee and regulatory agency representatives provide guidance and support.

## Regulatory Agencies

Staff from regulatory agencies handle permitting.

## Project Management Team

Staff of SCC, DFG, FWS conduct day-to-day project management and ensure coordination with stake-holders.

## Flood Management Team

Project Management Team will work with staff of Flood Control Districts and Corps to integrate flood manage-ment and habitat restoration.

## National Science Panel

National wetland restoration experts review process and science.

## Technical Committee

Scientists review scopes of work and work products.

## Public Involvement Committee

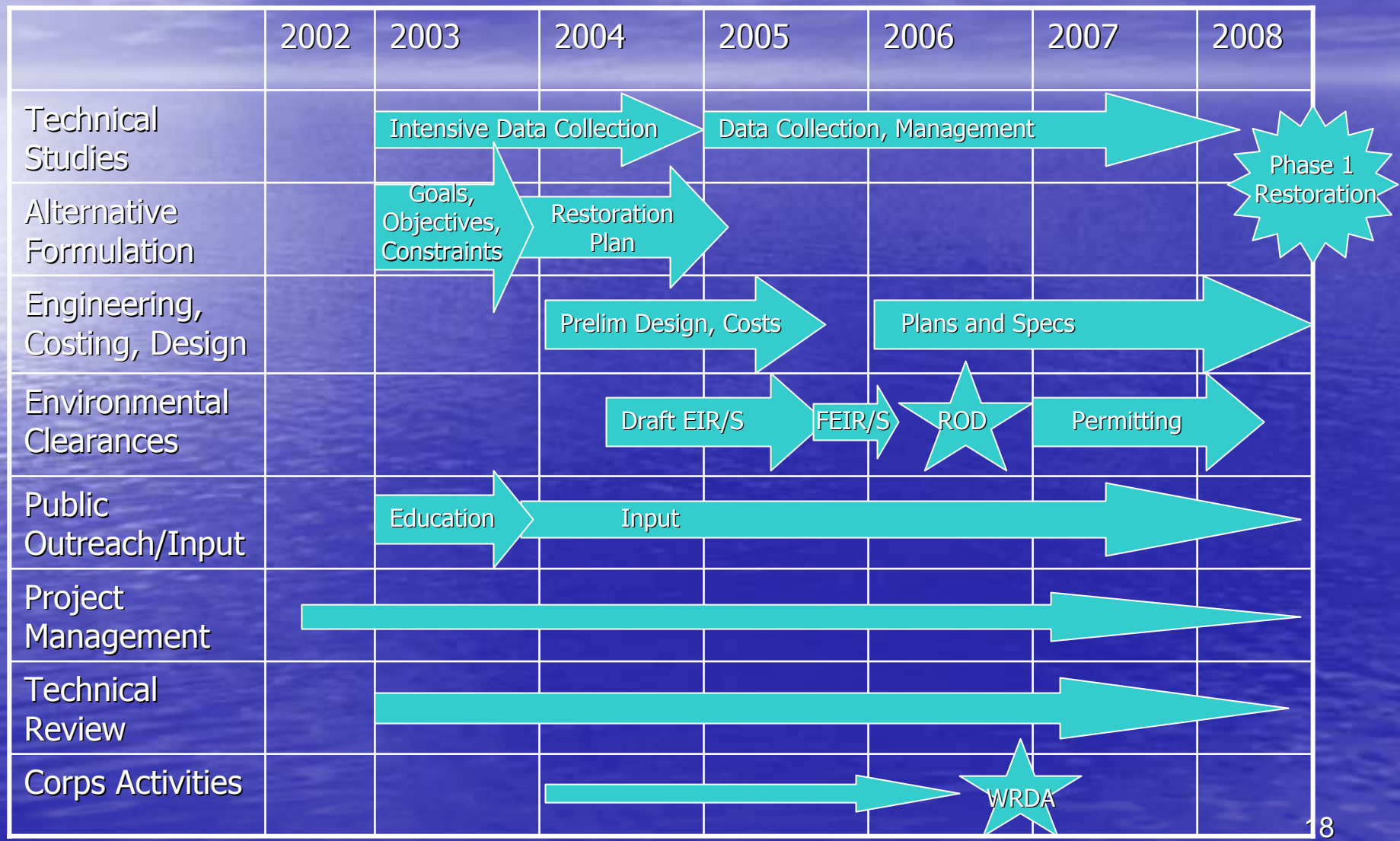
***Restoration, Flood Management, and Access***

NGOs, agencies, and others meet regularly to receive project updates and provide input on restoration and access planning as one group and in subcommittees.

## Public Outreach Team

The Project Management Team, with representatives from other groups, will ensure the public re-mains informed and has frequent opportunities for input.

# Draft Schedule



# Data Gaps Assessment Framework

- Major Decisions
- Agenda for Break-Out Sessions
- Ground Rules
- Next Steps

# Major Decisions

- Overall restoration design
- Flood management
- Appropriate public access and recreation
- Cost-effective restoration implementation and management
- Project phasing

# Major Decisions

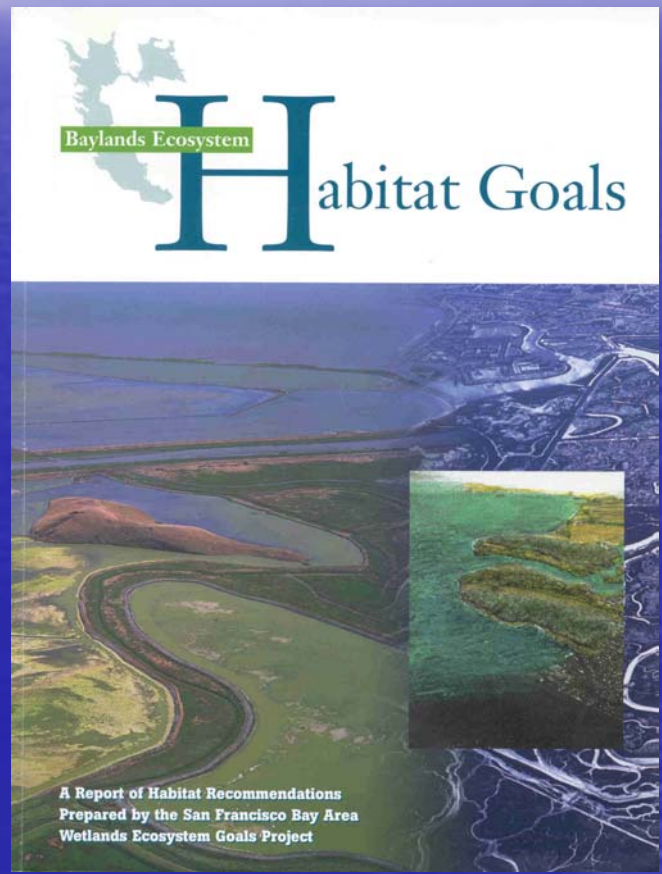
- What will be the overall restoration design?
- How do we maximize benefits to wildlife?
  - What is the appropriate mixture of habitats?
  - What is their placement in the landscape?

*Photo: Richmond Bridge Harbor Seal Survey*

*Photo courtesy DU*

# Overall Restoration Design Considerations

- Are the Habitat Goals Report recommendations still valid?
  - 25-30,000 acres of tidal marsh
  - 10-15,000 acres of saline pools
  - 15,000 acres of tidal flats
- Which portions of these recommendations should this project accomplish within the 15,000 acres?



# Overall Restoration Design Considerations

- How do we handle external constraints?
  - Flooding
  - Subsidence
  - Sediment availability
  - Sediment quality

# Overall Restoration Design Considerations

- How do we maximize habitat functions of managed ponds and pond complexes?
  - Mix of depths
  - Mix of salinities
  - Locations
  - Water management
  - Other factors

# Overall Restoration Design Considerations

- How do we minimize impacts from mercury methylation?
  - Design
  - Water management
  - Sediment management

# Major Decisions

- How and to what degree will flood management be accommodated or integrated?
  - Alameda Creek
  - Guadalupe River
  - Coyote Creek


1955 Alameda Creek Flood
Photo by: R.L. Copeland. From: Floods at Fremont, California; L.E. Young, 1962; USGS Hydrological Atlas, HA-54

# Major Decisions

- How and to what degree will appropriate public access and recreation opportunities be accommodated or integrated?
- Key issues:
  - Acceptable types of access and recreation
  - Protection of at-risk species
  - Location of access and recreation

# Major Decisions

- What restoration implementation and management process will be the most cost-effective?
- Potential key considerations:
  - Phasing
  - Mix of ponds
  - Flood management
  - Dredge material reuse

# Major Decisions

- How will the project be phased?
- Potential key drivers:
  - Restoration design and implementation
  - Funding
  - Flood management

# Break-Out Session Agendas

- Summary of Specific Decisions in each Category
  - Fish and Wildlife
  - Physical Processes
  - Water Quality/Contaminants
- Assess Data Gaps for Each Specific Decision
  - Available Data
  - Needed Data/Data Gaps
- Prioritize Data Gaps
- Wrap-Up

# Next Steps

- Development of Conceptual Model, Project Objectives
- Formation of Technical Committee
  - RFQ to be distributed
  - Subcommittees to be formed
- National Science Panel
  - Denise Reed (chair), Sam Luoma, John Teal, Si Simenstad, Jerry Schubel, Michael Erwin, Jorg Imberger
- Contracts/Grants
  - Data Collection
  - Restoration Design, Physical Modeling, Civil Design and Cost Estimating
  - EIR/S and Permitting
  - Public Outreach
- General Conservancy RFQ Available
- Specific RFQs, RFPs, and interviews will be released/conducted by Conservancy

# Today's Ground Rules

- Be constructive
- No speeches
- No sales pitches
- Keep on schedule
- Recognize that there will be follow up

# Thanks for Your Participation!