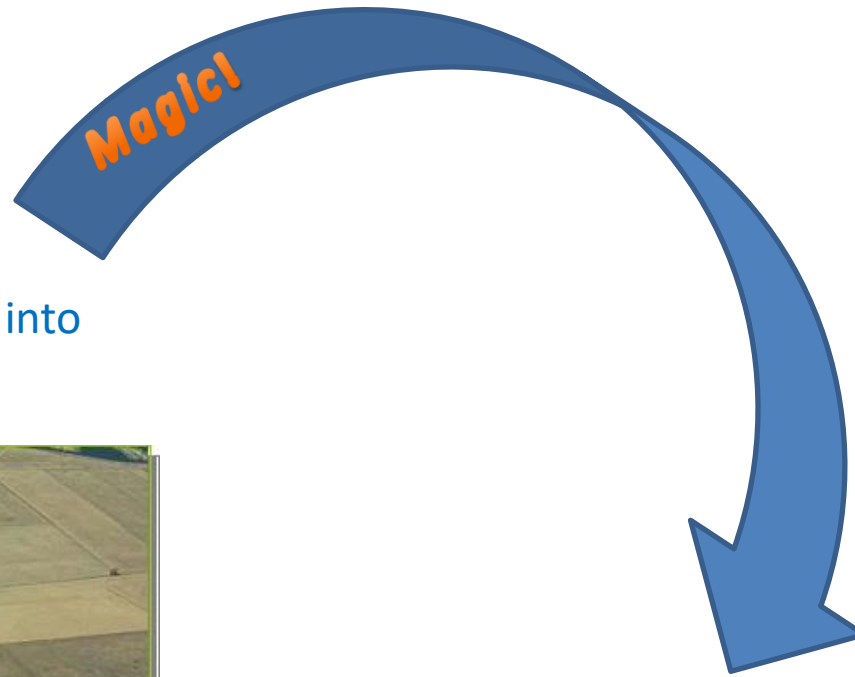


Hamilton/Bel Marin Keys Wetlands Restoration

Sam Schuchat
State Coastal Conservancy



What does it take to convert an abandoned military base airfield into a tidal wetland?



Hamilton Wetlands Restoration Project
Oblique Rendering



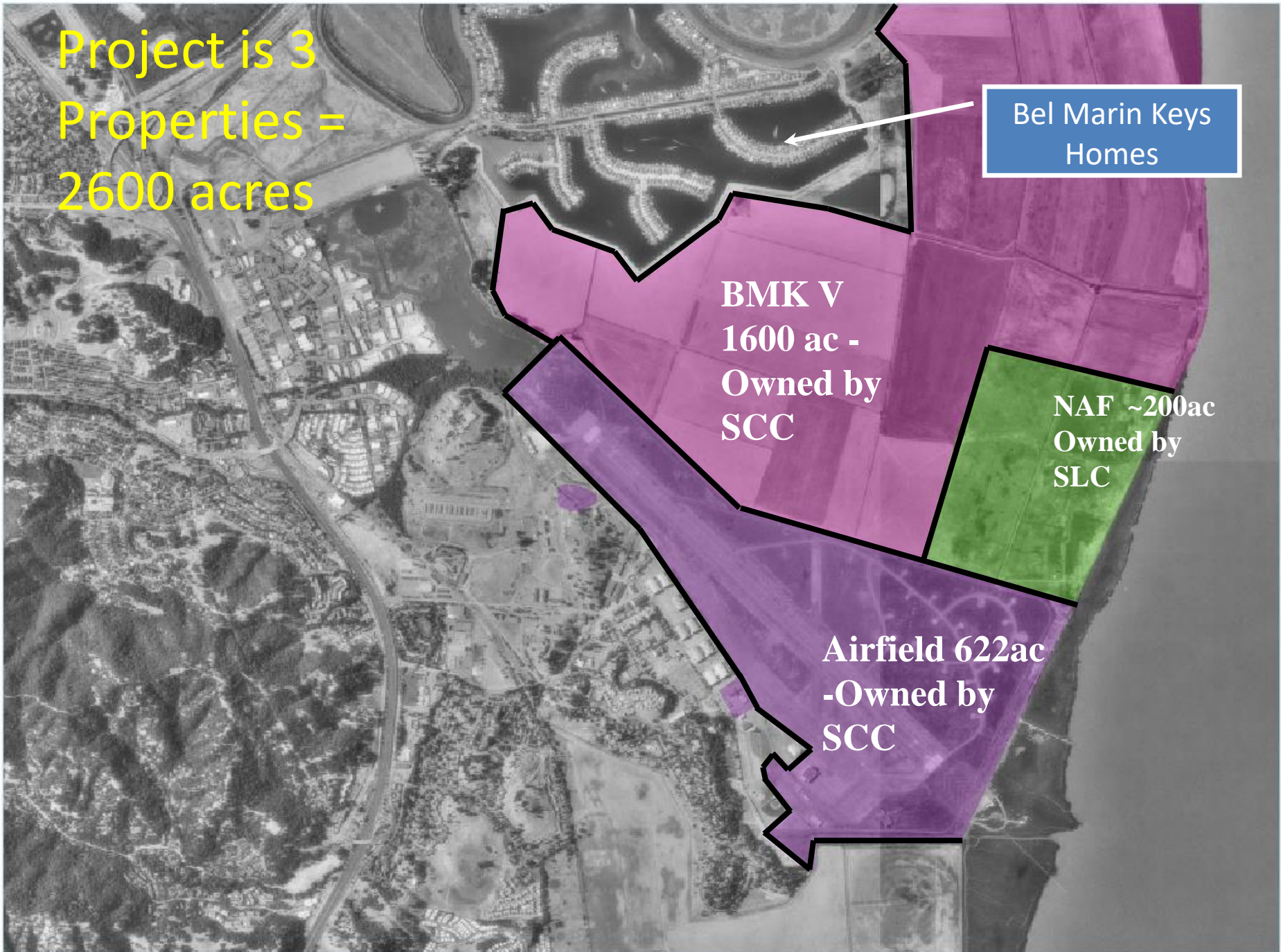
Project is 3
Properties =
2600 acres

Bel Marin Keys
Homes

BMK V
1600 ac -
Owned by
SCC

NAF ~200ac
Owned by
SLC

Airfield 622ac
-Owned by
SCC



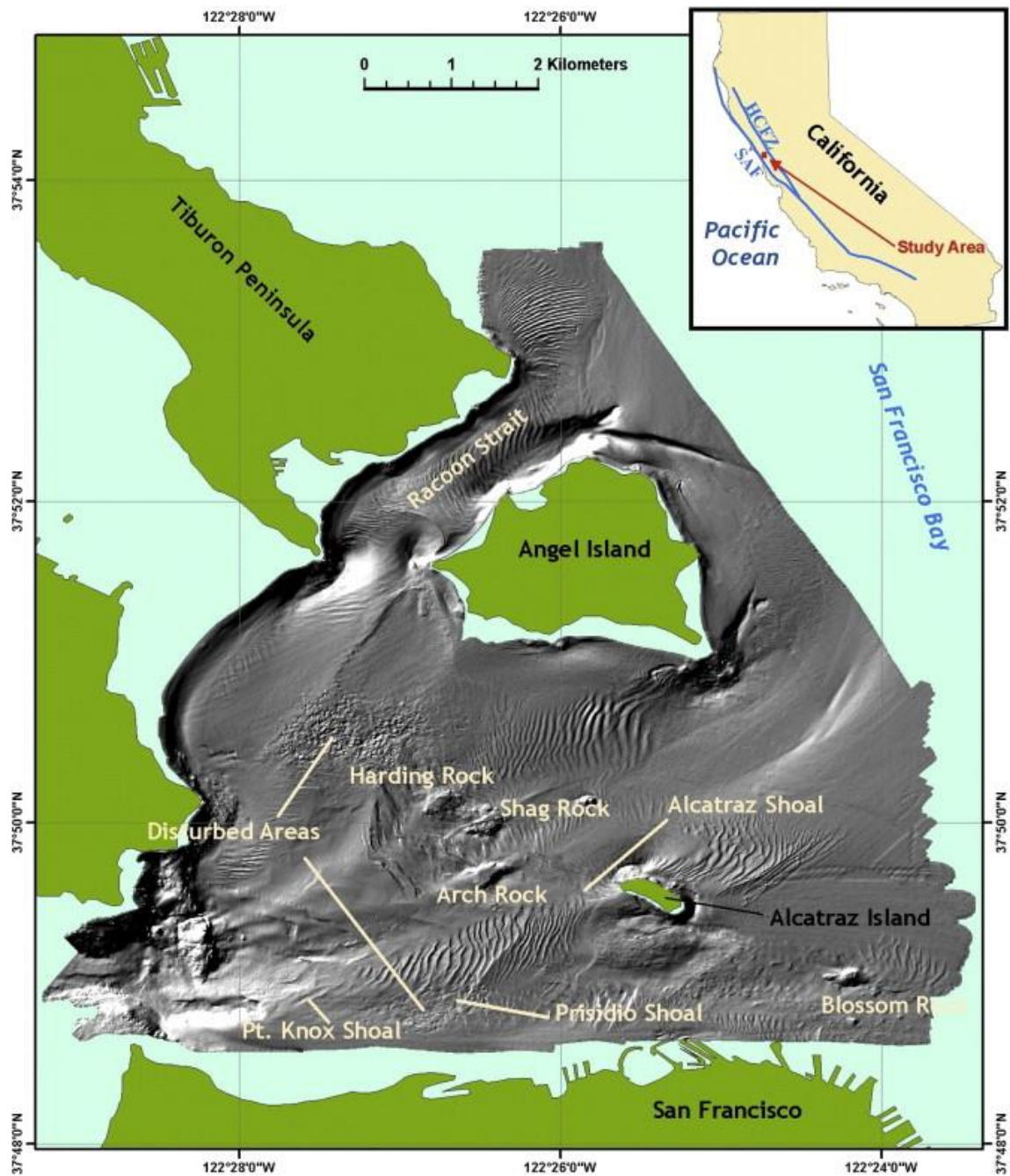


Chronology of Hamilton/Bel Marin Keys

- 1980's Base Realignment and Closure Act (BRAC); debate in Novato and Marin County over future of the property.
- September 19, 1996 SCC accepts grant from USEPA for project planning (\$75,000).
- September 18, 1997 SCC grants Pre-Project Feasibility (\$200,000).
- February 19, 1998 SCC Cost Sharing Agreement with Corps to Study Feasibility (FCSA) (\$615,000)
- April 22, 1999 Certification of EIS/EIR, Approval of the Feasibility Study; MOA with Army (signed November 10, 1999)
- 1999 Hamilton authorized by Congress in WRDA!
- September 28, 2000 SCC accepts title to Bel Marin Keys Unit V; authorize purchase and SRF loan (\$16M)
- June 25, 2001 Authorize EO to sign agreement with Corps (PCA); provides local cost-share (\$13.7M). PCA signed April 22, 2002.
- April 2003 Supplemental EIS/R and General Reevaluation Report completed for BMK.
- August 14, 2003 SCC certified SEIR for BRAC soil cleanup on Airfield parcel; Environmental Insurance purchased for \$900,000; State of CA Public Works Board authorizes acquisition of the Airfield.

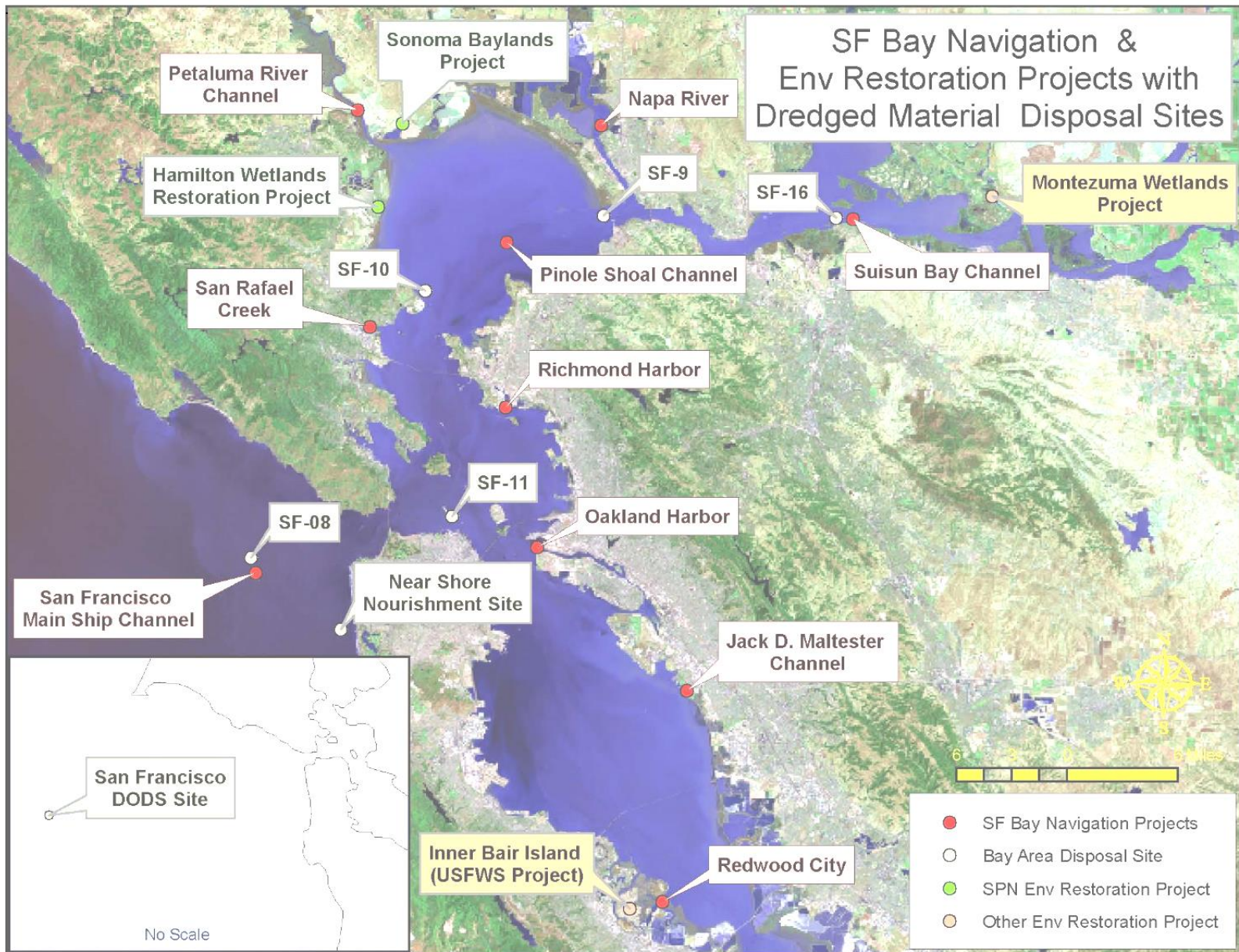
Chronology Continues

- Oct. 2003 Title to Hamilton Airfield transferred to SCC.
- Sept. 2004 Grant to Novato Sanitary District to study relocation of Dechlor facility (\$400,000); Funding for BMKV planning (\$1.1M)
- Sept. 2004 Chief's Report signed adding BMK to Hamilton Project.
- March 2005 Grant to NSD to relocate Dechlor Plant (\$1.3M)
- June 2005 Certify SEIR for Bel Marin Keys addition to Hamilton federal project, includes some CEQA changes e.g. diesel offloading.
- 2007 First dredge material from Oakland 50' arrives. Congress authorizes Bel Marin Keys in WRDA; ACOE cost estimates for BMK soars to \$600 million.
- April 2014 Hamilton levee breached, restored airfield reconnected to SF Bay.



Long Term Management Strategy

- Set of policies of BCDC; RWQCB; USEPA; Corps of Engineers
- Reduce in-bay disposal
- 40% Deep Ocean Disposal; 40% Upland and Habitat Restoration and 20% In-Bay Disposal
- LTMS limited funding for special studies
- Relies on Hamilton and other projects for implementation of policy.



First Wetland Restoration Using DM Sonoma Baylands (Before)

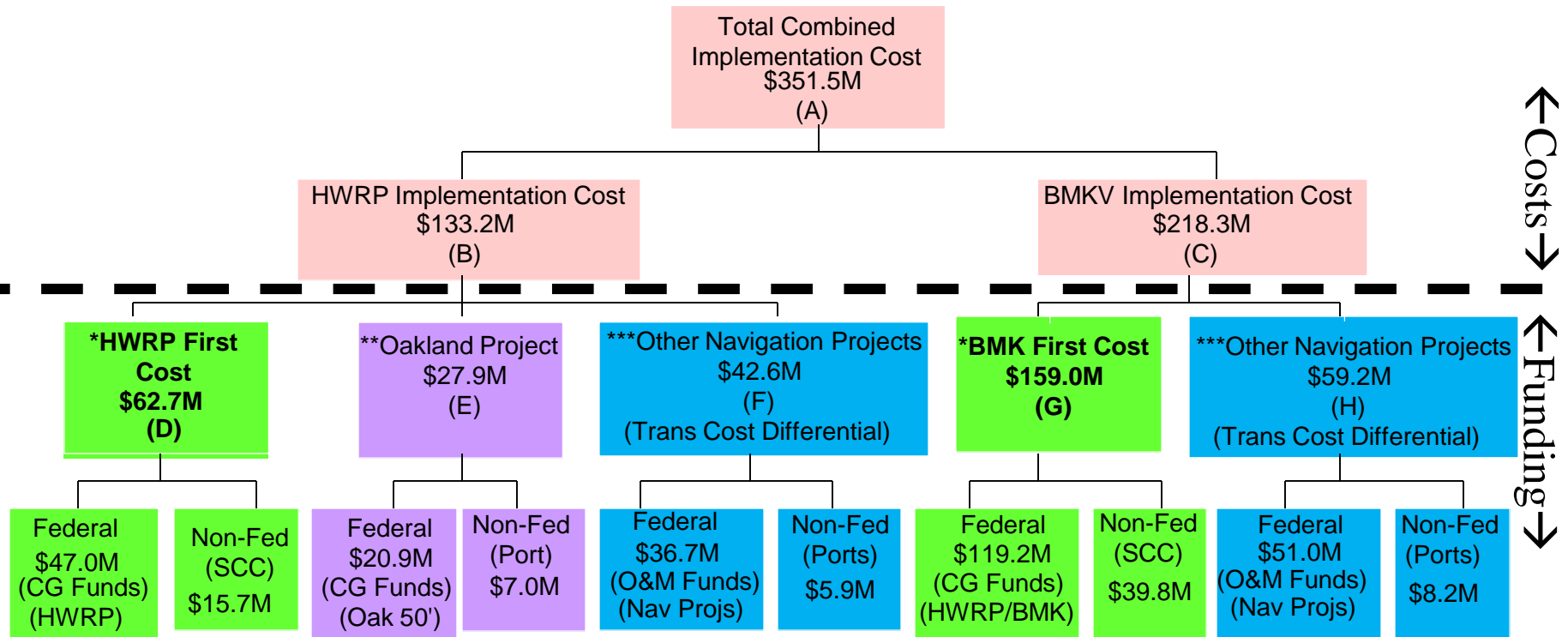


Sonoma Baylands



Hamilton/BMKV Project Costs

(October 2005 Price Level)



- Costs for Other Navigation Projects based on present estimates of dredged material deliveries to the HWRP.

*Typical Funding Sources

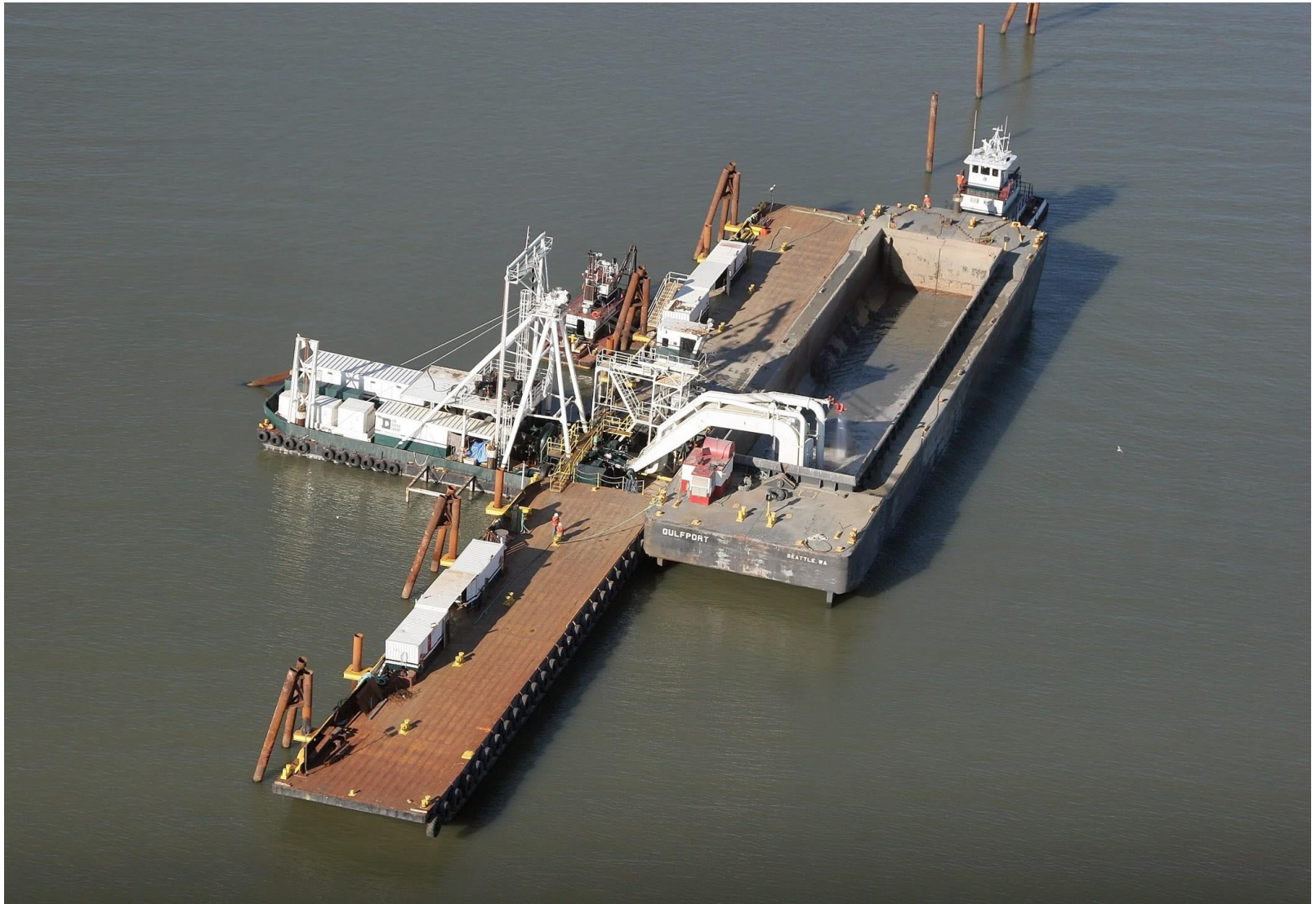
**Atypical Funding Sources

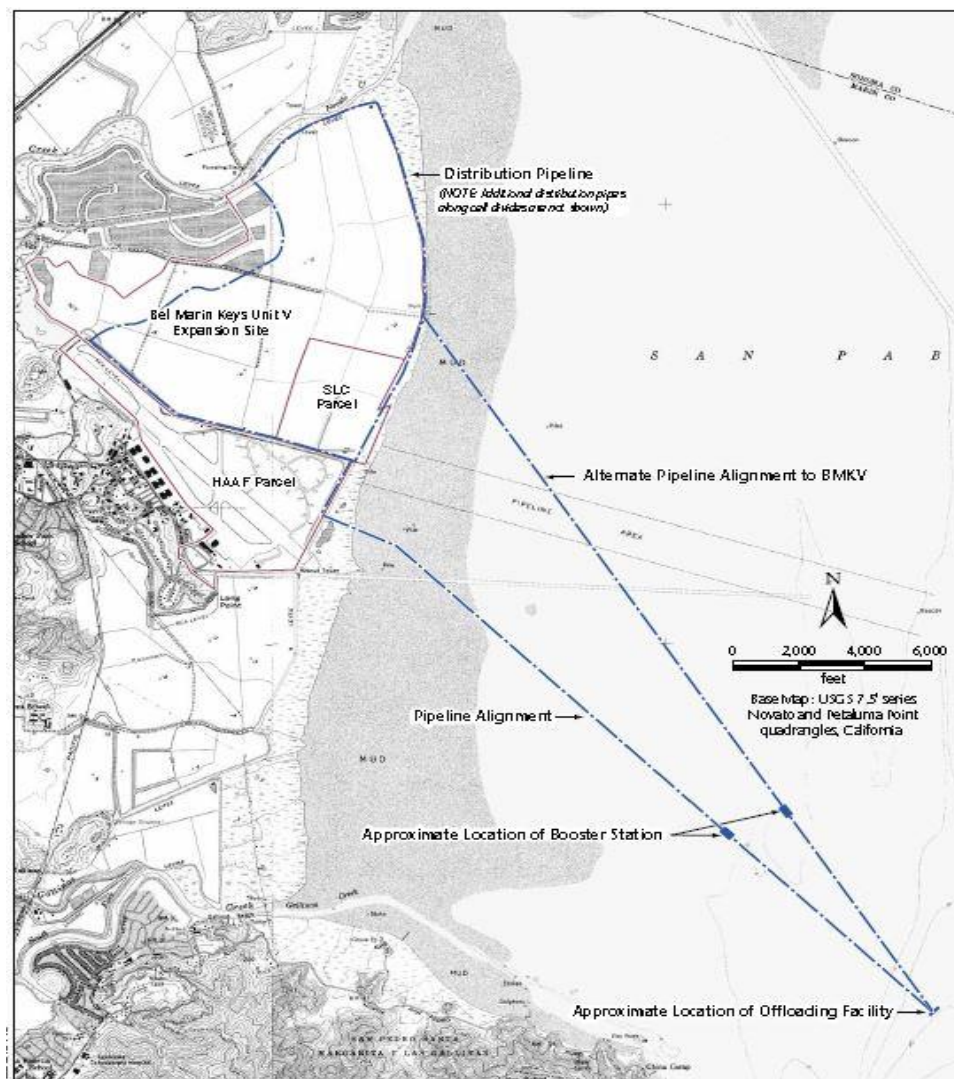
***Atypical Funding Sources

Financing

- Conservancy is Non-Federal (“local”) sponsor
 - Provides 25% of total project cost –beginning of each federal FY.
 - Receives credit for real-estate related work (“LERRs”)
 - Can perform work in-kind and receive credit.*
-
- *But the ACOE prefers cash and often will try to avoid in-kind credit.











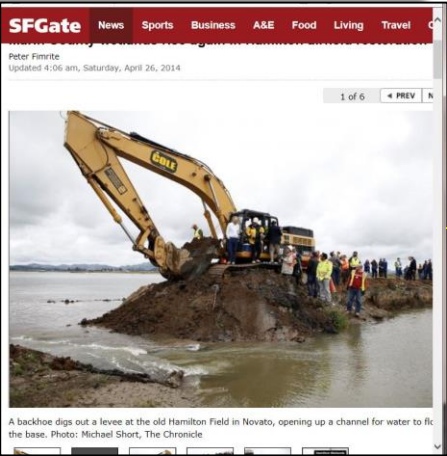








State Coastal Conservancy
Hamilton Wetland Restoration Project





737
TODD RD.

Design and Construction
Supervised by

US Army Corps
of Engineers
San Francisco District

**Hamilton Nursery
Wetlands Restoration Project**

Hamilton Airfield Novato, California

Architect:
Philip Hawkins Architect
Inc. • Associates
Roseville, California

General Contractor:
Philip Hawkins Architect
Inc. • Associates
Roseville, California

POSTED
NO TRESPASSING
KEEP OUT

**HARD HATS
REQUIRED**



**HAZARDOUS AREA
KEEP OUT
DANGER**

AUTHORIZED PERSONNEL
PERSONAL PROTECTIVE EQUIPMENT
IS REQUIRED IN THIS AREA







Natives



Natives



Natives



Natives





NORTH
SEASONAL
WETLAND

NORTH
ANTENNA
FIELD

TIDAL
PANNE

WILDLIFE CORRIDOR

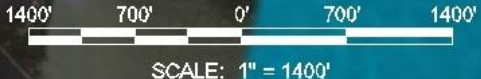
TIDAL
WETLAND

EXPANDED
SETTLING
BASIN

LEVEE
BREACH CHANNEL

BAY TRAIL

SOUTH
SEASONAL
WETLAND





HAMILTON WETLANDS



A self-guided mobile tour of this trail is
available by downloading Point by Canogle.










Figure 3-5
Bel Marin Keys Restoration
Revised Alternative 2 at Maturity

Legend









HABITAT TYPES

-  Upland Transition
-  Freshwater Emergent Wetland
-  Seasonal Wetland
-  High Transitional Marsh
-  Tidal Salt Marsh
-  Open Water

CHANNEL ORDER

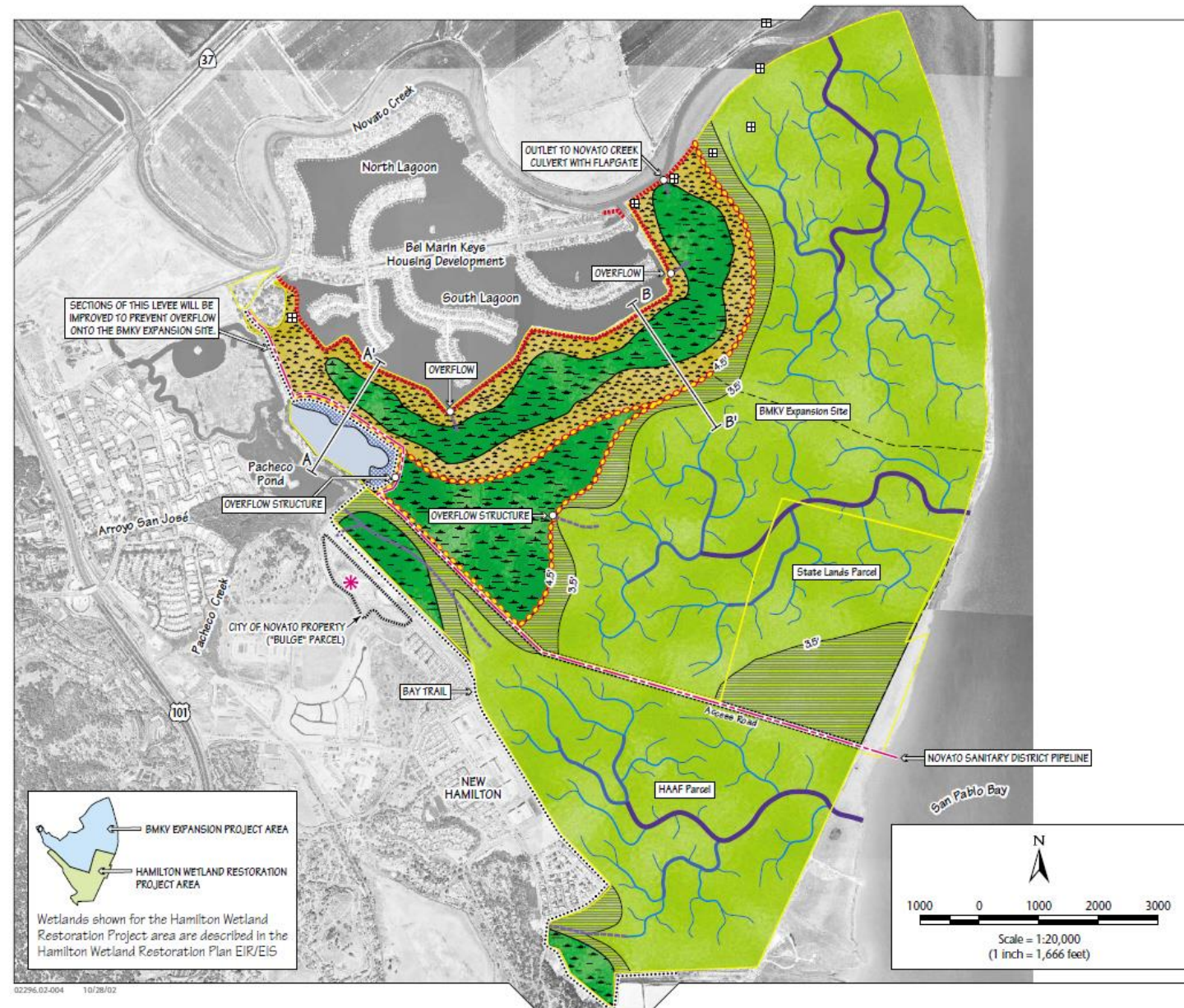
-  Primary channels
-  Secondary channels
-  Tertiary channels
-  Small branches
-  Sub-basin Boundary

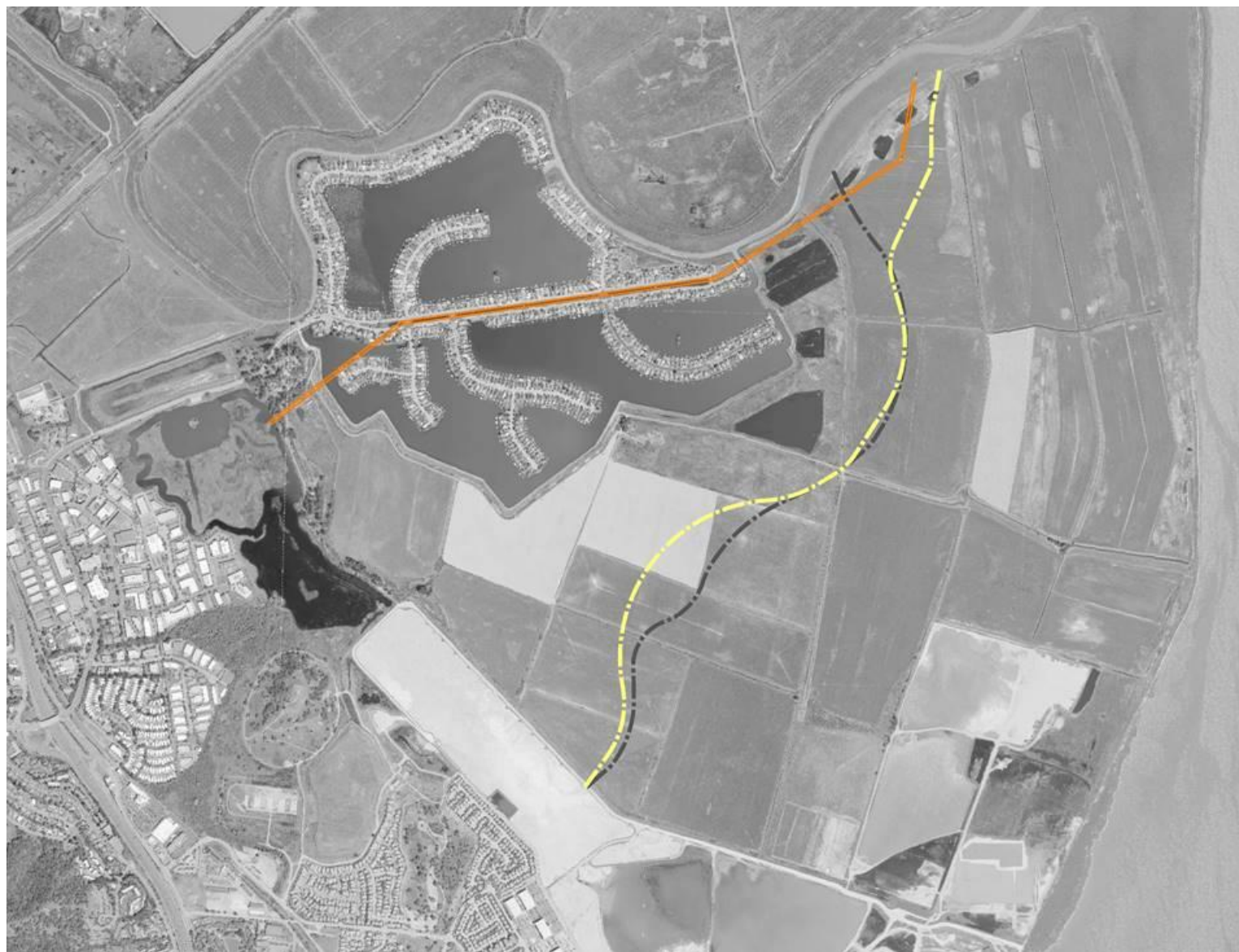
INFRASTRUCTURE

-  Parcel Boundary (see inset)
-  Overflow Channel and Structure
-  New Levee
-  Improved Levee
-  Existing Levee
-  Bay Trail
-  Power Tower
-  Novato Sanitary District Pipeline
-  Interpretive Center (not part of federal project; access area adjacent, not shown)

Notes:

Vertical elevations are relevant to NGVD 1929.
 Sections of the levee north of Pacheco Pond will be improved to prevent overflow onto the BMKV expansion site.
 See Figure 3-6 for cross sections A-A' and B-B'.





State Coastal Conservancy

BMKV Phase 1 Restoration Action – Levee Construction

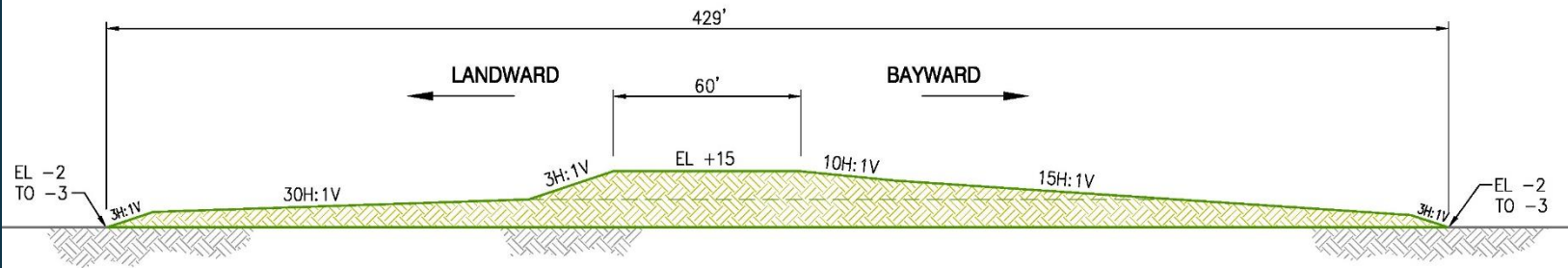


Levee Design:

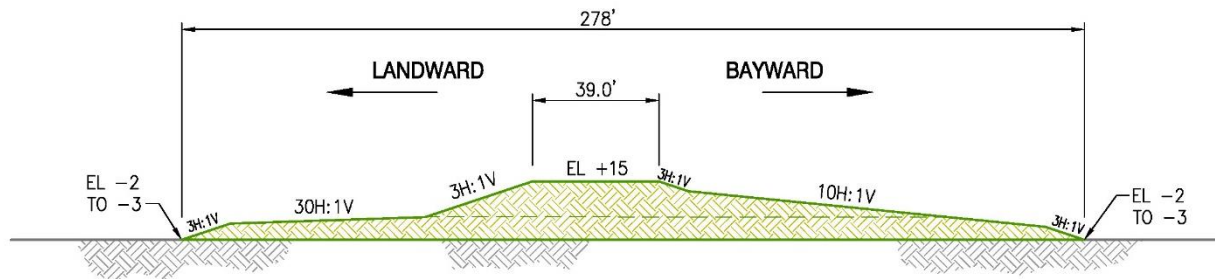
- 11,800-ft long
- 1,300,000 cubic yards
- Bayside borrow

BMKV Phase 1 Restoration Action – Levee Construction

LEVEE - NORTHERN SECTION



LEVEE - SOUTHERN SECTION



} 13.5

hamiltonwetlands.scc.ca.gov

