2-325-A Site Summary - Eden Landing Ecological Reserve -Alameda Creek 2-325-A

County: Alameda **ACP Division/Segment:** AL - G - S002 AL - G - S004

NOAA Chart: San Francisco Bay, Southern Part ***Map Book:*** AAA Fremont - N ***Decimal Degrees:*** 37.607559 -122.142345

Site Description:

Eden Landing Ecological Reserve is a 6,200 acre marsh on the east side of south San Francisco Bay extending four miles south from the San Mateo Bridge to the levee on Coyote Hills Slough, and inland three miles. This California Dept of Fish and Wildlife Reserve is roughly bounded on the north by Highway 92, the east by the Southern Pacific Railroad, on the west by San Francisco Bay, and on the south by Coyote Hills Slough (Alameda Flood Control Channel). It is fronted by very shallow mudflats extending offshore for a mile. There are four major channels allowing tidal exchange with the extensive marshes, most of which are behind levees and dikes; but there are two large areas (320 acres) of undiked marsh fronting on the bay. The exposed marsh frontage is in two locations: there's an 18 acre pocket marsh just south of the San Mateo Bridge (about 1/3 mile of bay frontage), and a large marsh (Whale's Tail Marsh - 300 acres) extending about a mile north and a mile south from the mouth of the Alameda Creek channel which is about a half mile wide. Both bay front marshes are fairly elevated pickleweed marsh with cordgrass margins. The remainder of the 4 miles of bay frontage, about 1.5 miles, is exposed rip-rap with eroding levees with low sensitivity.

Marshes behind bay front levees include about 40 diked ponds and channels that vary from well vegetated to newly converted salt ponds of largely open water. As of November 2004, the entire marsh circulation system is undergoing improvement including repositioning and replacement of existing channels and interior tide gates and siphons. Of the four openings to inner ponds from the bay, two have tide gate controls. The major exposure from the bay is via Old Alameda Creek channel which, in addition to extensive marshes along its margin, has several openings (North Creek and uncontrolled tide gates) to inner ponds. There is also significant site exposure from the upstream Alameda Creek urban drainage (most of Alameda Creek Drainage has been diverted to Alameda Flood Control Channel): at the east edge of the marsh, Alameda Creek has a road crossing with twenty 48" flap tide gates (open to ebb flow) where stream flows enter tidal channels.

Resources at Risk:

ESI and Habitat: 6B Riprap
9B Vegetated low banks
10A Salt - and brackish-water marshes

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	California black rail	FP, ST	Year-round	Mar-Aug
Birds	California least tern	FE, SE	Apr-Sep	Apr-Jun
Birds	California Ridgeway's rail	FE, SE	Year-round	Feb-Aug
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Oct
Fish	steelhead - Central/Northern California	FT	Year-round	Nov-Apr
Fish	longfin smelt	ST	Year-round	Nov-May
Mammals	salt-marsh harvest mouse	FE, SE	Year-round	
Plants	eelgrass		Year-round	

FT-Federally Threatened, FE-Federally Endangered, FP-Federally Protected, SE-State Endangered, ST-State Threatened, SP -State Protected, SR-State Rare, SSC-Species of Special Concern, BGEPA-Bald and Golden Eagle Protection Act, SSSP-State Special Status Species

List of Key Contacts:

Type	Name/Title	Organization	Phone
C	/Coordinator	Native American Heritage Commission	(916) 373-3710
C	/Coordinator	Northwest Information Center	(707) 588-8455
E	/Dispatch, 24-hr	Alameda County Flood Control	(510) 670-5500
E	/Dispatch, 24-hr	Alameda County Sheriffs Department	(510) 667-7721
E	/Supervisor	Cargill Salt	(641) 670-0654
E	/Dispatch, 24-hr	East Bay Regional Park District	(510) 881-1833
O	/Office	Point Blue Conservation Science	(415) 663-8032
T	/Supervisor	CDFW, Region 3	(415) 250-0243
T	/Agency Representative	NOAA National Marine Fisheries Service	(562) 980-3232

C – Cultural, Historic, Archaeological; E – Entry/Owner/Access; O – Other; S – Safety; T – Trustee; X – Exclusion or Security

Additional Site Summary Comments:

A variety of bird species inhabit the area. Harbor seals haul out on this shoreline as well.

Concerns and Advice to Responders:

Threatened and endangered species are located in salt-marshes as are thousands of birds and fish: should oil enter the marsh, expect severe injury and death of marsh vegetation, small mammals, shorebirds and waterfowl. Primary concern is to prevent oil entry to extensive marshes (6,000 acres) by blocking water exchanges. Secondary concern is oiling of two large bay front marshes. Avoid trampling vegetation and trampling oil into sediments.

Hazard and Restrictions:

Extremely extensive and shallow mudflats in SF Bay in front of this site. Seas to 3 feet under windy condtions. High voltage powerlines at east end of site pose hazards to helicopter and other Air Operations (UAVs).

Site Strategies:

Site Validation Level: II

Strategy:* 2-325.1** ***Objective: Primary: Exclude oil from entry channels by booming and closing tide gates at bay front.

Strategy: a. Mt. Eden Creek opening needs 200 ft of 9x9+ Hboom in a chevron to exclude oil from entering the Creek.
b. Exclude oil from entering Alameda Creek mouth with a chevron deployment at the mouth (1500 ft of 9X9+ Hboom), with shoreline attachments just past the mouth to the south and well north (200 ft) of mouth. Back with sorbent boom (1000 ft)
c. Exclude oil from entering channel at south end of 'Whale's Tail Marsh with chevron (600 ft of 9x9+ Hboom), with attachments north and south of the mouth. Back with sorbent boom (600 ft).
d. About a mile south of Alameda Creek mouth is a screw tide gate for two 48" culverts. These must be closed to exclude oil and boomed with 100ft of 9X9+ Hboom.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit
Boom	Harbor	9x9		2400	feet
Boom	Sorbent	6x6		1600	feet
Anchor	Danforth	22	lbs	15	
Vessel	Boom Boat			2	
Vessel	Skiff or Punt			1	
Staff	Staff to Deploy			7	
Staff	staff to tend			2	

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Strategy:* 2-325.2 *Objective: Protective booming of Whale's Tail Marsh and pocket marsh south of HWY 92.

Strategy: Prevent oiling of exposed marsh and exclude oil penetration via finger channels:
a) Deploy 2000 ft of 9X9+ Hboom and sorbent from riprap near toll plaza to riprap levee shore 1/3 mile south of Hwy. There is a lot of debris at this location which indicates that oil would tend to collect here.
b) Deploy 9300 ft of 9X9+ Hboom and sorbent from rip-rap at north edge of Whale's Tail Marsh to riprap at south end of Whale's Tail Marsh; link it to exclusions at mouth of Alameda Creek and unnamed channel at south end of marsh which should be already be deployed (2-326.1). [upper leg is about 4700 ft; lower leg to south is about 4600 and should be linked to lower exclusion which should already be in place (2-326.1c: 600 ft).] The area at the south end of Whale's Tail marsh below the unnamed channel has a lot of debris and may be a locale where oil will naturally collect.
NOTE: Call Reg 3, DFW, for information and assistance for keys, directions, and road conditions - 415-454-8050.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit
Boom	Harbor	9x9	inch	11300	feet
Boom	Sorbent	6x6	inch	10000	feet
Anchor	Danforth	22	lbs	25	
Vessel	Boom Boat			4	
Vessel	Skiff or Punt			3	
Staff	Staff to Deploy			16	
Staff	stsff to tend			2	

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Strategy:* 2-325.3 *Objective: Collection - develop or enhance skimming at mouth of old Alameda Creek when substantial oil is present.

Strategy: Create a skimming pocket by deploying an additional 300 ft of 9X9+ Hboom just inside the mouth of Alameda Creek. Back the pocket with second layer of boom (50 ft swamp boom) and sorbent. Deploy a shoreside skimming system (SSS) on the north levee (may be limited by wet weather). On-site storage will be necessary.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit
Boom	Harbor	9x9	inch	300	feet
Boom	Sorbent	6x6	inch	50	feet
Anchor	Danforth	15	lbs	5	
Vessel	Skiff or Punt			1	
skimmer	shoreside			1	
Staff	Staff to Deploy			4	
Staff	Staff to Tend			2	

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Strategy:* 2-325.4 *Objective: For inland spills from upstream Old Alameda Creek, collect oil at east creek crossing.

Strategy: Divert oil to bank using diagonal deployment of two 250 ft layers of swamp boom and establish shoreside skimming. If oil is light, consult IC for alternatives to SSS. If current is strong, contact IC about underflow dam construction. NOTE: it may be possible to manipulate current pattern to benefit skimming by blocking selected culverts.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit
Boom	Sorbent	6x6	inch	500	feet
Anchor	Danforth	15lb	lbs	4	
skimmer	shoreside			2	
Staff	Staff to Deploy			4	
Staff	Staff to Tend				

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Logistics:

Directions: Access to site at three points. 1) East side access: exit I-880 at Alvarado, north (right) and continue north about 2 miles crossing Union City Blvd onto Horner St and continuing to Veasy St then right to the locked gate. 2) South side access to site and bay front: exit I-880 as above and turn left on Lowry Rd after crossing the flood control channel and continue to Newark Blvd (Union City Blvd): on the opposite side of the Blvd is an East Bay Regional Park District (EBRPD) access parking area: the flood control levee is accessible though a locked gate (EBRPD). 3) North side access: exit Hwy 92 freeway at Eden Landing Rd and proceed south to a locked gate (Reg 3 DFW for access).

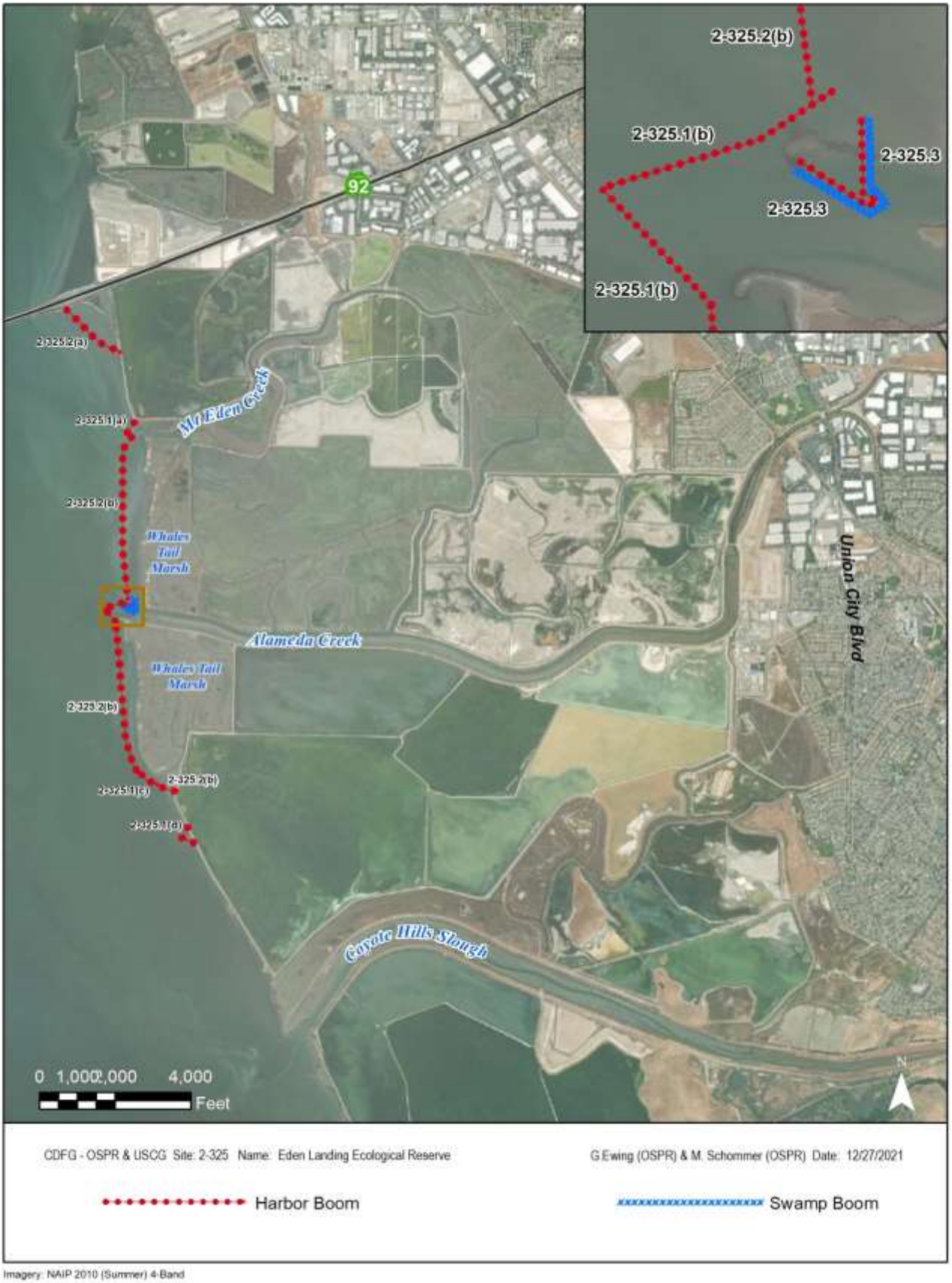
Land Access: During wet season, south channel only; otherwise roads all traffic. Coordinate with EBRPD Personnel for access & comms.

On-Water Limitations: Shallow draft vessels<4'. Boat launching available at San Leandro Marina or Redwood City Harbor . Small skiffs may be launched from local levees or Hayward Regional

Facilities, Staging Areas, Command Posts, Available Equipment: Staging at end of Veasey Rd, also at EBRPD Property off Newark Blvd at the Alameda Flood Control Channel access. Small staging area and field post possible at Hayward Regional Shoreline or National Wildlife Refuge. Command Post available at Alameda County OES.

Communications Problems: Good Cell reception.

Additional Operational Comments: Vehicle access is controlled by Cargill Salt and Alameda County Flood Control. Truck turn-arounds are available within several hundred yards of the Bay shoreline and will be useful when roads are passable. There is a possible access to the levee from west bound Hwy 92 at the toll plaza, but that would require improvement with several truckloads of fill to enable exit from the hwy grade to the levee.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92
2-325.2(a)
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Mt Eden Creek
Whales Tail Marsh
Alameda Creek
Whales Tail Marsh
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Union City Blvd
Coyote Hills Slough
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Feet
N
CDFG - OSPR & USCG Site: 2-325 Name: Eden Landing Ecological Reserve
G.Ewing (OSPR) & M. Schommer (OSPR) Date: 12/27/2021
Harbor Boom
Swamp Boom
Imagery: NAIP 2010 (Summer) 4-Band