Site Summary- Eden Landing Ecological Reserve -Alameda Creek

2-325 -A

Thomas Guide Location	Latitude N	Longitude W
	37 35.3	122 09.0

County: Alameda

USGS Quad: Redwood Point, Newark

NOAA Chart: San Francisco Bay, Southern Part

Last Page Update : 12/8/2004

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 about 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 (totaling about 320 acres) of undiked marsh fronting on the bay which have direct bay contact. The exposed marsh frontage is in two locations: there is a 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 Old 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 riprap and exposed, eroding dikes 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 (or will 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 Old Alameda Creek urban drainage (most of Alameda Creek Drainage has been diverted to Alameda Flood Control Channel): at the east edge of the marsh, Old Alameda Creek has a road crossing with twenty 48" flap tide gates (open to ebb flow) where stream flows enter tidal channels.

SEASONAL and SPECIAL RESOURCE CONCERN

The marsh is an "A" priority all year. Large numbers of birds winter in the interior ponds.

RESOURCES OF PRIMARY CONCERN

There is over two miles of exposed high pickleweed marsh with fringing cordgrass plus similar exposed frontage in Alameda Creek Channel totaling about 400 acres. The remainder of the 6200 acres is restored salt ponds varying from developed marsh to open ponded water.

The endangered California clapper rail and California black rail are found along the marsh front, particularly in south Whale's Tail Marsh and along Old Alameda Creek. Endangered least terns forage in the interior ponds (ponds 10 and 11) near the bridge toll plaza. The ponded areas are used year round by thousands of waterbirds and shorebirds. There is a heron rookery in pond 6B.

Endangered salt marsh harvest mouse live in these marshes.Hhistorically the saltmarsh wandering shrew was found here. Harbor seals haulout at the south tip of Old Alameda Creek. Bay fish species tend to move in and out of these ponds and channels. There is an eelgrass bed near the mouth of Old Alameda Creek.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Ohlone cultural sites are nearby. Contact the California Dept of Parks and Recreation - Office of Historic Preservation (Eric Allison -(916) 653-9125), and the Northwest Information Center, (Bryan Much, Sonoma State College ((707) 332-1117)) for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
B	Joy Albertson	US Fish & Wildlife Service, SF Bay (NWR)	(510) 792-0222
E	EBRPD Dispatch EBRP	East Bay Regional Park District	(510) 881-1833
E/T	Hayward/Eden Landing Park Supervisor	East Bay Regional Park District	(510) 544-3082
TBE	John Krause Wildlife biologist	CA Dept. of Fish & Wildlife, Region 3	(415) 454-8050
E	Pat Metelli	Cargill Salt	(510) 790-8610

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location	NOAA CHART	Latitude N	Longitude W
Alameda	San Francisco Bay, Southern Part	37 35.3	122 09.0

Last Page Update : 12/15/2010

CONCERNS and ADVICE to RESPONDERS:

Threatened and endangered species are in both bay front and back 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 entries. Secondary concern is oiling of two large bay front marshes. Avoid trampling vegetation and avoid trampling oil into sediments.

HAZARDS and RESTRICTIONS:

Extremely extensive and shallow mudflats in SF Bay in front of this site. Seas to 3 feet under windy condtions. High voltage electictowers and lines at east end of site pose hazards to helicopter and other low flying traffic.

SITE STRATEGIES

Shallow water craft or high tide conditions are necessary for some operations. During wet season, roads are often impassible to vehicles. Currents in channels tend to be strong, requiring diagonal booming, heavy anchors and chain, and longer anchoring scope in currents.

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

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 Old 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 Old 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.
e) Call DFG (John Krause), for information and assistance - 415-454-8050.

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

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 riprap 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 Old Alameda Creek and unnamed channel at south end of marsh which should be already be deployed (2-306.1). [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 (2-306.1c: 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 John Krause, DFG, for information and assistance for access, directions, and road conditions - 415-454-8050.

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

Create a skimming pocket by deploying an additional 300 ft of 9X9+ Hboom just inside the mouth of Old 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.

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

Divert oil to bank using diagonal deployment of two 250ft 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

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
2-325.1	2400			1600	17	7-22#+& 10-15#+/20'1/2"chain each	2	1					7	
2-325.2	11300	0	0	10000	25	22#+ danforth	4	3	0		0		23	
2-325.3	300	50	0	50	5	15#+ danforths	0	1	1	SSS	1	storage tank	3	2
2-325.4	0	500	0	0	10	4 12#+ anchors + 6 stakes	0	0	1	SSS	0			

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

There is 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 Parks (EBRP) access parking area: the flood control levee is accessible though a locked gate (call EBRP). 3) North side access: exit Hwy 92 freeway at Eden Landing Rd and proceed south to a locked gate (call DFG for access). (Driving within the site is limited seasonally.) 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 about 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.

LAND ACCESS: During wet season, south channel only; otherwise roads all traffic.

WATER LOGISTICS:
Limitations: depth, obstruction — Shallow draft vessels <4'.

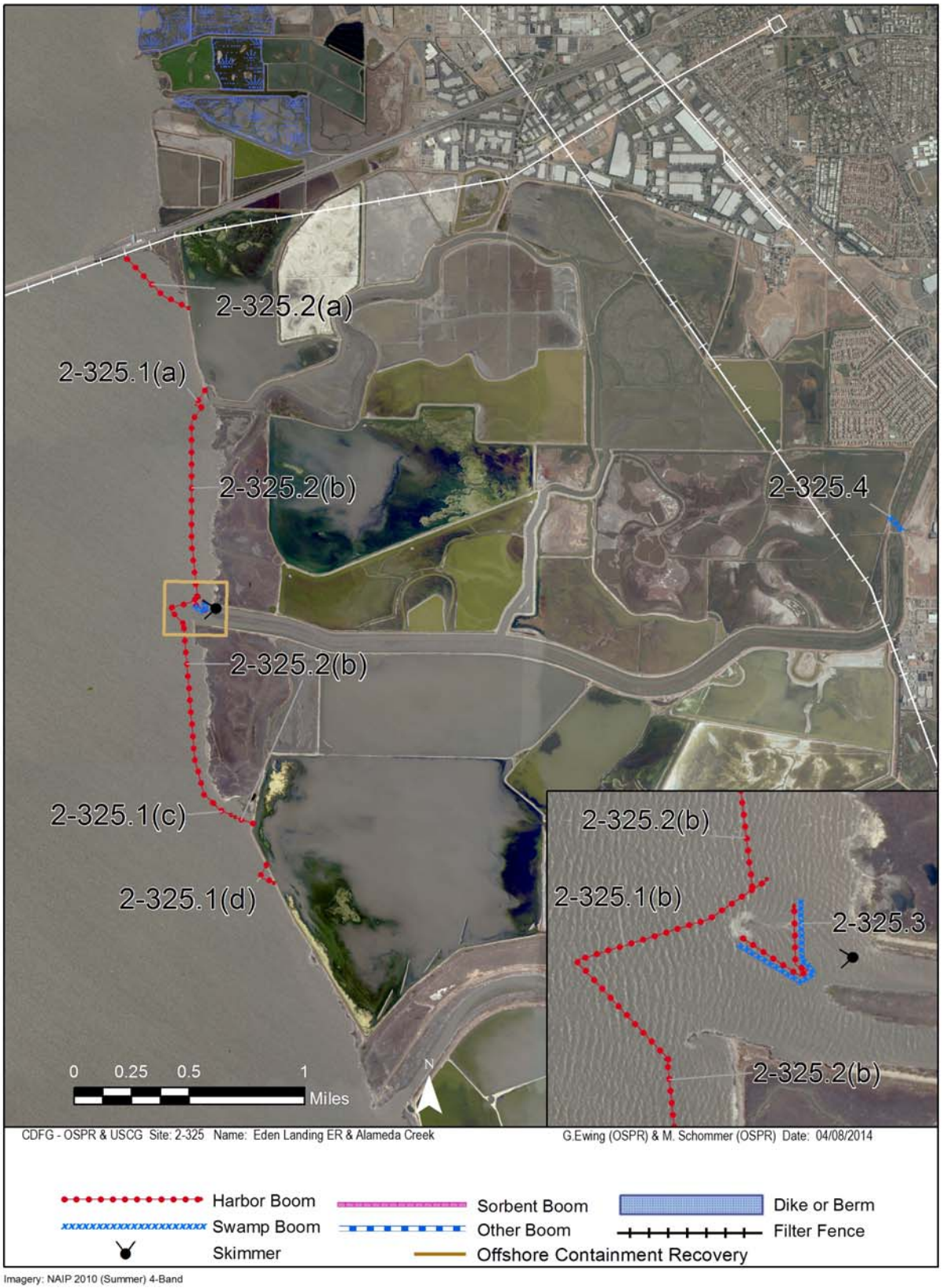
Launching, Loading, Docking and Services Available: Boat launching available at Redwood City Harbor or San Leandro Marina. Possible CalTRANS launch ramp at toll plaza. Small skiffs may be launched from local levees or Hayward Regional Shoreline.

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging at end of Veasey Rd, also at EBRPD land 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 HQ. Command Post available at Alameda County OES.

COMMUNICATIONS PROBLEMS: NONE KNOWN

ADDITIONAL OPERATIONAL COMMENTS: Vehicle access is controlled by Cargill Salt and Alameda County Flood Control.


2-325.2(a)
2-325.1(a)
2-325.2(b)
2-325.4
2-325.2(b)
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2-325.1(d)
2-325.2(b)
2-325.1(b)
2-325.3
2-325.2(b)
0 0.25 0.5 1
Miles
N
CDFG - OSPR & USCG Site: 2-325 Name: Eden Landing ER & Alameda Creek
G.Ewing (OSPR) & M. Schommer (OSPR) Date: 04/08/2014
Harbor Boom
Swamp Boom
Skimmer
Sorbent Boom
Other Boom
Offshore Containment Recovery
Dike or Berm
Filter Fence
Imagery: NAIP 2010 (Summer) 4-Band