Site Summary- San Lorenzo Creek, Bunker and North Marshes

2-315 -A

County:

USGS Quad: **San Leandro**

Thomas Guide Location: AAA Fremont - N Alameda

Latitude N: 37 29.0

Longitude W: 122 02.0

NOAA Chart: **San Francisco Bay, Southern Part**

Last Page Update : 10/1/2002

SITE DESCRIPTION:

This large contiguous section of bay front marshes, diked marshes and tidal channels/creeks (~150 acres) is located along the east side of San Francisco Bay in San Leandro. Shoreline south of San Lorenzo Creek is the East Bay Regional Park Districts Hayward Shoreline. Areas north of San Lorenzo Creek, such as Bunker Marsh and North Marsh are owned by the City of San Leandro. The site covers approximately 2.25 miles of shoreline and is bounded on the north by Estudillo Canal and on the south by Bockman Channel at the Oro Loma Sanitary Waste Facility. San Francisco Bay is west of the site and the railroad on the east limits the upstream extent of San Lorenzo Creek.

The shoreline consists of rip rapped levees; a small segment of sand beach outboard of Bunker Marsh; a 3/4 mile long bayfront cordgrass marsh in the southern part of the site; and four separate tidal channels with vegetated banks. At the northern-most portion of the site is Estudillo Canal. Estudillo Canal is dammed approx. 100 yds upstream by a bridge with 12 large (48") culverts with flap gates to prevent bay water from moving upstream. Two small unnamed saltmarshes are present adjacent to the golf course, yet contained by levees. The smaller northern marsh is connected to the bay via a culvert with a flap gate. The gate prevents bay water from flowing into the marsh. The larger marsh is fully tidal, connected to the bay via a 24" culvert with no gate structures. However, there are concrete risers located on the inboard and outboard ends of the culvert with slots for weir boards.

North and Bunker marshes are diked with riprap levee shorelines. North Marsh (94 acres) is bounded by levees but open to the bay via a gate structure of 4 x 48" culverts with grates on either end and screw gates on each. The bayfront cordgrass marsh (28 acres) is exposed to the bay and fronted by a wide tidal mudflat. The largest channel is the San Lorenzo Creek in the middle portion of the site. It's banks are lined by a wide band of marsh vegetation (>75ft) and extend upstream to the railroad tracks (1/2 mile). A tidal slough extends to the north off the mouth of San Lorenzo Creek and cuts through the bayfront marsh. This slough extends northward to Bunker Marsh (26 acres) and other marshes controlled by the City of San Leandro (e.g. Bunker, East, North, and Citation Marshes). The Bunker Marsh levee has an open breach at the south end at this slough. On the south end of the site is Bockman Channel, a narrow and short (<1/2 mile) channel lined on both banks with marsh vegetation (<20ft).

SEASONAL and SPECIAL RESOURCE CONCERN

The site is an "A" priority all year.

RESOURCES OF PRIMARY CONCERN

Extensive cordgrass marshes and mudflat habitats are present along the entire site. Cordgrass and pickleweed marshes are located closer to the levees, along the banks of the various channels, and interior to the levees of the Bunker and North Marshes.

The endangered California clapper rail and threatened California black rail forage and nest in the bayfront and interior marshes. The marshes and nearshore waters over the mudflats are heavily used by migratory waterfowl. The endangered California least tern are known to forage in the nearshore waters. A wide variety of other shorebirds and wading birds utilize these habitats

The endangered salt marsh harvest mouse inhabits the marshes.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Ohlone cultural sites may be 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
E/O		Alameda County Flood Control	(510) 670-5500
E	EBRPD Dispatch EBRP	East Bay Regional Park District	(510) 881-1833
E/O	Environmental Services	San Leandro City of	(510) 577-3401

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location	NOAA CHART	Latitude N	Longitude W
AAA Fremont - N Alameda	San Francisco Bay, Southern Part	37 29.0	122 02.0

Last Page Update : 10/1/2002

CONCERNS and ADVICE to RESPONDERS:

Prevent oil from entering bay front and diked marshes, and marsh-lined channels (San Lorenzo Creek). Avoid trampling marsh vegetation and trampling oil into mud.

HAZARDS and RESTRICTIONS:

Shallow water, Seas to 3 feet. Soft mud. Possible strong currents in channels.

SITE STRATEGIES

Strategy 2-315.1 Objective: Exclude oil from entering the bay diked marshes and tidal channels. Should oil enter the marsh or channels contain oil to the smallest possible area.

a) Deploy 600 ft of 9X9+ Hboom across the outer mouth of San Lorenzo Creek, near the edge of the marsh. Deploy 600ft of swamp boom at small angle from levee to levee, across that channel and vegetated flood plain banks. This is a wide creek (150ft) with potentially strong currents. Boom angle should be small. Deflect oil to southern shore/levee where road and small staging area are available for oil recovery. Skiffs can be deployed from levee. The boom can be delivered to site by truck. A shoreside skimming system and storage will be needed to recover oil if sufficient volume accumulates.

b) Deplot 50 ft of swamp boom (4x4+) across unnamed slough channel extending north off San Lorenzo Creek near the mouth. Deploy boom in slough near the confluence with San Lorenzo Creek. Back swamp boom with sorbent boom. Boom angle should be small as currents may be strong. Requires 1 skiff and 4 people and sufficient anchoring to seal banks of slough during the rise and fall of the tide. This slough provides water to Bunker Marsh and others north of San Lorenzo Creek.

c) Deploy 50 ft of swamp boom (4x4) at the entrance to Bunker Marsh, and another 50 ft across channel leading to East and Citation Marshes. Back swamp boom with sorbent boom. This is a leveed marsh with an unrestricted opening to the slough channel that flows to San Lorenzo Creek.

d) Close tide gate structure at entrance to North Marsh. Contact City of San Leandro - Public Works (510) 577-6022.

e) Place weir boards in concrete risers on culvert at larger tidal marsh (adjacent to the golf course and north of North Marsh).

f) Ensure flap gates are adequately closed to tidal flooding at Estudillo Canal, small marsh adjacent to golf course, and at Bochman Channel.

g) Deploy 200 ft of swamp boom (4x4) in the mouth of Bochman Channel located at southern edge of site adjacent to Oro Loma Sanitary Waste facility. Back swamp boom with sorbent boom. Requires 1 skiff and 4 people, or may possibly be deployed from land by heaving lines across this narrow channel and pulling boom across at an angle to any current. The boom can be delivered to the site by truck.

Strategy 2-315.2 Objective: Exclude oil from entering the bay front cordgrass marsh. Should oil enter the marsh contain oil to the smallest possible area.

Deploy 3,000 ft of 9X9+ Hboom around the marsh delta formed at the mouth of San Lorenzo Creek. This may require as many as 4 skiffs or shallow draft boom boats and 12 people. Anchor north end to rip rapped levee of Bunker Marsh, extend around outside (bayside) of marsh and San Lorenzo Creek mouth, south to rip rapped levee just south of Bockman Channel. Boom and skiffs may be deployed from south levee of San Lorenzo Creek or from offshore supply vessel at high tide.

Strategy 2-315.3 Objective: Oil Recovery by skimming

A shoreside skimming system and adequate storage will be needed to recover oil if sufficient volume accumulates as a result of strategy .1. Likely locations are San Lorenzo Creek, Bockman Channel, and Estudillo Canal.

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
2-315.1	600	950	0	300	8	20#	0	2	0		15	stakes	8	
2-315.2	3000	0	0		16	20# w/20' 1/2" chain each	0	4				stakes	12	
2-315.3	0	0	0	0	0		0	0			2	SSS/vac truck		

LOGISTICS

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

Hwy 880 to San Leandro; exit Washington Ave. west; right on Grant to Sanitary Waste Facility to launch ramp at San Leandro Marina, take Highway 880 to San Leandro, exit at Marina Blvd. Go west on Marina Blvd. to San Leandro Marina. This large contiguous section of bay front marshes, diked marshes and tidal channels/creeks (~150 acres) is located along the east side of San Francisco Bay in San Leandro. Shoreline south of San Lorenzo Creek is the East Bay Regional Park Districts Hayward Shoreline. Areas north of San Lorenzo Creek, such as Bunker Marsh and North Marsh are owned by the City of San Leandro.

LAND ACCESS: Access for trucks on well maintained, graveled levee roads.

WATER LOGISTICS:
Limitations: depth, obstruction — Shallow draft vessels <6'.

Launching, Loading, Docking and Services Available: — Boat launching available at San Leandro Marina. Small skiffs may be launched from levees.

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

Staging areas and access are available at the Oro Loma Sanitary Waste Facility. There are 6,000 lb vehicle bridges across both San Lorenzo and Bochman channels. Bochman also has a foot bridge near the mouth. Shoreline south of San Lorenzo Creek is the East Bay Regional Park Districts Hayward Shoreline. Areas north of San Lorenzo Creek, such as Bunker Marsh and North Marsh are owned by the City of San Leandro.

COMMUNICATIONS PROBLEMS: No limitations for cell phones

ADDITIONAL OPERATIONAL COMMENTS:


2-315.1(f)
Culvert screw gate
Bridge/culvert
Estudillo Canal
Culvert screw gate
Weir boards
2-315.1(f)
Tide gate
North Marsh
4 culvert screw gates
Citation Marsh
2-315.1(c)
2-315.1(b)
Marsh Opening
2-315.1(a)
2-315.1(a)
Oro Loma Sewer Facility
2-315.2
Bochman Channel
Exit culvert with flap gate
2-315.1(f)
2-315.1(g)
Oro Loma Marsh
0
0.25
0.5
1
Miles
N
CDFG - OSPR & USCG Site: 2-315 Name: San Lorenzo Creek, Bunker and North Marshes
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