

**2-315-A Site Summary - San Lorenzo Creek, Bunker and North Marshes****2-315-A****County:** Alameda **ACP Division/Segment:** AL - F - S002**NOAA Chart:** San Francisco Bay, Southern Part **Map Book:** AAA Fremont - N Alameda **Decimal Degrees:** 37.670255 -122.163125**Site Description:**

Site under jurisdiction of East Bay Regional Park District's (EBRPD) Hayward Shoreline, 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. The site covers approx 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. This 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 salt-marshes are present adjacent to the golf course, yet contained by levees. The smaller northern marsh is connected to the bay via culvert with flap gates. The gate prevents bay water from flowing into the marsh. The larger marsh is fully tidally connected to the bay via a 24" culvert w/o 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).

**Resources at Risk:***ESI and Habitat:* 6B Riprap

9B Vegetated low banks

10A Salt - and brackish-water marshes

**List of Resources at Risk:**

	<b>Resource Name</b>	<b>Status</b>	<b>Presence</b>	<b>Sensitivity</b>
Birds	California least tern	FE, SE	Apr-Sep	Apr-Jun
Birds	California Ridgeway's rail	FE, SE	Year-round	Feb-Aug
Birds	California black rail	FP, ST	Year-round	Mar-Aug
Birds	migratory waterfowl	FP	Apr - Sep	
Fish	longfin smelt	ST	Year-round	Nov-May
Mammals	salt-marsh harvest mouse	FE, SE	Year-round	
Plants	California seablite	FE, SSSP	Year-round	Jul-Oct

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	/Dispatch, 24-hr	East Bay Regional Park District	(510) 881-1833
E	/Shoreline Parks Manager	East Bay Regional Park District	(510) 881-1832

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

**Additional Site Summary Comments:**

**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.

**Hazard and Restrictions:**

Shallow water with potential underwater hazards (old pilings), Seas up to 3 feet w/ windchop. Soft sediments. Possible strong currents within channels.

**Site Strategies:****Site Validation Level: II**

**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.

**Strategy:** 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) Deploy 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.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		600	feet	
Boom	Swamp	6x6 inch		950	feet	
Anchor	Danforth	22 lbs		8		
Anchor	Stakes			15		
Vessel	Skiff or Punt			2		
Staff	Staff to Deploy			8		
Staff	Staff to Tend			2		

**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.

**Strategy:** 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.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		3000	feet	
Anchor	Danforth	22 lbs		10		
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			2		
Staff	Staff to Deploy			8		
Staff	Staff to Tend			2		

**Strategy: 2-315.3 Objective:** Oil Recovery by skimming

**Strategy:** 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

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
skimmer	shoreside			1		
Vac truck				1		
Staff	Staff to Deploy			4		

### Logistics:

**Directions:** 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.

**Land Access:** Access for trucks on well maintained, graveled levee roads.

**On-Water Limitations:** Shallow draft vessels <6'. Boat launching available at San Leandro Marina. Small skiffs may be launched from

**Facilities, Staging Areas, Command Posts, Available Equipment:** 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 Bockman channels. Bockman 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:** Cell reception strong.

