2-309-A Site Summary - San Leandro Bay

County: Alameda ACP Division/Segment: AL - D - S008 AL - D - S015

NOAA Chart: 18649/18650 Entrance Map Book: to SF Bay 2-309-A

Site Description:

This site includes all of San Leandro Bay including San Leandro Channel, north to High Street Bridge and Arrowhead Marsh. This shallow bay between Alameda and Bay Farm Islands has extensive mudflats and well developed salt-marsh, including the 50-acre Arrowhead Marsh at the south-east end. The west and south margins are part of Martin Luther King Jr. Regional Shoreline - EBRPD. The Oakland Estuary feeds into the north end, and San Leandro Channel feeds in from the west. San Leandro Creek enters into the bay at its southeast corner at the base of Arrowhead Marsh.

Resources at Risk:

ESI and Habitat: 10A Salt - and brackish-water marshes

9B Vegetated low banks

6B Riprap

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
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	Alameda song sparrow	SSC	Year-round	Mar
Fish	longfin smelt	ST	Year-round	Nov-May
Mammals	salt-marsh harvest mouse	FE, SE	Year-round	
Plants	Robust spineflower	FE	Year-round	Apr-Sep

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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/Dispatch, 24-hr	Alameda County Sheriffs Department	(510) 667-7721
Е	/Crown Beach Park Supervisor	East Bay Regional Park District	(510) 862-7984
Е	/Dispatch, 24-hr	East Bay Regional Park District	(510) 881-1833
Е	/MLK Park Supervisor	East Bay Regional Park District	(510) 544-3115
Е	/Shoreline Parks Manager	East Bay Regional Park District	(510) 881-1832
0	/Office	Point Blue Conservation Science	(707) 781-2555

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

Additional Site Summary Comments:

Several sensitive plant species occur in the area. The Elsie Roemer Bird Sanctuary is at the east end of Crown Beach and supports many sensitive salt-marsh species.

2-309-A Site Strategy - San Leandro Bay

Concerns and Advice to Responders:

The main concerns are the very sensitive marshes and mudflats here, which are almost impossible to cleanup. Endangered birds and marsh mice live here. The intention is to prevent oil from entering the marshes by diverting it to collection sites on the north shore of Bay Farm Island near the bridge. Avoid disturbing or trampling marsh vegetation and oil into the mud.

Hazard and Restrictions:

Beware of shallows and submerged hazards.

Site Strategies:

Site Validation Level: III

Strategy: 2-309.1 *Objective:* Exclusion/deflection to shoreside collection at Bay Farm Island Bridge. *Strategy:* Deploy 1600' ft of 9X9+ Hboom (800' per leg) in a chevron configuration from north side of Bay Farm bridge, across San Leandro Channel to south side at fishing pier, establish collection pockets on both sides, and exclude oil from San Leandro Bay marshes. Place interim anchors as needed based upon conditions. Flood tide - Using 1200 ft. of 9X9+ Hboom and 300 ft of swamp boom (or intertidal barrier boom) connected together, place boom across channel at approximately a 45 deg. Angle. Place intertidal barrier boom on north side of channel across mudflat, extending harbor boom across channel to form a collection pocket on south side of channel at inlet next to the Alameda/Bay Farm Island bridge.

Ebb Tide:- If little to no oil is inside San Leandro Bay; flood tide harbor boom can remain in place. If strong currents exist the boom may be opened, using the boom to line the marshes on either side of the channel, allowing oil to move out of the bay. If a significant amount of oil is present inside the bay; leave existing flood tide harbor boom in place, collect oil on the north bank.

Backup considerations- see substrategy 2-309.5: A secondary line of defense in the San Leandro Channel may be required. This could involve sorbent boom behind harbor boom or additional harbor boom and skimmers working near the bridge. Specific equipment requirements will be determined based on oil, current, and weather conditions during the incident. Advise UC/IC.

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	9x9 inch	1600 feet	Strategy Updated:
Boom	Sorbent		3000 feet	Last Test: 1/13/2017
Anchor	Danforth	22 lbs	5	
Vessel	Boom Boat		2	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		8	
Staff	Staff to Tend		2	_

Table of Response Resources

2-309-A Site Strategy - San Leandro Bay

Strategy: **2-309.2** *Objective:* Deflection away from Elsie Romer Bird Sanctuary to collection in the San Leandro Channel.

Strategy: Deploy 1500 ft of 9X9+ Hboom from the Park St. jetty on Alameda. Depending on weather and spill conditions, this boom can be used to either deflect oil away from the marsh east of jetty and into channel, or to deflect oil to the sandy beach into a collection area. SPS skimmer in San Leandro Channel may be replaced by portable skimming head operated from shore with vac truck or other shore storage. Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor Boom	9x9 inch	1500 feet	
Anchor	Danforth	22 lbs	4	
Vessel	Boom Boat		2	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		8	
Staff	Staff to Tend		2	

Strategy: **2-309.3** *Objective:* Exclude oil from entering the bay via Oakland Estuary.

Strategy: Protective measures on the north channel (Oakland Estuary) entrance to San Leandro Bay may also be necessary depending on the size and location of the spill. Spills in SF Bay should be confronted in the Oakland Inner Harbor to prevent oiling of the inner harbor and San Leandro Bay. Spills in the harbor should be confronted in the Park Street Bridge Reach. Currents in the Park St. Bridge Reach are very fast. Specific strategies have not been developed for these locations, although extensive use and deployment of several thousand feet of harbor boom, boom boats, skimmers and vacuum trucks may be required. Diagonal booming will be necessary to move oil out of swift water to slower shoreside collection pockets and eddies. Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	9x9	3000 feet	
Boom	Sorbent		100 feet	
Anchor	Danforth	22lb	10	
Vessel	Boom Boat		2	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		7	
Staff	Staff to Tend		2	

Strategy: **2-309.4** *Objective:* collect / ground oil washing along Alameda Beach toward Elsie Romer Bird Sanctuary

Strategy: To contain and collect along-shore transported oil on Alameda Beach, set 300 ft of swamp boom at a diagional just west of Park St. jetty. Use sorbents and provide for additional oil collection as needed. Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	6x6	300 feet	
Boom	Oil Snare (pom-pom)		50 feet	
Anchor	Danforth	12 lbs	3	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		2	
Staff	Staff to Tend		2	

2-309-A Site Strategy - San Leandro Bay

Strategy: **2-309.5** *Objective:* Collection by skimming - as needed

Strategy: Best skimming location is at south side of Alameda-Bay Farm Island Bridge in conjunction with 2-309.1. There is a pocket with immediate vehicle access, sea wall, and walkway immediately to the west of bridge footing. This site is well suited for a Shoreside skimming system. Extra boom to reinforce the pocket is recommended.

Skimming with a Self propelled skimmer may be effective upstream from the bridge and particularly in conjunction with strategy 2-309.2 (deflection boom from Park Street jetty at Elsie Romer Bird Sanctuary.) The channel on the south side is favorable to navigation. Shoreside skimming may also work in conjunction with 2-309.2.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	6x6	100 feet	
Self propelled skimmer			1	
Staff	Staff to Deploy		4	
Staff	Staff to Tend		4	

Logistics:

Directions: By vehicle, exit I-880 at Hegenberger Rd and proceed bayward (toward OAK airport). Turn right (north) on Doolittle Dr (Hwy 61) which runs along the west side of San Leandro Bay and crosses the San Leandro Channel. By boat, from the tip of Alameda Island, the bay is at the east end of the Island and may be approached via the Oakland Estuary or, preferably on the south side of the island, via the San Leandro Channel.

Land Access: Good on west shore.

On-Water Limitations: Exceedingly shallow. There are launches in Oakland Estuary and at the southwest of Alameda Island at the end of Lincoln St. All services available in Oakland Estuary. MLK Shoreline Park also has a launch and conference facilities, contact EBRPD for details.

Facilities, Staging Areas, Command Posts, Available Equipment: Good staging at the foot of Alameda-Bay Farm Island Bridge. Also at Crown Park, San Leandro Regional Shoreline, and Bay Farm Ferry Landing. Field Post at USCG, Alameda. Foss Environmental HQ is at the west end of Alameda.

Communications Problems: None known.

