

**2-605-A Site Summary - Hastings Slough & Point Edith Marshes****2-605-A****County:** Contra Costa **ACP Division/Segment:** CC - L - S007**NOAA Chart:** 18656 Suisun Bay**Map Book:****Decimal Degrees:** 38.050057 -122.067468**Site Description:**

Site extends from the Tosco Avon terminal wharf west to Hastings Slough and includes all the salt-marshes tributary to Hastings Slough including those south of Waterfront Road. Salt-marshes from Point Edith to the Avon Wharf are property of Department of Fish and Wildlife (700+ acres), but the marshes around Hastings Slough and much of the tributary marshland (2000+ acres) is located on DOD military property and entry is prohibited without prior clearance. These salt-marshes have a large tidal exchange volume, particularly Hastings Slough marshes. The DFW marshes drain directly to the bay via 10 separate tidal sloughs. Hastings Slough is very sinuous and has many tributary channels including Mt. Diablo Creek. Throughout the salt-marsh there is an extensive network of mosquito abatement channels which connect the freshwater and brackish marshes between. Most of the salt-marsh is pickleweed, but there are large stands of tules and open ponds. Portions of the property south of Waterfront Rd and just east of the Marathon refinery are on refinery property.

**Resources at Risk:***ESI and Habitat:* 10A Salt - and brackish-water marshes

9B Vegetated low banks

10B Freshwater marshes

**List of Resources at Risk:**

	Resource Name	Status	Presence	Sensitivity
Birds	California Ridgeway's rail	FE, SE		Feb-Aug
Birds	California black rail	FP, ST		Mar-Aug
Fish	longfin smelt	ST		Nov-May
Fish	delta smelt	FT, SE		Mar-May
Mammals	salt-marsh harvest mouse	FE, SE		
Plants	soft bird's beak	FE, SR		Jul-Nov
Plants	Mason's lilaeopsis	SR		Apr-Nov
Reptiles	giant quarter snake	FT, ST		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	Contra Costa County Office of the Sheriff	(925) 646-2441
E	/Security Chief	US Army, Concord Military Ocean Terminal	(601) 434-7005
E	/Office	US Navy, Concord Naval Weapons Station	(925) 246-4041
T	/Environmental Program Manager	CA Dept. of Fish & Wildlife, Bay Delta Region	(707) 576-2837
T	/Oil Spill Point of Contact	NOAA National Marine Fisheries Service	(707) 480-3496
T	/Spill Response Coordinator	USFWS, SF Bay-Delta Office	(916) 799-0588

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

**Additional Site Summary Comments:**

A number of sensitive plants and Suisun song sparrow reside in the area. There are submerged obstructions in Hastings Slough for about 50 yds south of bridge overcrossing.

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Mammals	salt-marsh harvest mouse	FE, SE	Year-round	
Plants	soft bird's beak	FE, SR	Year-round	Jul-Nov
Plants	Mason's lilaeopsis	SR	Year-round	Apr-Nov
Reptiles	giant garter snake	FT, ST	Year-round	Jul-Oct

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C	/Coordinator	Native American Heritage Commission	(916) 373-3710
C	/Coordinator	Northwest Information Center	(707) 588-8455
E	/24 hour number	US Army, Concord Military Ocean Terminal	(925) 246-4182
E	/24 hour number	US Army, Concord Military Ocean Terminal	(925) 246-4075
E	/24 hour number	US Army, Concord Military Ocean Terminal	(925) 246-4041
E	/24 hour number	US Army, Concord Military Ocean Terminal	(925) 246-3911
E	/Office	US Navy, Concord Naval Weapons Station	(925) 246-4041
S	/Dispatch, 24-hr	Contra Costa County Office of the Sheriff	(925) 646-2441
T	/Environmental Program Manager	CA Dept. of Fish & Wildlife, Bay Delta Region	(707) 576-2837
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**Additional Site Summary Comments:**

A number of sensitive plants and Suisun song sparrow reside in the area. There are submerged obstructions in Hastings Slough for about 50 yds south of bridge overcrossing.

**Concerns and Advice to Responders:**

The prime concerns are oil penetrating the marsh up tidal sloughs on tidal currents, particularly Hastings Slough, and oil saturating marsh vegetation on exposed marsh fronts and margins. Exclusion is first priority: to Hastings Slough and small channels. Next priority is to deflect oil away from these inaccessible marshy shores. During response be aware that there are listed species at the shoreline. So, minimize foot traffic. Avoid trampling vegetation and avoid trampling oil into sediments.

**Hazard and Restrictions:**

Some of the waterfront has very shallow mudflats. There are submerged obstructions in Hastings Slough for about 50 yds south of bridge overcrossing.

**Site Strategies:****Site Validation Level: III**

**Strategy: 2-605.1 Objective:** Exclude oil from Hastings Slough and tidal channels to prevent oil from being carried into marsh on flood tides.

**Strategy:** Exclude oil from entering all tidal sloughs using chevron booming configurations, including center anchors, and anchor boom ends well outside channel mouths to avoid entrainment and short circuiting around boom ends.

a) Hastings Slough: 1100' 6X6+ deployed in a modified chevron beginning well to the west (200'+ ) of the mouth. Back with sorbent boom. 3/22+/danforths.

B) The 2 sloughs just east of and one at Pt Edith: (400' 9X9+ and 1/22+ & 2/12+ danforths total.) Back with sorbent boom.

C) The ten tidal openings west of Pt Edith: 100' 6X6+ for each opening except #7 (from west) requires 200' (1100' total). Back each with sorbent.

## Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		1500	feet	
Boom	Swamp	6x6 inch		1100	feet	
Boom	Sorbent			2300	feet	
Anchor	Danforth	22 lb		9		
Anchor	Stakes			20		
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

**Strategy: 2-605.2 Objective:** Deflect oil away from shoreline for sites 2-605 and 2-607 on flood tide.

**Strategy:** Deploy 2400' Hboom from just west of Pt Edith past channel marker R2 and into channel toward channel marker G3.

## Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		2400	feet	<i>Strategy Updated: 11/16/2016</i>
Anchor	Danforth	22 lb		5		<i>Last Test: 11/16/2016</i>
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

**Strategy: 2-605.3 Objective:** Back-up of Exclusion booming of .1 strategy for wave conditions: if waves or chop is likely to wash oil over boom.

**Strategy:** a) Hastings Slough: deploy a second layer of boom (800' 6X6+) close behind to catch and exclude over wash. 3/12+/danforths.

b) The 2 sloughs just east of and one at Pt Edith: (400 6X6+) and 2/22+ danforths total. Back with sorbent boom.

c) The ten tidal openings west of Pt Edith: 100' 6X6+ for each opening except #7 (from west) requires 200' swamp boom (1100' total). Back each with sorbent.

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Boom	Swamp	6x6 inch		2300	feet	
Boom	Sorbent			1000	feet	
Anchor	Danforth	22 lb		5		
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

**Strategy: 2-605.4 Objective:** Marsh front protective booming: If there is threat of heavy oiling and saturation of the marsh front, and when such deployment will not preclude defending other sites with Strategic Objectives 5 and 6 (seek concurrence of the trustee stratigist).

**Strategy:** Deploy protective boom along the marsh front from the Tosco Wharf to the US Navy piers and linking with existing boom deployments as convenient: an additional 7,000 ft of harbor boom and ten additional anchors will be required in combination with boom already deployed in strategies .1 and .2. (A similar strategy for the deployment of exclusion boom at this site is illustrated in Potential Oil-Spill Protection Strategies for San Francisco Bay, CA (Hayes and Montello, 1994).)

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		7000	feet	
Anchor	Danforth	22 lb		15		
Vessel	Boom Boat			3		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			8		

### Logistics:

**Directions:** By boat, the site is east of the Benicia Bridge from the Avon Refinery wharf to the Navey Piers. By vehicle exit Hwy I-680 at Marina Vista (first exit south of Benicia Bridge - Waterfront Rd) and proceed west to Avon Refinery gate; request access and proceed east: Marina Vista (Waterfront) Road is blocked at the Hastings Slough Bridge by a Weapons Station locked gate. Important: Permission to enter eastern portion of the area must be obtained from the U.S. Naval Weapons Station Concord. By arrangement with Weapons Station Security only, access from Highway 4 to CNWS exit north on Port Chicago Highway to Base Gate to request entry: Contact USCG Watch 415-399-3546 or 3547.

**Land Access:** All types to Waterfront Road. Otherwise by foot only.

**On-Water Limitations:** Very shallow water. Exposed mud at low tides. Very poor launch at CNWS tug wharf. Commercial Launching at Martinez, Benicia, and McAvoy's in Bay Point, all have complete services. Tosco launch is at Pacheco Slough.

**Facilities, Staging Areas, Command Posts, Available Equipment:** Martinez and McAvoy's Marinas are two primary staging areas depending on zone of spill impacts. Both have wide variety of services and access, potential for security control.

**Communications Problems:** Good cell reception.

