2-168-A Site Summary - Walker Creek and Delta

County: Marin ACP Division/Segment: MR - B - S005

NOAA Chart: Bodega and Tomales Bays **Map Book:** Marin County 18643

Site Description:

Site includes the Walker Creek delta wetlands and tidal flats between Preston Point on the north and the unnamed point on the south and the creek upstream to the limit of tidal influence. Site lies within the Greater Farallones National Marine Sanctuary. Walker creek has a seasonal fresh flow which can be considerable during rainy seasons, but during much of the year, the tidal flow is dominant or exclusive. There is an extensive salt-marsh at the Walker Creek mouth and saltmarsh along the shores of the estuary. There are several channels leading into the estuary. There is a small pocket marsh on the south shore which is fed by a separate drainage. Shallow mudflats and and oyster leases front the salt-marsh. These waters are barely navigable but only by the knowledgeable oystermen and other locals. Multiple licensed aquaculture leases are located nearshore.

Resources at Risk:

ESI and Habitat: 9A Sheltered tidal flats

9B Vegetated low banks

5 Mixed sand and gravel beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	California black rail	FP, ST	Year-round	Mar-Aug
Birds	California Ridgeway's rail	FE, SE	Year-round	Feb-Aug
Fish	longfin smelt	ST	Year-round	Nov-May
Fish	coho salmon - south of Punta Gorda	FE, SE	Year-round	Nov-Apr
Fish	steelhead - Central/Northern California	FT	Year-round	Nov-Apr
Mammals	harbor seal	FP	Year-round	Mar-Jun
Mammals	North American river otter	SSC	Year-round	
Plants	eelgrass		Year-round	

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	/Owner	Hog Island Oyster Company	(415) 602-9281
0	/Director of Conservation Science	Audubon Canyon Ranch	(415) 663-8203
0	/Agency Representative, 24-hr	California Coastal Commission	(415) 693-8375
0	/Emergency Service Coordinator	Marin County Office of Emergency Services	(415) 250-0267
0	/Dispatch, 24-hr	Marin County Sheriff's Department	(415) 479-2311
Т	/Agency Representative, 24-hr	Greater Farallones National Marine Sanctuary	(650) 678-4943
Т	/Agency Representative, 24-hr	Greater Farallones National Marine Sanctuary	(650) 479-5311
Т	/Park Ranger, 24 hr	US National Park Service, Point Reyes	(415) 464-5175

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

Additional Site Summary Comments:

A wide variety of species use this area including shorebirds, waterfowl, egrets, sensitive plants, pacific herring, etc. Oyster mariculture leases occur in this area as well.

Decimal Degrees: 38.209015 -122.929674

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Concerns and Advice to Responders:

Great potential for injury to wetland plants, eelgrass beds, waterfowl and shorebirds. Oil may penetrate into side channels of the marsh and upstream as far as tidal waters may extend. The concerns are oil contamination and response activity impacts to wetlands, rare and endangered species, and other vulnerable plants and wildlife which are present throughout the year. The primary objective is to minimize the exposure of oil to plants, animals and habitats present at this site. Other concerns are the impacts resulting from response activities. Avoid trampling wetlands, sensitive plants and animals, and soft mudflats, causing penetration of oil into the sediments and further injury to the environment.

Hazard and Restrictions:

Shallow water area. Aquaculture facilities offshore of the delta.

Site Strategies:

Site Validation Level: II

Strategy: **2-168.1** *Objective:* Minimal Exclusion effort: Boom each channel mouth of the delta. This can be executed with minimal staff and small boats. It leaves the marshfront exposed.

Strategy: a) Using small craft or oyster boats, boom the two entrances to Walker Creek delta and estuary. The southern opening should be boomed with about 350' of 6X6"+ swakp boom in a chevron configuration from the shoreline just north of Hamlet (yet before the pocket marsh along Hwy 1) and the delta bay front. The northerly opening requires 300' of 6X6"+ boom in a chevron configuration.

B) Boom small pocket marsh Northeast of Tom's Point with 300 ft swamp boom (6X6"+)

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	6x6 inch	950 feet	-
Anchor	Danforth	25 lb	4	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		3	_

Strategy: **2-168.2** *Objective:* Protective booming of Walker Creek Delta marsh front as augment to channel exclusions (2-168.1)

Strategy: Deploy 1500 ft 6X6 swamp boom across delta front and link to channel exclusions of (2-168.1). Extreme shallows will require operations with very shallow draft vessels and at high tide. Employ local oystermen if possible to make execution or for advice.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	6x6 inch	1500 feet	
Anchor	Danforth	25 lb	6	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		3	

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Strategy: **2-168.3** *Objective:* 2nd layer of exclusion: boom entire marsh front including the various channels. This strategy excludes oil from all channels into the delta and the exposed marshfront as well.

Strategy: Using shallow draft vessels such as oyster boats, deploy 2500' of 6X6 swam boom from Preston Point to Hamlet. Anchor the boom at 800' intervals and form chevrons in the channels to avoid oil entrainment under the boom. Back channels with sorbent.

Table of Response	Resources
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Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	6x6 inch	2500 feet	
Boom	Sorbent		600 feet	
Anchor	Danforth	25 lb	7	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		5	

Strategy: **2-168.4** *Objective:* 3rd exclusion: When heavy oil threat is pending, deploy large boom set from Tom's Pt to north of Nick's Cove to exclude oil and redirect oil to Tom's Pt on ebb for collection.

Strategy: Use when heavy oil impacts to Tomales Bay are pending and the primary exclusion/collection strategy for the Bay may not be effective and oil may spread into the east side of the bay.

Deploy 9,000 feet of 9X9 or larger boom from south of Hamlet to Tom's Point. At the channel immediately south of Tom's Point, the boom must be angled across the current to keep oil from entraining under the boom on the flood tide. These waters are extremely shallow. Anchor at about 600' intervals. The target time for deployment is about 4 hours using three boomboat equivalents.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	9x9 inch	9000 feet	
Anchor	Danforth	25 lb	20	
Vessel	Skiff or Punt		2	
Staff	Staff to Deploy		8	_

Strategy: **2-168.5** *Objective:* Upstream confinement for product spillage from Hwy 1 or upstream. Deploy boom across the lagoon near Hwy to contain and confine spill to upper estuary and prevent product from flowing down into delta.

Strategy: Deploy boom across the lagoon to contain and confine spill to upper estuary and brining it to a collection point near Hwy 1 (taking into consideration inhalation and flamability safety). Select a site where containment can be assured and deploy 200 ft of small boom across at a diagonal. Select a site based on pevailing conditions: 1) far enough away from product that safety compromised; 2) access for deployment; 3) only secondarily consider collection - because collection may not be advisable if the product is highly flammable. Repeat the booming to provide several layers of containment. Keep some slack near shore to assure containment even when boom drops during low tide. (strategy not shown on Site Strategy Diagram).

Table of Response Resol	_			
Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	6x6 inch	400 feet	
Anchor	Danforth	25 lb	3	
Vessel	Skiff or Punt		2	
Staff	Staff to Deploy		3	_

Logistics:

Directions: Highway 1 follows the eastern shoreline of Tomales Bay. To get to Hwy 1 from Hwy 101: in San Rafael, take the Sir Francis Drake exit and proceed west to Olema and Pt. Reyes Station; in Petaluma, take the Pt. Reyes Petaluma Road to Pt. Reyes Station at the head of the bay, or take the Tomales Petaluma Road to the mouth of the bay. Hwy 1 parallels the site near the intersection with Tomales Petaluma Road.

Land Access: Shallow draft vessel only, some land access upstream.

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Facilities, Staging Areas, Command Posts, Available Equipment: Staging upstream at parking area off Hwy 1, Lawson's Landing or Nicks Cove. Facilities at Lawson's Landing and Marshall.

Communications Problems: Cell reception varies on outer coast.

Additional Operational Comments: No strategy on file.

