

**2-150-A Site Summary - Bodega Harbor****2-150-A****County:** Sonoma **ACP Division/Segment:** SN - E - S004 SN - E - S015**NOAA Chart:** Bodega and Tomales Bays **Map Book:** Sonoma County **Decimal Degrees:** 38.311899 -123.051622  
18643**Site Description:**

Site includes the marshes, mudflats, beaches, piers and marinas within the confines of the harbor. The entrance to Bodega Harbor is open all year and is stabilized by rip-rap jetties on either side. Strong tidal currents are present near the harbor entrance. Within the harbor, there are extensive tidal flats, saltmarshes and eelgrass beds. The harbor provides habitat for threatened and endangered species as well as thousands of birds (shorebirds, wading birds, waterfowl). Two major marinas, with hundreds of vessels, are present in the upper bay. Bodega Harbor is located on the San Andreas rift zone.

**Resources at Risk:***ESI and Habitat:* 8C Sheltered riprap

5 Mixed sand and gravel beaches

10A Salt - and brackish-water marshes

**List of Resources at Risk:**

	Resource Name	Status	Presence	Sensitivity
Birds	California black rail	FP, ST	Year-round	Mar-Aug
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Oct
Fish	Pacific herring		Year-round	Nov-Apr
Fish	eulachon	FT	Year-round	
Insects	Myrtle's silverspot butterfly	FE	Year-round	
Insects	Monarch butterfly	FP		Apr-Jun
Plants	eelgrass		Year-round	
Plants	Tidestrom's lupine	FE, SE	Year-round	Apr-Jun

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	/Office	Sonoma County Regional Park Department	(707) 565-2041
E	/Ranger	Sonoma County Regional Park, Doran Regional Par	(707) 875-3540
O	/Agency Representative, 24-hr	California Coastal Commission	(415) 693-8375
O	/Dispatch, 24-hr	California State Parks (Dispatch)	(916) 358-1300
O	/Dispatch, 24-hr	Sonoma County Sheriffs	(707) 565-2231
T	/Office	California State Parks, Russian River District	(707) 865-2394
T	/Agency Representative, 24-hr	Greater Farallones National Marine Sanctuary	(650) 678-4943
T	/Agency Representative, 24-hr	Greater Farallones National Marine Sanctuary	(650) 479-5311

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

**Additional Site Summary Comments:**

This area host a high diversity of wildlife. It is a Dungeness crab nursery, has substantial clam beds, many birds including raptors, migratory seabirds and waterfowl in the fall and winter, and shore birds wading birds and waterfowl year-round. There is a large number of sensitive plant species, as well as bats and beetles of special concern, California sea lions and harbor seals, etc.

**Concerns and Advice to Responders:**

An oil spill in or reaching Bodega Harbor could have tremendous impacts on birds, wetland and eelgrass habitat, and clam beds. 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 waters and mudflats exist throughout the bay outside of the main channels. Expect moderately strong flood currents near the harbor entrance. As of 1991, no quantitative data were available on the harbor's tidal currents.

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

**Strategy: 2-150.1 Objective:** Exclude oil from entering the harbor.

**Strategy:** Responders must consider wind direction and expected current velocity when deciding which shoreline to deflect the oil to. They should select an angle of the boom to wind and current that will maximize the effectiveness of the boom to deflect oil. Although the prevailing northwest wind may reduce the risk of oil entering the Bodega Harbor, local winds and currents may be very different from the prevailing offshore wind. These local conditions may work to pull oil into the harbor when least expected.

**BODEGA HARBOR ENTRANCE**

- Deploy deflection boom outside the jetties to direct oil away from the harbor entrance and toward Doran County Beach. Avoid "venturi effect" at harbor entrance by deploying away from the mouth of the harbor. Use up to 5,000 feet of (harbor or ocean) boom. Oil recovery and storage equipment should be staged at Doran Beach if surf conditions and oil concentration permit.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		5000	feet	
Anchor	Danforth	40 lb		15		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

**Strategy: 2-150.2 Objective:** Exclude oil from entering the harbor and moving onto the mudflats, eelgrass beds and/or wetlands.

**Strategy: BODEGA HARBOR ENTRANCE**

- Deflect oil coming through the entrance channel to Campbell beach. Cascade six 300 foot sections of curtain (harbor) boom from the west end of the north jetty to Campbell beach. This is the beach location to strand oil. Two boom boats and a skiff will be needed. A shoreside skimmer and a portable storage device must be located at Campbell beach if significant amount of oil can be accumulated there.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		1800	feet	
Anchor	Danforth	40 lb		10		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

**Strategy: 2-150.3 Objective:** Exclude oil from entering the harbor and moving onto the mudflats, eelgrass beds and/or wetlands.

**Strategy:** BODEGA HARBOR ENTRANCE

- Prevent oil from passing through the jetties and oiling the the interior surfaces of the jetties. Consider the use of 2,000 feet of boom, fabric or some other material to protect the south side of the south jetty. The jetties are very porous, oil will readily pass through them and they will be difficult to impossible to clean. There is also a low spot near the base of the southern jetty where water flows over at high tide. Fill this gap with sandbags or use large quarry stone.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		2000	feet	
Anchor	Danforth	25 lb		6		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

**Strategy: 2-150.4 Objective:** Prevent oil from moving onto the mudflats, eelgrass beds and/or wetlands.

**Strategy:** INSIDE BODEGA HARBOR (alternative to #150.3 above)

- Oil may also be deflected to the northwest side of Doran spit inside the harbor by cascading several (300-500 ft.) sections of (harbor or swamp) boom from the north end of Campbell Beach to the northwest side of Doran spit. The beach here is narrow and backed by riprap. Almost no sand beach exists at high tide.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		2000	feet	
Anchor	Danforth	25 lb		6		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			3		

**Strategy: 2-150.5 Objective:** prevent oil from moving onto the mudflats, eelgrass beds and/or wetlands.

**Strategy:** INSIDE BODEGA HARBOR

- The last line of defense of the tidal flats and eelgrass beds is to line both natural and dredged channels with 6,000 feet of curtain (harbor) boom and recover oil with skimmers strategically located in the channels. This hard boom should be backed by an equal amount of absorbent boom.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		6000	feet	
Boom	Sorbent			6000	feet	
Anchor	Danforth	40 lb		15		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			7		

## Logistics:

**Directions:** From Hwy 101 in Petaluma, take Bodega Avenue west. Continue onto Petaluma Valley Road and Hwy 1 and proceed to Bodega Bay. Doran County Park and Bay Flat Road can be accessed from Hwy 1.

**Land Access:** Semi-truck, no restrictions.

**On-Water Limitations:** Shallow water outside main channel. Boat ramp on the NW shore Doran Spit and Westshore Park. Several docks and marinas for mooring. Fuel and marine hardware available locally

**Facilities, Staging Areas, Command Posts, Available Equipment:** There is a good access and a staging area at Doran County Beach and Westshore County Park. The first and third choices for containment and recovery share this access and staging area. Access to Campbell cove containment and recovery sites is from Bay Flat Road on the eastern shore of Bodega Head. A parking lot there could provide a small staging area.

**2-150-A      Site Strategy - Bodega Harbor**

**2-150-A**

*Communications Problems:* Cell reception varies on outer coast.

*Additional Operational Comments:* Excellent access to all areas. Major natural and human resources.

