

2-490-B Site Summary - Berkeley Eelgrass Beds and Cove**2-490-B****County:** Alameda **ACP Division/Segment:** AL - A - S015 AL - A - S023**NOAA Chart:** Entrance to San Francisco Bay 18649 **Map Book:** AAA Oakland **Decimal Degrees:** 37.851099 -122.308756**Site Description:**

The eelgrass bed is centered on the shallow bar just north of the Emeryville channel (west and north of channel marker Green "3") and extends from the channel, north about half way to the Berkeley pier. This eelgrass bed, like all eelgrass beds can vary in distribution, density, and height from year to year. Because the most of the bed is deeper than 8 feet (MLLW), it is rarely exposed to oil, only when tides are so low (< 0.5) that the eelgrass fronds are exposed on the surface (hence the sliding sensitivity).

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

8B Sheltered solid man-made structures

8D Sheltered rocky rubble shores

List of Resources at Risk:

| | Resource Name | Status | Presence | Sensitivity |
|--------|-----------------------|----------|------------|-------------|
| Birds | California black rail | FP, ST | Year-round | Mar-Aug |
| Birds | Alameda song sparrow | SSC | Year-round | |
| Fish | Pacific herring | | Year-round | Nov-Apr |
| Fish | longfin smelt | ST | Year-round | Nov-May |
| Plants | eelgrass | | 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 Sheriffs Department | (510) 667-7721 |
| E | /Dispatch | California Department of Parks and Recreation | (916) 358-1300 |
| E | /Marina Manager | City of Berkeley, Parks, Recreation and Waterfront | (510) 981-6740 |
| E | /Dispatch, 24-hr | East Bay Regional Park District | (510) 881-1833 |
| E | /Shoreline Park Supervisor | East Bay Regional Park District | (510) 881-1832 |
| O | /Dispatch, 24-hr | The Marine Mammal Center | (415) 289-7350 |
| T | /Agency Representative | California Department of Fish and Wildlife | (707) 644-2812 |
| T | /Agency Representative | NOAA National Marine Fisheries Service | (562) 980-3232 |

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:

When eelgrass is exposed (at low tides), oil quickly attaches and clings to eelgrass fronds. Once eelgrass gets fouled with oil, oil becomes a subsurface threat to fish and other organisms which thrive in this habitat.

Hazard and Restrictions:

Navigational hazards include shallow water, a submerged pipeline and debris.

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

Strategy: 2-490.1 Objective: Assess need for protective booming: Eelgrass is only vulnerable at very low tides when eelgrass tops are exposed to floating oil.

Strategy: Biological staff must assess this site to determine if eelgrass is at risk. Because this bed is fairly deep, eelgrass tops are rarely, if ever, exposed to floating oil, and then only at very low (minus) tides. Oil readily sticks to floating eelgrass tops, and once eelgrass gets fouled with oil, oil becomes a subsurface threat to fish and other organisms which thrive in this cover. Scientific staff must review tidal information to see if minus tides less than -0.5 may result in eelgrass exposure, and must conduct on-site evaluation as necessary. Any booming recommendations should be expedited through ICS to operations.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|---------------|------|------|-----|------|------------------|
| Personnel | OSPR Staff ES | | | 1 | | |

Strategy: 2-490.2 Objective: Exclusion/deflective booming when oil coming from the west

Strategy: When oil is approaching from the westerly direction, attempt to deflect it away from the eelgrass bed. Deploy deflection Hboom by cascading several 600 foot sections of harbor boom between the Emeryville Marina to about half way to the Berkeley pier. Overlap each section of boom. Oil will probably be wind driven. Set each section of boom at a shallow angle to the wind. Set each section as straight and taut as possible so that oil does not collect anywhere on the boom, but moves continuously along the boom until it falls off the end and is caught by the next section of boom.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|-----------------|----------|------|------|------|------------------|
| Boom | Harbor | 9x9 inch | | 6000 | feet | |
| Boom | Sorbent | | | 2000 | feet | |
| Anchor | Danforth | 22 lb | | 19 | | |
| Vessel | Boom Boat | | | 3 | | |
| Vessel | Skiff or Punt | | | 1 | | |
| Staff | Staff to Deploy | | | 11 | | |

Strategy: 2-490.3 Objective: Exclusion/deflective/protective booming for oil from the west low wind conditions

Strategy: When winds are low, oil will tend to move north-south and can be kept away from the Berkeley flats, particularly in fall months when waterfowl concentrations are high. Deploy deflection boom by cascading several 600 foot sections of harbor boom between the Berkeley pier to about half way to the Emeryville Marina to link-up with southerly deployment (2-490.2). Overlap each section of boom. Set each section of boom at a shallow angle to the windward. Set each section as straight and tight as possible so that oil does not collect anywhere on the boom (scallops), but moves continuously along the boom until it falls off the end and is caught by the next section of boom (cascading configuration).

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|-----------------|----------|------|------|------|------------------|
| Boom | Harbor | 9x9 inch | | 5000 | feet | |
| Anchor | Danforth | 22 lb | | 14 | | |
| Vessel | Boom Boat | | | 2 | | |
| Vessel | Skiff or Punt | | | 1 | | |
| Staff | Staff to Deploy | | | 8 | | |

Logistics:

Directions: From Coast Guard Island take Hwy 880 north to Hwy 80 north. Exit at Powell Avenue and proceed west. Make a right on Frontage Road and proceed north to the Berkeley Yacht Harbor.

Land Access: Access to shoreline has hazards such as I 80 Hwy.

On-Water Limitations: Waters access from either Berkeley or Emeryville Marinas.

Facilities, Staging Areas, Command Posts, Available Equipment: Both Berkeley and Emeryville Marinas have excellent services and facilities for staging. Emeryville may have slightly better opportunities for security.

Communications Problems: Good cell reception throughout area.

