

3-305 -A Site Summary- Moss Landing Inlet**3-305 -A****County:** Monterey**Thomas Guide Location****Latitude N****Longitude W****USGS Quad:** Moss Landing

1055

36° 48.5'

121° 47.7'

NOAA Chart:**Last Page Update:** 6/30/2014**SITE DESCRIPTION:**

Moss Landing Harbor is located at the approximate center of Monterey Bay. Moss Landing Beach/Pajaro Dunes lie north of Inlet & MBARI/Salinas State Beach to south. Dynegy operates a gas fired power plant on SE edge of Elkhorn Slough and has intake portal onsite. Hwy 1 separates Moss Landing and Elkhorn Slough. Northern boundary lies at Jetty Road as southern boundary lies at Potrero Road. The following State Marine Protected Area is located adjacent to south harbor under Highway 1: Moro Cojo Slough State Marine Reserve. Moss Landing is the gateway to Elkhorn Slough's rich biodiversity featuring extensive marshes and tidal flats (2,500 acres). It is the major commercial fishing port in the area. It also is home port to research ships and recreational boats. Moss Landing State Beach lies just to the north.

SEASONAL AND SPECIAL RESOURCE CONCERN

Species listed below are present year round in various life stages. Dynegy Co. has a water intake system on the western edge of their facility along seaward side of Hwy 1 (eastern tip of southern inlet jetty points directly at intake).

RESOURCES OF PRIMARY CONCERN

Year round with many species utilizing inlet to forage, roost, and transit to the biologically diverse habitat of Elkhorn Slough. Moss Landing State Beach is critical habitat for the western snowy plover.

Moss Landing/Elkhorn Slough supports 260 species of birds. Western Snowy Plover (FT) present year round at Moss Landing State Beach (aka Jetty Road beach) and Moss Landing Wildlife Area (salt ponds inland of Highway 1) provide nesting, foraging, and roosting habitat; nesting March-September. Brandt's Cormorants and Western Gulls nest on structures in the harbor, April-August.

High volume of pinnipeds utilize estuary to forage and roost. Significant numbers of Southern sea otters (FT) present year-round in Moss Landing Harbor and Elkhorn Slough. May haul out on shore inside north harbor jetty. Sea lions and harbor seals also common and present year round.

Tidewater goby (FE) is known to utilize estuary. Steelhead have been confirmed in the estuary as well.

There are over 400 species of invertebrates including gaper clams, Washington clams, and littleneck clams.

Within the salt ponds is the mimic Tryonia plant species. The Monterey Indian paint brush is found at Moss Landing State Beach.

CULTURAL, HISTORIC, AND ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept of Parks and Recreation - Office of Historic Preservation (Eric Allison: 916-445-7044), and the Northwest Information Center (Bryan Much, Sonoma State College: 707-588-8455) for specific information on historic or cultural resources in this area.

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

| Type | Name | Title | Organization | Phone |
|------|----------------|---------------------------|--|----------------|
| O | | | Moss Landing Marine Laboratories | (831) 771-4400 |
| T | | Northern Communications | CA Department of Parks & Recreation | (916) 358-0333 |
| T | | | US Fish & Wildlife Service | (805) 644-1766 |
| O | | | USCG Station Monterey | (831) 647-7300 |
| O | | | Monterey Co. OES | (831) 796-1900 |
| O | | | Monterey Co. Environmental Health | (831) 755-4511 |
| O | | Response Mgt Response Ctr | Union Pacific Railroad | (888) 877-7267 |
| E | | Harbor Master | Moss Landing Harbor District | (831) 633-5417 |
| O | | Director | Elkhorn Slough Foundation | (831) 728-5939 |
| E | | Operations Dept. (24-hr.) | Moss Landing Harbor District | (831) 633-2461 |
| | | Monterey District | CA Department of Parks & Recreation | (831) 649-2836 |
| O | | Operations | Monterey Bay Aquarium Research Institute | (831) 775-1700 |
| O | | Control Room (24-hr.) | Dynegy Co - Moss Landing Power Plant | (831) 633-6741 |
| O | | Manager | CDFW - Elkhorn Slough Nat'l Est. Rsrch Rsrv | (831) 728-2822 |
| T | | | CA Coastal Commission, Oil Spill Program | (415) 693-8375 |
| O | | | CA Coastal Commission, Central Coast District Ma | (831) 427-4872 |
| O | Gregg Drilling | | Woodward's Marine | (831) 633-2620 |

| | | | | |
|---|--------------|---------------------------|--|----------------|
| O | Ron Gravelle | | Gravelle's Boat Yard | (831) 633-2417 |
| T | Scott Kathey | Emergency Response Coord. | Monterey Bay National Marine Sanctuary | (831) 647-4251 |
| T | Becky Ota | Marine Conservation Mgr | CDFW Marine Protected Areas Program | (650) 631-6789 |
| T | Steve Wertz | Senior Env. Scientist | CDFW Marine Protected Areas Program | (562) 342-7184 |

ADDITIONAL SITE SUMMARY COMMENTS:

The Intake for the Dynegy Power Plant is in the Moss Landing Harbor. Elkhorn, Bennett and Moro Coho Sloughs and the Old Salinas River Channel connect with the ocean through Moss Landing Harbor. This is the entrance to the ecologically diverse Elkhorn Slough. Moro Cojo Slough exits through Moss Landing Harbor.

Outer beach is recreational area and major surfing site. Inner harbor (boat turning basin) is windsurfing area.

Also site of commercial and recreational harbor (600 berths, 2 boat ramps, small craft refueling dock), seawater intakes, and marine research institutes.

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NOAA Chart:**Last Page Update:** 6/30/2014**CONCERNS AND ADVICE TO RESPONDERS:**

Moss Landing Inlet is the gateway to Elkhorn Slough and Moss Landing Harbor. Elkhorn Slough is an important and rare habitat within California that supports numerous state and federally listed species. This strategy provides the primary means of protecting Elkhorn Slough from offshore spills and its proper deployment is essential. The inlet is a gathering place for sea otters (FT), harbor seals, and sea lions. Avoid interactions with these animals. Moss Landing State Beach: Seasonal (nesting) of Western snowy plovers (FT) will affect vehicle and beach access; access must be approved of State Park staff.

HAZARDS AND RESTRICTIONS:

Strong tidal exchange and potentially heavy surf near mouth during fall, winter months.

SITE STRATEGIES

Protection strategies for this site will likely cause the closure of the harbor to vessel traffic. If the harbor is not to be closed, crews must remain on-site in order to remove/redeploy strategy as needed to allow for incoming/outgoing traffic. Also, a salt/fresh water convergence zone is often found in the harbor mouth during flood tides. If necessary, this is a good area to attempt skimming operations at those times.

Strategy 3-305.1 Objective: Exclusion booming to protect all three channels inside Moss Landing Harbor mouth.

Deploy 1400 ft of boom from north jetty across the harbor entrance to the south-west side of Highway 1 bridge. Both locations have permanent anchor points available. On the south-west side of Highway 1, the second anchor point away from the mouth of the slough should be used. Attach an additional 400 ft of boom to the first section of boom at approx. 300 feet from the eastern-most anchor point (along Hwy 1) and deploy it at an angle back south towards the eastern shore and anchor at the small sandy beach. Deploy another 1200 ft of boom from a location 200 ft south of permanent anchor point on Highway 1 (at the small sand beach) across south harbor to the southern extent of the sandy beach inside of the break wall (just north of Gravelles Boat Yard). Deploy sorbent boom behind each strand of hard boom.

Strategy 3-305.2 Objective: Booming to provide secondary protection to Elkhorn Slough.

Boom from north-west of the Highway 1 bridge (adjacent to the visitor dock) to the south side of Elkhorn Slough. Deploy sorbent boom behind each strand of hard boom.

Strategy 3-305.3 Objective: Booming to provide secondary protection to North Harbor.

Deploy 900 feet of boom from the tip of the north inner harbor jetty across the north harbor entrance to the base of the boat ramp. Deploy sorbent boom behind each strand of hard boom.

Strategy 3-305.4 Objective: Booming to provide protection to rip-rap areas.

Boom the north and south sides of the south jetty from midway in the channel (by the beach sign) eastward to the tip of the jetty in the inner harbor. Deploy sorbent boom behind each strand of hard boom. This strategy should be deployed at low-tide.

Table of Response Resources

| strategy number | harbor boom | swamp boom | Other boom type | sorb boom | Anchoring no | type and gear | Boom boat | Skiffs punts | Skimmers No | Type | Special Equipment or comment No and kinds | staff deploy | Staff tend |
|-----------------|-------------|------------|-----------------|-----------|--------------|------------------|-----------|--------------|-------------|------|---|--------------|------------|
| 3-305.1 | 3000 | 0 | | 3000 | 13 | Danforth anchors | 1 | 1 | 0 | 6 | Anchor posts or stakes. | 5 | 2 |
| 3-305.2 | | 1200 | 0 | 1200 | 6 | Danforth anchors | 1 | 1 | 0 | 4 | Anchor posts or stakes. | 5 | 2 |
| 3-305.3 | 900 | 0 | 0 | 900 | 4 | Danforth Anchors | 1 | 1 | 0 | 0 | | 5 | 2 |
| 3-305.4 | 1500 | 0 | 0 | 1500 | 7 | Danforth | 1 | 1 | 0 | 0 | | 5 | 2 |

LOGISTICS

DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Access to the beach at the South end of Zmudowski Beach is by way of Moss Landing State Beach. Seasonal (nesting) of Western snowy plovers (FT) will affect vehicle and beach access; access must be approved of State Park staff. Turn off Highway 1 at the State Beach sign and follow the road to the parking area. The Dynegy power plant is on the inland side of the Highway. Vehicular access to the beach and north Jetty is from the south end of Jetty Road at Moss Landing State Beach (through locked gate). Moss Landing Harbor is located at the approximate center of Monterey Bay. Moss Landing Beach/Pajaro Dunes lie north of Inlet & MBARI/Salinas State Beach to south. Dynegy operates a gas fired power plant on SE edge of Elkhorn Slough and has intake portal onsite. Hwy 1 separates Moss Landing and Elkhorn Slough. Northern boundary lies at

Jetty Road as southern boundary lies at Potrero Road. The following State Marine Protected Area is located adjacent to south harbor under Highway 1: Moro Cojo Slough State Marine Reserve.

LAND ACCESS 4WD on beaches; large trucks in harbor.

WATER LOGISTICS: Boat launch; full service boat yard; berthing for large boats; fuel
Limitations: depth, obstruction Moss landing has several launches within harbor
Launching, Loading, Docking
and Services Available:

FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Elkhorn Slough Reserve HQ conference room

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

