

2-423-C/X Site Summary - Angel Island**2-423-C/X****County:** Marin **ACP Division/Segment:** MR - R - S001 MR - R - S004**NOAA Chart:** Entrance to San Francisco Bay 18649 **Map Book:** AAA - Mill Vall **Decimal Degrees:** 37.866413 -122.435129**Site Description:**

Angel Island is a state park located approx one-mile SE of the Tiburon Peninsula. It has an area of about one square mille, and a maximum elevation of 781 feet. There is a dock and numerous floating berths in Ayala Cove located on the North Western side of the island. A road runs the perimeter of the island.

Sand/gravel/cobble beaches exists on the North Eastern, Eastern and South Eastern shores. Rocky bluffs make up a large part of the shoreline. Strong currents run through Raccoon Straits. Back eddies occur along the South Eastern shore and at numerous other locations around the island. An underwater cable is located between Ayala Cove and Point Stuart. Shorelines have been oiled to different degrees in several spills, and the eastern shoreline is a natural collection area for oil and other floating debris.

Resources at Risk:*ESI and Habitat:* 2A Exposed wave-cut platforms in bedrock, mud, or clay

1C Exposed rocky cliffs with boulder talus base

5 Mixed sand and gravel beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Fish	Pacific herring		Year-round	Nov - Apr
Fish	longfin smelt	ST	Year-round	Nov - May
Mammals	harbor seal	FP	Year-round	Mar - Jul
Mammals	California sea lion	FP	Year-round	Mar - Aug
Plants	eelgrass		Year-round	
Plants	northern meadow sedge	SSSP	Year-round	May - Jul

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	/Environmental Scientist	California State Parks	(831) 335-6384
E	/Dispatch, 24-hr	California State Parks, Bay Area District	(916) 358-0333
E	/Emergency Contact (24hr)	Marin County Emergency 911	(415) 472-0911
E	/Emergency Service Coordinator	Marin County Office of Emergency Services	(415) 250-0267
E	/Dispatch, 24-hr	Marin County Sheriff's Department	(415) 479-2311
O	/Office	Audubon Society, Marin County Chapter	(415) 924-6057
O	/Dispatch, 24-hr	The Marine Mammal Center	(415) 289-7350

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

Additional Site Summary Comments:

Seabirds, pinnepeds, and many other marine plants and animals utilize this site year-round.

Concerns and Advice to Responders:

Oil tends to collect on the eastern shore of the island, particularly on the beaches north of Blunt Point and Quarry Point. The beach between Blunt Point and the pier about 100 yards to the north is a mixture of coarse sand and gravel. Petroleum may penetrate this beach to a depth of six inches. The fine grained sand beach to the north would be much easier to clean. A similar situation exists to the north of Quarry Point where gravel beaches are both north and south of a fine sand grains.

Hazard and Restrictions:

Submerged rocks along most beaches, steep cliffs along most shorelines. Currents around points may be strong on steep tides due to deep water (>50 ft).

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

Strategy: 2-423.1 Objective: Objective: Collection: natural collection at Blunt Pt & Quarry Pt.

Strategy: The following are the instructions to use this area as a collection site with a minimal amount of cleanup.

a) At Blunt Pt deploy 600 feet of 9X9+ Hboom in a northeasterly direction from the sand beach north of the pier to collect oil. To prevent oiling of the gravel beach south of the pier, deploy 800 ft of 9X9+ Hboom from the south side of Blunt Point to the pier to the north of Blunt Point.

B) At Quarry Point, the shoreline and the eddies just off the shoreline are natural collection areas for shoreline and onwater recovery. Collect oil on fine grained beach about 1000' north of Quarry Pt by deploying 600 feet of 9X9+ Hboom from the beach in a northeasterly direction. To prevent oiling of the gravel beach to the north of the collection site, deploy 1,000' of boom parallel to the gravel beach. Anchor the ends at the high tide line and anchor the midpoint 50 feet offshore. To prevent oiling of the gravel beach to the south of the collection beach, deploy 600 feet of 9X9+ Hboom from the shoreline near the pier at Quarry Pt to the south end of the fine grained sand beach.

C) Look for oil offshore. Direct on-water recovery vessels to concentrations offshore. Set up Shore Side Skimming

(SSS) as necessary. Both sites have some roads and piers for support of SSS.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		2600	feet	<i>Strategy Updated:</i>
Boom	Swamp	6x6 inch		1200	feet	<i>Last Test: 7/26/2016</i>
Anchor	Danforth	22 lb		20		
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			8		

Logistics:

Directions: Angel Island is a state park located SE of the Tiburon Peninsula. Access to the island is by water only. Ferry service is available from Tiburon. Numerous launch ramps and boat launching facilities are located in Sausalito. To launch boats take highway 101 to Sausalito, 3 miles north of Golden Gate Bridge. Take Bridgeway exit at north end of Sausalito about 1 mile south of the highway 1 exit. Go southeast on Bridgeway towards downtown Sausalito and the USCOE bay model. Turn left on Harbor Drive. Take harbor drive to the launch ramp at Clipper Yacht Harbor.

Land Access: Equipment and vehicles would have to be transported over water.

On-Water Limitations: Submerged rocks off most beaches. Berths are available in Ayala Cove. There are piers just north of Blunt Point and at Quarry Point.

Facilities, Staging Areas, Command Posts, Available Equipment: California Parks and recreation can make space available for staging areas, and field posts. Marin County OES may be able to identify a command post.

Communications Problems: Cell coverage may be spotty depending your service.

