

County: **Contra Costa**
 USGS Quad: **San Quentin**

Thomas Guide Location

Latitude N

Longitude W

3 7 50

122 24

NOAA Chart: **18649 Entrance to SF Bay**

Last Page Update : 10/1/2005

SITE DESCRIPTION:

Castro Rocks is a small group of rock islands located near the east end of the Richmond-San Rafael Bridge, and just north of the Chevron Long Wharf. Their exposure is variable with the annual tidal cycle. During higher tides and rough conditions, the islands are exposed to aggressive wave action. This is a harbor seal rookery during the spring when the tide is less than 3 feet above mean lower low water: 30 to 60 seals pup at the site. 100 to 250 seals haul out at this site during the winter.

SEASONAL and SPECIAL RESOURCE CONCERN

This is an A priority during the harbor seal breeding season from 15 March to 10 June and a B priority for the remainder of the year.

RESOURCES OF PRIMARY CONCERN

This rocky exposure has intertidal biota but the prime habitat sensitivity at this site is related to harbor seal and bird use.

This is a site which is used heavily by birds, including pelicans and cormorants, for roosting and foraging..

This is a harbor seal rookery during the spring when 30 to 60 seals use the site during the period when the tide is less than 3 feet above mean lower low water. 100 to 250 seals haul out at this site during the winter.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Contact the California Dept of Parks and Recreation - Office of Historic Preservation (Eric Allison -(916) 653-9125), and the Northwest Information Center, (Bryan Much, Sonoma State College ((707) 332-1117)) 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
T	Marine Mammals NMFS	NOAA, National Marine Fisheries Service	(562) 980-3230
E	Chevron Long Wharf	Chevron Corp., Operations Control Room (24hrs.)	(510) 242-4494

ADDITIONAL SITE SUMMARY COMMENTS:

2-451 -A/B Site Strategy - Castro Rocks

County and Thomas Guide Location

Contra Costa

NOAA CHART

18649 Entrance to SF Bay

2-451 -A/B

Latitude N

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CONCERNS and ADVICE to RESPONDERS:

Last Page Update : 12/15/2005

The concern is that these rocks will be come oiled and, in turn, will oil the harbor seals and birds which use them. This is particularly a problem in the spring when harbor seals pup here. During that time, responders must make every effort stay as clear as possible of the islands to minimize disturbance of adults and their pups.

HAZARDS and RESTRICTIONS:

There are submerged rocks near Casto Rocks.

SITE STRATEGIES

Site protection is an exclusion with booms in a N-S diamond. Depending on the path of oil, only two of the sides need be depolyed during most tidal cycles. West side of rocks is hard bottom and requires rock anchors and boom deployed on the 40 foot contours with 250 ft of scope. North, south, & east sides are soft mud and require mud anchors. Bridge piers may be good anchoring points. The strong currents coupled with the submerged rocks in the area are formidable aspects of deployment here.

Strategy 2-451.1 Objective: Deflection/exclusion of oil from west or southwest in ebb or flood - deploy protection legs 1 (SW) and 2 (NW)

Deploy 3000' 9X9+ Hboom in a wide angle wedge configuration on the west side of the rocks (legs 1 & 2 of a protective diamond around the rocks). Assess need for back-up deployment if waves are washing oil over the boom requiring backup 2-451.4

Strategy 2-451.2 Objective: Deflection/protection boom for oil from south and southeast on flood currents in a chevron on the north side of the rocks - deploy protection legs 1 and 3

Complete a south-side chevron to deflect oil past site by deploying protection legs 1 and 3 as follows: Deploy the south legs of the chevron first (legs 1 & 3 of the deflection diamond) using 6000' 9X9+ hboom. Optimally deployment should be made before flood due to difficult boat operations in flood current. Advise IC/UC if waves are washing oil over the boom necessitating back-up booming.

Strategy 2-451.3 Objective: Deflection/exclusion for oil from north or northwest on ebb in a chevron on the north side of the rocks - protection legs 2 (NW) and 4(NE)

Complete a north-side chevron to deflect oil past site by deploying protection legs 2 and 4 as follows:

Leg 2: Deploy a total of 1500 ft: 1000 ft 9X9+ boom from the bridge pier to the north and 500 ft from the bridge pier south to terminate west of the rocks on the 40 ft depth contour. The north end of leg 2 should be a little west of center of rocks. Leg 4 is 1500' 9X9+ Hboom from the north apex of leg 2 to the east side of Castro Rocks. Advise IC/UC if waves are washing oil over the boom necessitating back-up booming.

Strategy 2-451.4 Objective: Confine/deflect oil to shore for collection after completion of protection strategy

If the source of the spill is between the rocks and shore, divert oil to shoreline for confinement and collection after excuting appropriate protection:

From boom already deployed to protect easterly exposure of the rocks, deploy 2300 feet of 9X9+ Hboom to the sandy pocket beach near the bridge which can be used as an oil recovery area. Beware of submerged debris of the beach; rip rap is on either side as well. (strategy not shown in diagram.) Anchoring will require chain and scope to keep boom from moving.

Strategy 2-451.5 Objective: Backup secondary boom when oil overwhelms initial protection strategy

Deploy a second layer of 4X4+(6000') inside of the overwashing leg and arrange for absorption (600' of sorbents and snare).

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 and kinds	staff deploy	Staff tend
2-451.1	3000				10 5/40+/northhill, & 5/22+/Danforth	3	0		maneuverable Bboats & 1500' line	11	
2-451.2	6000				9 5/40+/northhill, & 4/22+/Danforth	3	1		maneuverable Bboats & 1500' line	11	2
2-451.3	3000	2500			15 5/40+/northhill, & 10/22+/Danforth	3	1		maneuverable Bboats & 1500' line	11	2
2-451.4	2300				6 22#+ danforth with heavy chain	3	1			11	
2-451.5	0	6000	600 OS	0	6 22#+ anchors	2	1	0	0	8	

LOGISTICS

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

Access is by boat only to this small group of rock islands located near the east end of the Richmond-San Rafael Bridge. The nearest launching sites are Richmond Harbor and Tiburon Center for Environmental Studies in Marin County. The site is visible from the platform on pier 55 or from the lower deck of the Richmond-San Rafael Bridge. Castro Rocks is a small

group of rock islands located near the east end of the Richmond-San Rafael Bridge, and just north of the Chevron Long Wharf.

LAND ACCESS: Accessible only by boat

WATER LOGISTICS: There are submerged rocks around this site

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: The nearest launching sites are Richmond Harbor and Tiburon Center for Environmental Studies in Marin County.

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

Nearest staging, facilities, and field outposts are at Richmond Marina and Santa Fe Channel. Staging and fuel may be available at refinery.

COMMUNICATIONS PROBLEMS: none known

ADDITIONAL OPERATIONAL COMMENTS:

