

2-451-A Site Summary - Castro Rocks**2-451-A****County:** Contra Costa **ACP Division/Segment:** CC - Y - S006 CC - Y - S007**NOAA Chart:** 18649 Entrance to SF Bay **Map Book:** **Decimal Degrees:** 37.929095 -122.430501**Site Description:**

Castro Rocks is a small group of rocky outcroppings and one island (Red Rock) located south of Hwy 580 near the east end of the Richmond-San Rafael Bridge, and just north of the Chevron Long Wharf. Their exposure is variable with the daily 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 pups haul out at the site. Numerous (100 to 250) seals haul out at this site during the winter.

Resources at Risk:*ESI and Habitat:* 1A Exposed Rocky Shore

1C Exposed rocky cliffs with boulder talus base

5 Mixed sand and gravel beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	double-crested cormorant	FP	Year-round	Mar-Jul
Fish	longfin smelt	ST	Year-round	Nov-May
Mammals	harbor seal	FP	Mar - 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	/Operations, 24-hr	Chevron Corporation, Long Wharf	(510) 242-4494
E	/Dispatch, 24-hr	Contra Costa Water District	(925) 688-8374
O	/Dispatch, 24-hr	The Marine Mammal Center	(415) 289-7350
S	/24hr Emergency Pager	Contra Costa County Hazardous Materials	(925) 655-3232
S	/Dispatch, 24-hr	Contra Costa County Office of the Sheriff	(925) 468-4421

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:

The concern is that these rocks will become 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.

Hazard and Restrictions:

There are submerged rocks surrounding Casto Rocks which are tide dependent.

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

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)

Strategy: 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

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		3000	feet	
Anchor	Danforth	44 lb		10		
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

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

Strategy: 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.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		6000	feet	
Anchor	Danforth	44 lb		9		
Vessel	Boom Boat			2		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			8		

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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)

Strategy: 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.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		3000	feet	
Boom	Swamp	6x6 inch		2500	feet	
Anchor	Danforth	44 lb		12		
Vessel	Boom Boat			2		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			8		

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

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.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		2300	feet	
Anchor	Danforth	44 lb		6		
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

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

Strategy: Deploy a second layer of 6X6 (6000') inside of the overwashing leg and arrange for absorption (600' of sorbents and snare).

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Swamp	6x6 inch		6000	feet	
Boom	Pom-pom			600	feet	
Anchor	Danforth	44 lb		13		
Vessel	Boom Boat			2		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			8		

Logistics:

Directions: 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 Marina or 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.

Land Access: Accessible only by vessel.

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On-Water Limitations: There are submerged rocks around this site. The nearest launching sites are Richmond Harbor and Tiburon Center for Environmental Studies in Marin County.

Facilities, Staging Areas, Command Posts, Available Equipment: Nearest staging, facilities, and field outposts are at Richmond Marina and Santa Fe Channel. Staging and fuel may be available at Chevron Refinery.

Communications Problems: Good cell reception throughout.

