2-219 -B Site Summary- Duxbury Reef

County:	Marin County							
USGS Quad:	7.5" Quad: Bolinas, CA							

SITE DESCRIPTION:

The site is located within Gulf of the Farallones National Marine Sanctuary and partially within Point Reyes National Seashore. It is approximately 12 nauctical miles upcoast from the Golden Gate near the town of Bolinas. The reef is several hundred yards wide and nearly 3 miles long. Site is within the following State Marine Protected Area: Duxbury Reef State Marine Conservation Area. Site is associated with BLM Ca Coastal National Monument resources. This is the largest intertidal reef in California. It is a designated wildlife preserve. It consists of a large wave-cut mudstone rocky bench backed by coarse-grained beaches and eroding cliffs with extensive intertidal and tidepool areas.

Thomas Guide Location

NOAA Chart: 18649 / 18680

Marin County

SEASONAL and SPECIAL RESOURCE CONCERN

"B" priority all year due to its extensive intertidal habitat, rich intertidal biota, and harbor seal haulout sites. It is the largest exposed reef in California.

RESOURCES OF PRIMARY CONCERN

Duxbury reef consists of the largest rocky intertidal reef habitat in California.

A wide variety of shorebirds, wading birds, raptors and scavengers forage on the reef.

Harbor seals are present (200-250) on many on the outer rock outcroppings, primarily towards Bolinas Point and the southern tip of the reef.

A wide variety of seaweeds, fish, crabs, snails and other sealife are present on and around the island and washrocks.

Intertidal plants and animals are diverse and abundant on the central California coast. Many seaweeds, very extensive mussel beds, barnacles, goose-necked barnacles, anemones, fish, endangered black abalone, seastars and other invertebrates can be found here.

Surface-canopy forming bull kelp beds and subtidal-canopy forming kelps are common in the offshore area beyond the reef.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

This is a culturally sensitive area. For specific sites, contact the Pt. Reves Park headquarters archeological staff, the California Dept of Parks and Recreation - Historically, a rich area of human inhabitation. 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)

Туре	Name / Title	Organization	Phone
E/T	24hr Sanctuary Personnel	Gulf of the Farallones National Marine Sanctuary	(650) 479-5311
0	Main Office	Point Blue Conservation Science	(707) 781-2555
E/O	Anita Brown Fire Chief	Bolinas Fire Dept.	(415) 499-6717
Т	David Ledig	BLM Ca Coastal Monument	(831) 630-5006
Т	Becky Ota Marine Conservation MGR	CDFW Marine Protected Areas Program	(650) 631-6789
Т	James Weigand	BLM Ca Coastal Monument	(916) 978-4656
0	Steve Wertz Senior Env.Scientist	CDFW Marine Protected Areas Program	(562) 342-7184

ADDITIONAL SITE SUMMARY COMMENTS:

3753

Last Page Update : 1/1/1998

Latitude N Longitude W 122 40

2-219 -B Site Strategy - Duxbury Reef

County and Thomas Guide Location Marin County Marin County

NOAA CHART 18649 / 18680

CONCERNS and ADVICE to RESPONDERS:

Principal concerns are oil contamination and response activity impacts to seabirds, marine mammals, and other vulnerable intertidal plants and wildlife which are present throughout the year. The primary objective is to minimize exposure of oil to the natural resources present at the site. Other concerns are the impacts resulting from response activities. Avoid low flying aircraft/helicopters (<1000 ft) over the seabird colonies and marine mammal haulout areas. Avoid noisy boat traffic near the site.

HAZARDS and RESTRICTIONS:

Heavy surf and large swell common at this site. Very wide rocky reef. Steep, eroding cliffs.

SITE STRATEGIES

Strategy 2-219.1 Objective: Open water & on-water counter measures.

This site is difficult to protect as is most of the outer coast. Mechanical shoreline protection techniques are not likely to be effective because of high wave energy and rocky conditions at this site.

a) Recommended response strategy is on-water containment and recovery.

b) Pursue feasibility of alternative response technologies (e.g. dispersants and in-situ burning) to reduce the volume of oil reaching the site.

Strategy 2-219.2 Objective: Shoreline oil mitigation and cleanup: Prevent penetration of oil into gravel beaches resulting in long-term persistent oiling of the area.

Place several thousand feet of sorbent booms (pom poms or sausage booms) along upper beach to minimize oil pentrating into gravel beach.

Manual removal of oil would most likely be the recommended cleanup method due to the sensitivity of the reef organisms.

Table of Response Resources

strategy	harbor	swamp	Other	sorb	Anchoring	Boom	Skiffs	Skin	nmers		Special	Equipment or comment	staff	Staff
number	boom	boom	boom type	boom	no type and gear	boat	punts	No	Туре	No	and	kinds	deploy	tend
2-219.1	0													
2-219.2	0	0	0	5000	0	0	0	0		0			4	

LOGISTICS

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

Hwy 101 to Hwy1 to Bolinas Lagoon. At the top or head of the lagoon turn westward onto Olema-Bolinas Road. Turn right on Mesa Road. Several access point to the reef exist: 1) public access trails from Mesa Road at Palomarin; 2) through the Commonweal Institute north of Bolinas; 3) at Agate Beach County Park. To get to Agate Beach: from Mesa Road turn left on Overlook Drive, turn right on Elm Road and proceed to the parking lot at the end of the road. The site is located within Gulf of the Farallones National Marine Sanctuary and partially within Point Reyes National Seashore. It is approximately 12 nauctical miles upcoast from the Golden Gate near the town of Bolinas. The reef is several hundred yards wide and nearly 3 miles long. Site is within the following State Marine Protected Area: Duxbury Reef State Marine Conservation Area. Site is associated with BLM Ca Coastal National Monument resources.

LAND ACCESS: No vehicular access to beach.

WATER LOGISTICS:

Heavy surf and large swell common at this site.

Limitations: depth, obstruction

Launching, Loading, Docking Nearest boat launch is in Bolinas Lagoon from Seadrift.

and Services Available:

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

Staging access through Agate Beach County Park in Bolinas, the Commonweal Institute on bluffs above the site, and on the Palomarin Beach access at the northwest end of beach.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS: Strategy developed March 1995, has not been deployed or tested.



Imagery: NAIP 2010 (Summer) 4-Band