

County: **Marin County**USGS Quad: **7.5" Quad: Drakes Bay, CA**

Thomas Guide Location

Marin County

NOAA Chart: **18647**

Latitude N

3 8 02

Longitude W

122 56

Last Page Update : 1/1/1996

**SITE DESCRIPTION:**

Located within Point Reyes National Seashore and part of site is a designated Wilderness Area. The site includes all of Drakes and Limantour Esteros. Site is within the following State Marine Protected Area: Point Reyes State Marine Reserve and the Gulf of the Farallones National Marine Sanctuary. A large natural inlet with medium-grained sandy outer beaches. Drakes Estero and Estero de Limantour are connected and tidally flushed through the same opening into Drakes Bay. This shallow Estero contains extensive marshes, tidal mudflats, and 1000 acres of commercial oyster aquaculture operations.

**SEASONAL and SPECIAL RESOURCE CONCERN**

"A" priority all year. Several endangered plant and animal species migrate through or are present all year. Harbor seal pupping (Mar-June), molting (July-Aug) and haulout area (year-round).

**RESOURCES OF PRIMARY CONCERN**

Extensive tidal marshes, tidal mudflats, and eelgrass beds at risk all year.

Western snowy plovers nest (on high beach and foredune areas) and forage on the sandy shores of the Estero and sand spit. California brown pelicans roost and feed in the Estero. High usage area by over-wintering and migrating shorebirds, wading birds, and waterfowl (ca. 14,000 in 1991). A wide variety of raptors, including peregrine falcons, red-tail hawks, osprey, and white-tailed kites forage throughout the esters and surrounding wetlands. Other birds such as turkey vultures and ravens are abundant and at risk from eating dead oiled birds.

Significant Harbor seal breeding, pupping and haulout area (20% of the state population in 1989; 1300-1500 individuals in summer 1991) located in the Esteros and on sand spits at the entrance (peak March-June).

A variety of fish and invertebrates utilize the mudflats and marshes throughout the year. Herring enter the bay to spawn on eelgrass in the winter (Nov-Mar). Dungeness crab use the bay as a nursery area to spawn and grow. Widespread commercial oyster aquaculture operation throughout Drakes Estero.

A variety of clams, worms and crabs may be found in and on the mudflats and intertidal shoreline areas.

Extensive eelgrass beds throughout the Esteros. Two rare plant species are present in the pickleweed saltmarshes: Northcoast birds-beak (*Cordylanthus maritimus palustris*) and the Marin knotweed (*Polygonum marinense*).

**CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES**

This is a culturally sensitive area. For specific sites, contact the Pt. Reyes 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)**

Type	Name / Title	Organization	Phone
T	24hr Sanctuary Personnel	Gulf of the Farallones National Marine Sanctuary	(650) 479-5311
O	Main Office	Point Blue Conservation Science	(707) 781-2555
O	Jonathan Bishop Oil Spill Prgm Coord.	CA Coastal Commission	(415) 904-5247
O	Alison Detmer	CA Coastal Commission	(415) 904-5205
T	Jan Knight	US Fish and Wildlife Service	(916) 414-6702
T	Becky Ota Marine Conservation MGR	CDFW Marine Protected Areas Program	(650) 631-6789
E/T	Pt. Reyes NP Dispatch PRNS	US National Park Service, Pt. Reyes (NS), Ranger	(415) 464-5170
T	Steve Wertz Senior Env.Scientist	CDFW Marine Protected Areas Program	(562) 342-7184

**ADDITIONAL SITE SUMMARY COMMENTS:**

## 2-205 -A Site Strategy - Drakes Estero

County and Thomas Guide Location  
Marin County Marin County

NOAA CHART  
18647

## 2-205 -A

Latitude N Longitude W  
3 8 02 122 56

Last Page Update : 7/1/2005

### CONCERNS and ADVICE to RESPONDERS:

The concerns are oil contamination and response activity impacts to wetlands, rare and endangered species, and other vulnerable plants and wildlife which are present throughout the year. The primary objective is to minimize the exposure of oil to plants, animals and habitats present at this site. Other concerns are the impacts resulting from response activities. Avoid trampling wetlands, sensitive plants and animals, and soft mudflats, causing penetration of oil into the sediments and further injury to the environment. Avoid low flying aircraft/helicopters (<1000 ft) over the seabird use areas and marine mammal haulout areas.

### HAZARDS and RESTRICTIONS:

Large swell and surf along the outer beach and strong current common through the mouth of the Estero.

### SITE STRATEGIES

#### Strategy 2-205.1 Objective: Exclude oil from entering either Drakes or Limantour Estero.

This large natural inlet cannot be closed by constructing a sediment dike. The mouth may be greater than 1000 ft wide. Length and specific placement of booms may vary due to changing position of estero mouth. In addition to on-water containment and recovery efforts, the following site-specific protection measures should also be carried out:

a) As much oil as possible should be stranded on the outer beaches to reduce the volume flowing into the estero. If conditions allow, deploy several 100-300 ft sections of deflection booms along shore to divert oil onto hard-packed, medium-grained outer sand beaches.

b) Alternative: if conditions allow and inlet mouth is relatively narrow; place a "V shaped" boom configuration beginning several yards from up- and down-coast from the mouth and pointing out from the mouth and into the bay.

#### Strategy 2-205.2 Objective: Exclude oil from entering either Drakes or Limantour Estero.

Under high surf conditions when booming outside the mouth is not possible, deploy the following deflection/collection booming strategy inside the estero mouth:

a) Deploy a series of cascading 18" curtain boom in the interior east channel (Estero de Limantour) with a hinge point near mid-channel. Deploy at an angle appropriate to deflect oil based on current and/or wind conditions, divert oil to either the fine sand beach catchment area on the mainland directly northeast of the inlet throat, or onto the landward side of the east spit.

b) Deploy another hinged set of cascading deflection booms (18") in the interior northwest channel (Drakes Estero) angled to deflect oil onto the fine sand beach catchment area on the mainland directly northeast of the inlet throat onto the landward side of the west spit. Use 50ft of Oil Snare (OS) and/or 100ft of sorbent boom to collect oil that may possibly accumulate.

Contact IC if oil accumulates in skimmable quantities.

#### Strategy 2-205.3 Objective: Exclude oil from entering either Drakes or Limantour Estero.

During periods of extreme high tides and large waves, build a sediment dike across opening through dunes at the western most end of the Drakes beach spit.

#### Strategy 2-205.4 Objective: Oil Recovery by skimming

If oil accumulates in skimmable quantities, deploy skimmers to collect oil. Because of very strong flood currents, there may be some entrainment of oil. To guard against this eventuality, it may be necessary to position additional skimmers further back in the tidal channels.

Consult IC prior to initiation of this recovery strategy.

### 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
2-205.1	0		2000 OB		25 20-25 / 25-40 Danforth	4	0			28	
2-205.2	6000		50 OS	2100	30 25-30 / 25-40lb Danforth	4	4			28	
2-205.3	0	0	0	0	0 0	0		00	Bulldozer	4	
2-205.4	0	0	0	0	0	0	0	3 vssl depl	0		

## LOGISTICS

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

From Highway 101 in San Rafael, take Sir Francis Drake Blvd to Hwy 1 at Olema. Turn right (north) and go 2 miles, turn left (west) on Sir Francis Drake through Inverness. Proceed out to headland and turn left onto Drakes Beach Road to Visitors Center. This will give access to the north spit of the Estero. To reach the south spit: after turning off Hwy 1 onto Sir Francis Drake, take the first left onto Bear Valley Road, then right on Limantour Road, proceed to the end of the road. Located within Point Reyes National Seashore and part of site is a designated Wilderness Area. The site includes all of Drakes and Limantour Esteros. Site is within the following State Marine Protected Area: Point Reyes State Marine Reserve and the Gulf of the Farallones National Marine Sanctuary.

**LAND ACCESS:** Use of motorized vehicles is restricted.

**WATER LOGISTICS:** Tidal sandbar cannot often be crossed.

Limitations: depth, obstruction

Launching, Loading, Docking Small boat launching is possible at Johnson's oyster farm during high tide.  
and Services Available:

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

On-site staging areas are not available. Closest area is Limantour Beach parking lot 2.5 miles south of the inlet.

**COMMUNICATIONS PROBLEMS:**

**ADDITIONAL OPERATIONAL COMMENTS:** This is a designated Wilderness Area and access is very poor. Permission to access granted by QMGE 136

