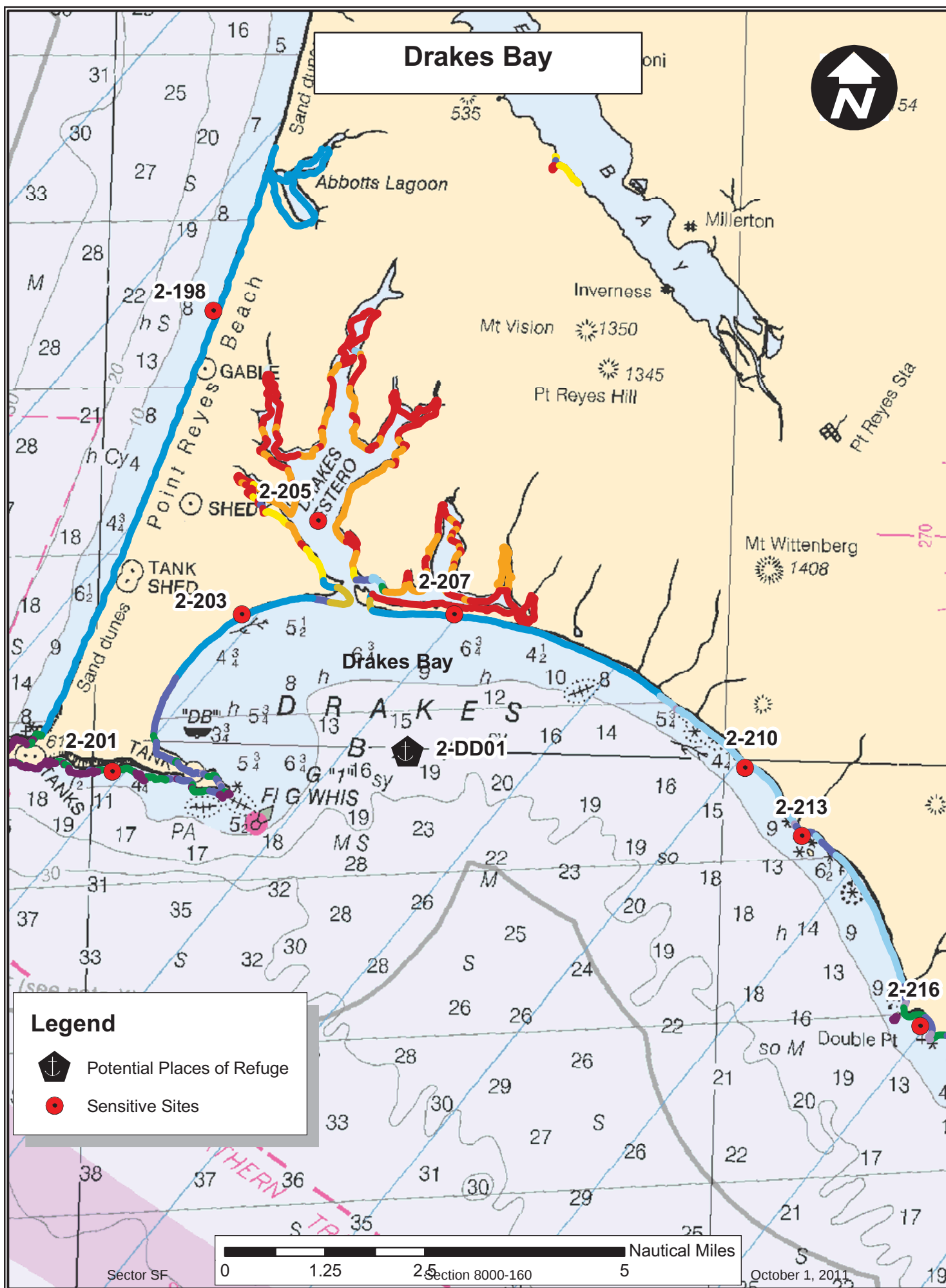




PPOR Pre-Incident Information SummaDrakes Bay: Deep Anchorage			2-DD01
Latitude 38° 0'	122.9	Longitude 122° 5	122.917
County Marin			Type: Anchorage

Location Description:		
Drakes Bay is a small bay on the coast of northern California in the United States, approximately 30 miles (48 km) northwest of San Francisco at approximately 38 degrees North latitude.[1] The bay is approximately 8 miles (13 km) wide. It is formed on the lee side of the coastal current by Point Reyes.		
Drakes Bay has one of the highest concentrations of TAES and sensitive species in California. Drakes Bay Shoreline and Estero is the only Marine Wilderness south of Alaska. Largest mainland breeding concentration of harbor seals in California. Largest and most diverse mainland seabird breeding area in the region. High diversity of marine mammals, shorebirds and waterbirds. Unique oceanographic conditions result in a high concentration of species and make this an especially high-value commercial and recreational fishing area. CA State Marine Protected Areas are proposed here and two already are designated. The oldest known marine shipwreck of US West Coast (San Augustin) is located in Drakes Bay. Common recreational uses are surfing, wildlife viewing, and other beach activities. Shoreline contains preserved archaeological sites dating back to first European–Native American encounters and unique paleontological resources including paleo dunes and fossils are vulnerable to shoreline contamination and/or cleanup activities.		
Natural Resource Concerns and Issues for this Place / Site		
Threatened and Endangered Species (TAES):	Critical Habitat for TAES:	
17 TAES species common/known to be present in the area and likely to be impacted; additional seasonal and rare TAES species present as well.	Red-legged frog; Drakes Bay upper tributaries for steelhead trout (Home Ranch, East Schooner and Creamery Bay).	
Western snowy plover (F–T); Pt. Reyes Great Beach, Limantour Spit, Drakes Beach; nest spring/summer upper beach, present year–round, highest numbers in winter.		
Peregrine falcon (S–E); Breed at Pt. Reyes Headland and on cliffs around Drakes Bay; forage year–round.		
California sea otter (S/F–E); occasional to area.		
Steller sea lion (F–T); Pt. Reyes National Seashore is one of remaining haul–outs; year–round.		
Leatherback turtle (F–E); common seasonally.		
Guadalupe fur seal (F–T); rare.		
Marbled murrelets (F–T,S–E); major concentration in winter.		
Humpback whales (F–E); forage spring to fall.		

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Blue whales (F-E); rare, forage spring to fall.

Central California coho salmon (S/F-E); winter and spring use.

Chinook salmon (F-E,S-T); winter and spring use.

Central California steelhead trout (F-T); winter and spring use, spawning.

Green sturgeon (F-T); use coastal bays with regularity.

California clapper rail (F-E); seasonal.

California red-legged from (F-T); fresh water species found in streams, estuaries flowing into Drakes Bay; year-round and breeding; can occur in brackish water.

2 (S/F-E) Dune plant species vulnerable to shoreline contamination/cleanup.

Sensitive Non-protected (Non-TAES) Species:

SFACP2:198A,201A,203A,205A,207A,210B,213B,216A; ESI/Central Coast-Maps 39, 40

Extremely sensitive and important area along Bay headlands on offshore rocks, cliffs, pocket beaches for: seabird colonies (Brandt's/pelagic cormorants, common murre, pigeon guillemot, tufted puffin, ash storm-petrel [proposed for listing], western gulls) and roosting and foraging area for wintering birds; largest numbers of shorebirds on North Coast (black oystercatcher, willets, colonial nesting egrets and herons); large numbers of waterbirds (brown pelican, white pelican, brant, osprey, western grebes, loons, scoters) and waterfowl (scaup, scoters); pinniped rookeries (northern elephant seal year-round, northern-most breeding area and pupping Dec-Mar, CA sea lion haul-out year-round, harbor seal highest concentration in state on mainland breeding season and molt year-round, and pupping Mar-Jun); other marine mammals (CA gray whale - nearshore Dec-Feb and Apr-May, killer whale, northern fur seal, minke whale, harbor porpoise). Also, black abalone (candidate for TAES listing), white

Critical Habitat for Non-protected (Non-TAES) Species:

Elephant seals, harbor seals, Dungeness crab, eelgrass beds, herring.

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sharks feed in Bay, river otters occur in Drakes Estero, sensitive dune and wetland plants as well as insects vulnerable to contamination/cleanup operations.

Subsistence–use Species:

Critical Habitat for Subsistence Species:

Essential Fish Habitat:

Historic and Cultural Resources:

Drakes Bay is essential fish habitat for species in all three federal fishery management plans (FMP), the Coastal Pelagics FMP (Northern anchovy, Pacific sardine, market squid, Pacific mackerel and Jack mackerel), the Pacific Salmon FMP (which covers chinook and coho salmon as well as pink salmon) and most importantly for Drakes Bay, the Pacific Groundfish FMP. A wide variety of rockfish and flat fish utilize Drakes Bay.

Culturally sensitive area. Native American archaeological sites; archaeological sunken vessels (San Augustin – oldest ship wreck on the west coast); paleontological resources – rich area for fossilized whales; rare paleontological coastal dunes.

Commercial Fisheries / Species:

Recreational Species and Habitat:

Wide variety of rockfish, Pacific herring, halibut, sand dabs, clams, crabs, abalone, oysters.

Wide variety of rockfish, Pacific herring, halibut, sand dabs, clams, crabs, abalone.

Sensitivity of spawning habitat for Pacific herring on eelgrass or kelp (Oct–Mar). Sensitivity of Drake's Bay as nursery area for Dungeness crab (egg laying Nov–Feb; hatching Dec–March).

Human Health / Safety Concerns and Economic Issues for this Place / Site

Human Health and Safety

Economic Impact on Maritime Commerce and Shipping:

Pt. Reyes Station (Basic Medical Services) – 15 miles
Petaluma (Basic and Emergency Medical Services – 40 miles
The main town of Drake Bay is Agujitas and has a population of about 1,000 residents. Drake Bay is not on the beaten track and can only be reached by highway during the dry season.

Redundant piers and accommodations exist to counter problems that may arise as a result of a Places of Refuge incident. As long as shipping channels are clear of obstructions, most commercial shipping will continue.

Economic Impact on Commercial Fishing and Aquaculture:

Economic Impact on Non–maritime Commerce:

Potential impacts to oyster mariculture in Drake's Estero.

Collateral effects due to a disturbance in intermodal transportation systems may happen if the maritime transportation system is obstructed.

Potential impacts to Dungeness crab fishery.

Potential impacts to Pacific herring fishery.

Potential impacts to salmon fishery.

Sector SF

Section 8000-163

October 1, 2011

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Economic Impact on Recreational Fishing and Marine Tourism:

Potential impacts to recreational beach use in Pt. Reyes area. High use for surfing, fishing and sunbathing.
Potential impacts to marine wildlife viewing eco-tourism.

Other Economic Impacts:

Airborne release of a hazardous substance or a catastrophic incident will most likely impact population desire to stay away from affected areas or any large metropolitan areas due to a fear factor.

Stakeholder List for this Place / Site

Name / Title	Organization	Phone	more details
Sarah Allen	US National Park Service, Pt. Reyes (NS)	(415) 464-5187	
NPS-PRNS Dispatch	Pt. Reyes National Seashore - NPS	(415) 464-5170	
Main Office GFNMS	National Marine Sanctuaries, Gulf of the Farallone	(415) 561-6622	
Sara Koenig	US National Park Service, Pt. Reyes (NS)	(415) 663-8525	
Thomas O. Moore	CA Dept. of Fish & Game	(707) 875-4261	
PRBO Main Office	Pt. Reyes Bird Observatory	(415) 868-1221	
Bill Shook Chief Nat. Resources	US National Park Service, Pt. Reyes (NS)	(415) 464-5188	
Gerald White Chief Cult.Resources	Point Reyes National Seashore - NPS	(415) 464-5127	

Characteristics and Tactical Considerations

Primary Jurisdictional Contact: Gulf of the Farallones National Marine Sanctuary

Marine Fire Fighting Resources Bodega Bay OR SF PIER 24: 37-42.42, 122-23.24

Approximate Tug Response Time 4 HOURS FROM SF PIER 24

List of Nearby Environmentally Sensitive Sites SFACP 2: 198A, 201A, 203A, 205A, 207A, 210B, 213B, 216A (Pt. Reyes Great Beach) Is Containment Possible? ☐

Coast Pilot and Navigation Chart Information

Prevailing Winds	Tidal Range	Bottom Type	Max Water Depth	Min Water Depths	Currents	Sea Conditions	Fog	Shelter From Severe Storms	Navigational Approach	Pilot Requirements
NW(Apr-Oct)	6	sandy bott	100	0	MINIMA		SEASONAL	YES: NW storm	SOUTH	☐

Specific Site Details

Site ID	Site Name	Vessel Capacities			Site Capacities and Facilities		
		Max Size	Mini Size	Max Draf	Swing Room or Dock Face	Facilities, capabilities, and any other issues or concern	
01	Deep Anchorage	1500	NA	75	0	Heavy fog periodically during summer months; SWING ROOM OR DOCK FACE: 1 MILE	ContainmentPossibilities: The anchorages within this place have good primary containment potential since there are few significant currents exceeding 0.7 knts. However, the local topography minimize the potential for secondary confinement of oil escaping primary containment.

Site Contact/Leasee/Owner: National Park Service, U.S.Fish & Wildlife Service