

County: **Marin County**USGS Quad: **7.5" Quad: Inverness, CA**

Thomas Guide Location

Marin County

Latitude N

3 8 05

Longitude W

122 50

NOAA Chart: **Bodega and Tomales Bays 18643**

Last Page Update : 7/1/2005

SITE DESCRIPTION:

Site includes all of the tidal saltmarshes and mudflats at the head of Tomales Bay from the south edge of Inverness (about a mile north of Willow Pt on the west side) and Bivalve (on the east side), as well as Lagunitas Creek upstream to Point Reyes Station. Pt. Reyes National Seashore owns most of this site. Site lies within the Gulf of the Farallones National Marine Sanctuary. The site includes mudflats, low to high saltmarsh, and freshwater marshes and riparian corridors. There are extensive mudflats which graduate to prograding saltmarshes north of the levied portion of the delta. The area behind the delta levees is a mix of salt marsh (where levees have been breeched) and wet meadow, but all the levied area will be restored to salt marsh in the future. Lagunitas Creek is tidal upstream to Point Reyes Station and provides the largest freshwater inflow into Tomales Bay. There is riparian habitat in upper estuary on Levees and banks of Lagunitas Creek, Tomasini Creek, and Olema Creek. This stream system is key to California Coho populations. The Tomales Bay Ecological Reserve is an extensive saltmarsh area on the east shore behind the old railroad bed and north of Pt. Reyes Station.

SEASONAL and SPECIAL RESOURCE CONCERN

"A" priority for protection all year. This very sensitive ecosystem a variety of habitats and a very diverse assemblage of plant and animal species. Freshwater, brackish and saltwater marshes, as well as riparian and mudflat habitats can be found at this site. Several threatened and endangered species use the area. Coho salmon (endangered) and steelhead trout migrate up the creek during the winter (Oct -Mar) and the young smolts out migrate during the spring and summer (May-Aug). Shorebirds and waterfowl can be found by the thousands during the fall and winter months (Oct-Apr).

RESOURCES OF PRIMARY CONCERN

This is an extensive site which includes salt marshes, mudflats, freshwater marshes, and riparian corridors along freshwater inflows. The area has very limited access throughout because of the extreme shallows and marshes. The habitat here support numerous sensitive species and large concentrations of resident and migratory shorebirds, wading birds, and waterfowl. Lagunitas Creek drainage is vulnerable to both land and marine petroleum threats and is a key habitat for threatened salmonid stocks. The fronting and margin mudflats and marshes provide spawning, nursery, and foraging habitat for a variety of birds, fish, and invertebrates throughout the year.

Several bird species of special concern are resident or casual visitors. The brown pelican occurs seasonally; threatened species such as the California black rail, salt marsh yellowthroat, and merlin are common in bay marshes. Herons, egrets, shorebirds and waterfowl use the site throughout the year. Shorebirds and waterfowl, including large numbers of brant, are very abundant here as they are elsewhere throughout the bay during the fall and winter months (Oct-Apr) and many are resident throughout the year.

The western pond turtle (in fresh and brackish water areas) and threatened California red-legged frog (in freshwater areas) are present in the Lagunitas Creek Estuary. River otters have recently returned to the estuary after an 85 year absence and frequent this area.

Ninety percent of the remaining coho salmon (endangered) use the Lagunitas Creek system. Both salmon and steelhead trout migrate up the creek during the winter (Oct -Mar), and the young smolts out-migrate during the spring and summer (May-Aug).

Saltmarsh bird's beak is a key endangered plant sustained here, and a wide variety of saltmarsh, brackish, and riparian plants occur throughout this site.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

This is a culturally sensitive area as is the entire margin of Tomales Bay. 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
E/T	24hr Sanctuary Personnel	Gulf of the Farallones National Marine Sanctuary	(650) 479-5311
E/T	Chris Bramham	Marin, County of, Parks & Open Space	(415) 499-6405
E/T	Pt. Reyes NP Dispatch PRNS	US National Park Service, Pt. Reyes (NS), Ranger	(415) 464-5170

ADDITIONAL SITE SUMMARY COMMENTS:

2-191 -A Site Strategy - Lagunitas Creek & Delta Marsh

County and Thomas Guide Location
Marin County Marin County

NOAA CHART
Bodega and Tomales Bays 18643

2-191 -A

Latitude N Longitude W
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CONCERNS and ADVICE to RESPONDERS:

The concerns are oil and response activity impacts to wetlands, rare and endangered species, and other vulnerable plants and wildlife. The primary objective is to minimize oiling of marshes by booming. Other concerns are the impacts resulting from response activities such as trampling wetlands, disturbing sensitive plants and animals, and soft mudflats or tromping oil into the sediments which can cause long term oil injury to the environment.

HAZARDS and RESTRICTIONS:

Extremely shallow water.

SITE STRATEGIES

Because the south end of the bay is so shallow, there is little or no opportunity to boom near the marshfront or stream mouths. Booming is much simpler up-bay from the site.

Strategy 2-191.1 Objective: primary, exclude / protect marsh from substantial marine oil threat

Deploy 4200' of Curtain boom (Harbor boom of 9X9 or greater size) from Inverness to Millerton. The boom should be set at a diagonal from the upper end of Inverness (in the area where Sir Francis Drake Highway veers away from the bay) to the low beach on Millerton Point. Tidal currents are minimal here. Contact State Parks about setting up a SSS (shore side skimming) operation on Millerton Point beach.

Strategy 2-191.2 Objective: 2ndary exclusion / protection of marsh. This is secondary booming strategy to protect south bay from substantial marine oil threat. More sites are afforded protection but oil will impact here sooner.

Deploy 4500' of curtain boom (9X9 or greater size) from west shore to east shore north of Shell Beach. The boom should be set at a diagonal from the shoreline near Shallow Beach to Tomasina Pt (the point north of Millerton Point- unnamed on some maps). Tidal currents are minimal here. Contact State Parks about setting up a SSS (shore side skimming) operation: shoreside skimming may be a problem here because shoreline is abrupt bluffs. (If shoreside skimming is impractical, plan an on-water skimming operation, and contact unified command.)

Strategy 2-191.3 Objective: for upstream spill threats, divert to collection.

If petroleum enters upstream drainage from a roadside or similar land based spill, minimize spread downstream by diverting to containment/collection. Boom Inverness Creek, Olema Creek, Bear Valley Creek, or other drainage at most feasible access point, such as Inverness Park, Hwy 1 bridge, Bear Valley Road, etc. Position boom swamp boom or other small boom at an angle to the current to avoid entrainment of petroleum. Use local emergency responders to deploy boom. Use local supplies of anchors and punts to secure boom. Temporary absorbants may be useful while awaiting arrival of sorbant boom or skimmers. (Strategy not on Site Strategy Diagram).

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
2-191.1	4200	0		0	7 22# danforths with chain	3	1	0		9	
2-191.2	4500	0		0	0	3	1	0		9	
2-191.3	0	300		0	0	0	1	0		2	

LOGISTICS

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

Hwy 1 to Point Reyes Station near the head of Tomales Bay. To gain access to Lagunitas Creek, proceed westward on Sir Francis Drake approximately 1/2 mile to White House Pool County Park area; or at the Hwy 1 Bridge in Pt. Reyes Station. Site includes all of the tidal saltmarshes and mudflats at the head of Tomales Bay from the south edge of Inverness (about a mile north of Willow Pt on the west side) and Bivalve (on the east side), as well as Lagunitas Creek upstream to Point Reyes Station. Pt. Reyes National Seashore owns most of this site. Site lies within the Gulf of the Farallones National Marine Sanctuary.

LAND ACCESS: Large trucks to Pt. Reyes Station and Inverness.

WATER LOGISTICS: Extremely shallow water at the head of Tomales Bay.
Limitations: depth, obstruction
Launching, Loading, Docking and Services Available: Nearest launch ramps at Nicks cove and Inverness.

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

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:

