2-572 -A **Site Summary- Tolay Creek Marshes**

		Thomas Guide Location Latitude N	Longitude W
County:	Sonoma	3 8 07	122 02.7
USGS Q	^{uad:} Petaluma Point	NOAA Chart: 18654 San Pablo Bay	

SITE DESCRIPTION:

Last Page Update : 1/1/2000

2-572 -A

Site includes the San Pablo Bay frontage from mouth of Petaluma River to a mile east (to Tubbs Island) of the mouth of Tolay Creek (Midshipman's Point) and includes 3 miles of Tolay Creek to Hwy 37 and adjacent tributary wildlife areas (San Pablo Bay National Wildlife Refuge). The marshes between Petaluma River and Tolay Creek are prograding and shallow very gradually, supporting 100 to 200 meter wide continuum of biota from tidal flat to high marsh: unvegetated to chord grass to pickleweed dominated. Tolay Creek itself is an incised channel through a wide flood plain (300+ meters) of pickleweed marsh and bounded by aged levees. The creek and marshes are much less extensive north of Hwy 37. The two wetlands wildlife areas bordering the east side of Tolay Creek, connect via gated channels and culverts. The DFW marsh abuts Hwy 37. The much larger USFWS property abuts San Pablo Bay at Tolay Creek mouth with a mile of riprap dike frontage to the east and which has three additional openings exchanging directly with the Bay. There is another resorted marsh, Sonoma Bay Lands Wetland, with an open tidal exchange channel about a mile and a half west of Tolay Creek. Midshipman's point is used by harbor seals as an occasional haulout.

SEASONAL and SPECIAL RESOURCE CONCERN

This is an A-priority site all year due to the extensive marshes. Several Special Status Species occur here: including three endangered and one threatened species. These marshes and the adjacent tidal flats are heavily used my migratory shorebirds and waterfowl from September through April.

RESOURCES OF PRIMARY CONCERN

Extensive marshes are exposed via Tolay Creek including bordering emergent marsh, flood plain pickleweed marsh, and adjacent controlled wetlands. The bay frontage to the west has extensive chord grass and pickleweed marshes and the west has tidal openings to wetlands behind bay front levees.

This is excellent rearing and wintering habitat for marsh bird life including waterfowl and marsh birds. Special Status Species found here include the endangered California clapper rail, the threatened black rail, and species of special concern, the salt marsh common yellowthroat and the San Pablo song sparrow nest here.

In addition to the normal diversity of marsh mammals found in this habitat, the endangered saltmarsh harvest mouse is found here. The salt marsh wandering shrew also inhabits this area. Harbor seals occasionally haul out on Midshipman's Point at high tide.

This area has rich infauna and is part of the Dungeness nursery area.

The Marin knotweed, an endangered plant, may also be found in these marshes.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

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	
Т		NOAA, National Marine Fisheries Service	(562) 980-3232	
E/O	Richard Bicknell Supervising Ranger	Baylands Nature Preserve	(650) 617-3156	
E/T	Region 3 DFW Office	CA Dept. of Fish & Wildlife	(707) 944-5500	
0	Barbra Salzman	Audubon Society, Marin County Chapter	(415) 924-6057	

ADDITIONAL SITE SUMMARY COMMENTS:

2-572 - A Site Strategy - Tolay Creek Marshes

County and Thomas Guide Location

NOAA CHART 18654 San Pablo Bay

Last Page Update :

CONCERNS and ADVICE to RESPONDERS:

This is very sensitive habitat with rare and endangered species present. Exclude oil from entering Tolay Creek and wetlands to the east: boom creek mouth and tidal channels and close tide gates. Deflect oil away from this site. Any oil arriving at this site should be deflected to collection locales and prevented from free movement where possible. Protect marsh fronts from oiling and oil penetration. Avoid trampling marsh and trampling oil into marsh muds during cleanup. Be aware of oil penetrating animal burrows.

HAZARDS and RESTRICTIONS:

This area is very shallow except in Tolay Creek Channel.

SITE STRATEGIES

<u>Strategy 2-572.1</u> Objective: Exclude oil from Tolay Creek and other openings to marsh. Access by skiff from land or via water route.

(a) Deploy 700' of 6X6+ Hboom at the mouth of Tolay Creek in a modified diagonal from Midshipman Point across the channel to a point about 150' west of the mouth, with this anchor point well high in the marsh. Approximately 20' of Hboom should wrap around Midshipman Point. A midpoint anchor must be positioned in the channel (just off the east bank) to keep the boom from sagging into a catenary curve. Back with a sorbent boom layer. Repeat configuration if there is a wind chop or waves.

(b) Exclude oil from tidal cuts and inlets. Deploy 100' 6X6+ Hboom as exclusion boom at entrance of Sonoma Bay Lands Marsh 1 mile west of Tolay Creek. Deploy 50' chevron exclusion booms in front of each of the three tidal culverts to the east of the creek mouth. Close the tidal gate at the levee near the creek mouth.

Strategy 2-572.2 Objective: Divert to prevent oil from moving up channel while in San Pablo Bay still away from shoreline.

Diversion booming: If oil is posing a threat, it will move up channel which cuts across the shallow flats of San Pablo Bay. A diversion boom across that channel to divert oil out of the tidal current and onto flats, will afford protection to the Creek mouth. Divert to windward. Deployment will require 200 ft of Hboom. Deploy at higher tide with a shallow draft boom boat.

Strategy 2-572.3 Objective: Protection booming to prevent oil from accumulating along the marshy shoreline of San Pablo Bay Consider that this deployment will require intensive resources and time in the short navigable intervals.

Deploy a layer of harbor or swamp boom along the marshy frontage from Tolay Creek mouth westerly to Petaluma River mouth. Deploy during periods of higher tides to permit approach near shore using shallow draft boomboats. Set boom as close to vegetation as possible. Anchor at 600' intervals and stake as necessary to secure. Under severe oil threat, two layers and a sorbent backup may be required. Two layers of swamp boom set about 10 feet apart would be equivalent to harbor boom.

Table of Response Resources

strategy	harbor	swamp	Other	sorb	4	Anchoring	Boom	m Skiffs Skimmers Special Equipment or comment		Equipment or comment	staff	Staff			
number	boom	boom	boom type	boom	no	type and gear	boat	punts	No	Туре	No	and	kinds	deploy	tend
2-572.1	0	950		400	8	6/22+/danforth	0	1				stakes t	o aid in securing	2	
2-572.2	200				3	3/22/anchors	1	0				shallow	draft boomboat	3	
2-572.3	10500				65	65/15+/anchors	5	2				shallow	draft bboats which can strand	20	

LOGISTICS

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

Vehicle access to the mouth of Tolay Creek is from Hwy 37 though the locked gate (USFWS) at the DFG wildlife area parking lot (1/2 mile east of Tolay Creek on south side of Hwy) on rough levee roads. By boat, proceed northerly from Petaluma River Channel in San Pablo Bay to creek mouth. Site includes the San Pablo Bay frontage from mouth of Petaluma River to a mile east (to Tubbs Island) of the mouth of Tolay Creek (Midshipman's Point) and includes 3 miles of Tolay Creek to Hwy 37 and adjacent tributary wildlife areas (San Pablo Bay National Wildlife Refuge).

LAND ACCESS: Marginal for large trucks. Seasonally impassible on earth levees.

WATER LOGISTICS:

Channel is very navigable. Very shallow mudflats.

Limitations: depth, obstruction Launching, Loading, Docking and Services Available: Boat ramp, fuel, and berthage at Petaluma River- 2 miles west. Punt launch at Midshipman Pt and Hwy 37.

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

Best staging site is Petaluma River boat ramp. Also, Sonoma Marina: fuel, berthage, and some services available (water, phones, restrooms, food). Small skiff deployments can be staged at Tolay Creek at mouth or Hwy 37.

COMMUNICATIONS PROBLEMS: none known

