2-715 - A Site Summary- Pittsburg-Antioch Marsh (Dow Wetlands)

Thomas Guide Location

Latitude N Longitude W 38 01.4 121 05

2-715 -A

USGS Quad: Antioch North

Contra Costa

County:

NOAA Chart: 18656 Suisun Bay

Last Page Update : 7/1/2005

SITE DESCRIPTION: The site is located on the south side of the San Joaquin River at Antioch and extends from Dowest Slough to the pier east of the Antioch Marina (at the end of I Street). This freshwater marsh has a large leveed marsh enclosure and unenclosed emergent marsh. The leveed marsh has been named Dow Wetlands and extends from the Antioch Marina to Contra Costa Canal at the west levee. This interior marsh is mostly cattail-tule-pickleweed marsh, and there is a freshwater marsh at the west end. There are breeches in the levee at Antioch Point, which allows a significant tidal exchange. The levee has a growth of willow. Outside the levees are additional marshes. Along the river side of the levee there are emergent growths, but the more remarkable emergent marshes are those at the mouth of Contra Costa Canal to the west, the shoreline east of the marina, Dowest Slough and the emergent growth on the offshore bar in the San Joaquin River.

SEASONAL and SPECIAL RESOURCE CONCERN

Marsh is A-priority year-round. There are Special Status Species abiding here.

RESOURCES OF PRIMARY CONCERN

The habitats sensitive to oil are marshes and riparian growth along the levee and the bank. The marshes are distinctive. The interior marsh was traditionally freshwater or brackish, there has always been pickleweed and saltgrass, particularly with the more saline influence from the breech, but the freshwater marsh at the east corner is well buffered from oil. This marsh can be protected from oil by excluding entry at the breeches. The marshes outside the levee are of several types. The emergent vegetation on the shoal in the San Joaquin River is almost exclusively tules and difficult to protect. The marsh to the east of the marina, though small, is freshwater type vegetated ranging from high marsh to emergent and can be protected by protective and deflective booming. The marsh at the mouth of Contra Costa Canal is expanding; this pocket has little flow, and the accreting margin is an increasing band of emergent species at the toe of the aged revetments. The two pocket sloughs to the west (Dowest and unnamed) are eurihaline marshes and vulnerable to oil unless boomed.

This is suitable habitat for a variety of marsh bird species and is of importance to wintering migratory waterfowl.

The full range of marsh mammals occur here including beaver and river otter. Salt marsh harvest mouse may also occur here.

The rich marsh vegetation includes several rare species: Suisun marsh aster and Mason's lilaeopsis.

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
E/L	Dow Chemical 24 hr	Dow Chemical Co., Pittsburg	(925) 432-5278
	John Henderson F/W Biologist	US Fish & Wildlife Service, Environmental Contam	(916) 414-6595
	Eric Larson	CA Dept. of Fish & Wildlife, Bay/Delta	(707) 944-5528

ADDITIONAL SITE SUMMARY COMMENTS:

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County and Thomas Guide Location Contra Costa

NOAA CHART 18656 Suisun Bay

CONCERNS and ADVICE to RESPONDERS:

Marsh always has a high protection priority. First concern is to exclude oil from entering the interior marsh by booming the breeches in the levee. Secondary concerns are to keep oil off of marshes to the east, west and north of Dow Wetlands by deflection and protection booming. Responders should avoid trampling vegetation and trampling oil into soft mud. There are very small rare plants and endangered mammals present.

HAZARDS and RESTRICTIONS:

There are obstructions and shallows in these waters.

SITE STRATEGIES

<u>Strategy 2-715.1</u> Objective: Exclude oil from entering the marshes: booming levee breeches at Antioch Pt. & and small openings, mouth of Contra Costa Canal, Dowest Slough, & unnamed slough.

a) At Antioch Pt (just west of the marina), deploy an extended chevron which encompases both breeches using 800' 6X6+ (9X9+ Hboom with heavy anchors when there are winds). Back with sorbent. (This may alternatively be accomplished by by deploying 800' of 9x9+ from Antioch Pt as in strategy -.2 and attaching 500' from mid boom to the shoreline west of the breech. To do this add 400' to the amount shown below.)

b) At the mouth of Contra Costa Cannal (which is just west of the unnamed point between Antioch Point and Dowest Slough), exclude oil from channel and cove. Boom creek mouth with 20' 4X4+ (and if time an resources permit, boom across cove with 800' 4X4+ stake and anchor in place).

c) Exclude oil from Dowest Slough (200' 4X4+) and pocket cove east of Dowest Slough (100' 4X4+).

Strategy 2-715.2 Objective: Deflect oil away from sensitive areas on Flood tide

For oil on the Flood tide, set 800' 9X9+ Hboom cascading off the point west of Antioch Pt and just east of the Contra Costa Canal mouth to deflect oil back into the channel and past the emergent growth in the San Joaquin. Also, set a 200' 9X9+ deflection just west of Antioch Marina entrance to deflect away from marsh east of the Marina. SSW of G13 R2

Strategy 2-715.3 Objective: Deflection on Ebb tide: deflect oil away from and past sensitive areas.

For oil on the ebb tide, set 400' 9X9+ Hboom cascading off the tip of the chevron to deflect oil past the emergent growth in the San Joaquin River.

If oil is massed and moving along the Antioch waterfront, delfect oil away from east marsh at the pier to deflect it away from the east marsh, marina, and sensitive areas further to the west of the marina. Deploy 200' deflection boom as necessary.

Strategy 2-715.4 Objective: Protective booming of shoreline of marsh to the east of Antioch Marina.

Deploy 800' 4X4+ boom along the shoreline from the fishing pier at the Antioch Marina east to the pier to the eas (at I street).

Table of Response Resources

strategy	harbor	swamp	Other	sorb	Anchoring	Boom	Skiffs	Skimmers			Specia	al Equipment or	comment	staff	Staff	
number	boom	boom	boom type	boom	no	type and gear	boat	punts	No	Туре	No	and	kinds		deploy	tend
2-715.1	800	350		800	5	5/22+/danforths with chain & stakes	2	1				Bboa	at: 1 very shallow		8	
2-715.2	1000				6	6/22+/danforths + chain	2	1							8	
2-715.3	600				6	6/22+/danforths + chain	1	0							3	
2-715.4	0	800			3	3/12+/danforths & stakes	1	1							5	

LOGISTICS

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

From Hwy 4, exit on Summersville Road and go north. Summersville becomes 4th Street (after a right curve). Turn north (left) on L Street. Marsh and marina are across railroad tracks. There is also access to shoreline at the west end via private roads (contact DOW Chemical or Winter Island Duck Club.) Site is most easily addressed via water; Antioch Marina is included in the site. The site is located on the south side of the San Joaquin River at Antioch and extends from Dowest Slough to the pier east of the Antioch Marina (at the end of I Street).

LAND ACCESS:

variable depending on shore segment: ft to large truck.

WATER LOGISTICS: Limitations: depth, obstruction

shallows and obstructed at ends. Long-shore channel at levee

Launching, Loading, Docking and Services Available: boat launch & fuel on site - Antioch Marina. Also private launch -Winter Isl. Duck Club - near Dowess Slough. Full services at Pittsburg and Antioch Bridge marinas.

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

There are many options for local and regional staging and field outposts depending on the scope of the spill impacts. Local staging at Antioch Marina. Further to the west is Pittsburg Marina. To the east is the public access at Antioch Bridge,

2-715 - A Strategy Diagram- Pittsburg-Antioch Marsh (Dow Wetlands) 2-715 - A

