2-665 - A Site Summary- Simmons Island / Suisun Cutoff

County:	Solano	Thomas Guide Location TG Solano	Latitude N 38 05.4	Longitude W 122 00			
USGS Quad:	Honker Bay, Vine Hill	NOAA Chart: SUISUN BAY 18658/	NOAA Chart: SUISUN BAY 18658/18652/18656				
		[Last Page Update :	9/4/1997			

SITE DESCRIPTION:

This site includes the 4 miles of bay frontage on Suisun Cutoff and berm islands of Simmons Island from Noyce Slough on the east to Pt. Buckler. There are several land ownerships - all are duck clubs. This location is also strategic as a pathway for oil to move from west Suisun Bay to the extensive marshes of Honker Bay and nearby locales via Suisun Cutoff. Suisun Cutoff is very deep. USGS drifter studies have demonstrated how surface currents of western Suisun Bay funnel though this deep channel on flood tides. Simmons Island itself is a large diked island which is maintained for duck hunting. The dike is riprapped. Some of the margin has a barrow channel separating the historic marsh front from the current island levee, resulting in extensive marshy margins. Although there is some emergent marsh along the ripped island levee, the outer perimeter is a premium strip of native marsh. The barrow channel is open to the bay at multiple points. Wave action here tends to be tangential to the shoreline. There is a tide gate to the inner island sloughs at Noyce Slough.

SEASONAL and SPECIAL RESOURCE CONCERN

These marshy areas have A-protection priority at all times. Major seasonal concerns are the large numbers of waterfowl which here and in adjacent areas.

RESOURCES OF PRIMARY CONCERN

These marshy areas are pristine, to excellent, habitat for all manner of marsh species. Oil must be prevented from entering barrow channels and interior sloughs by exclusion booming. The open bay waters, both here and to the east in Honker Bay, are important for wintering waterfowl. Inner island marshes are exposed to oil threats if the tide gate at Noyce Slough is open.

The marshy margins are prime marsh bird and waterfowl habitat for many species including Suisun song sparrow and possibly black rail. This area is heavily used by ducks and other water birds during the wintering season.

These emergent marshes are inhabited by semi-aquatic mammals such as river otter, raccoon, beaver and muskrat. Salt marsh harvest mouse is probably present.

Fish using these waters include adults and juveniles of the various Delta species, including sensitive species: Delta smelt, longfin smelt, and winter-run chinook; major fish stocks move though this area: salmon, steel head, green and white sturgeon, striped bass, American shad.

The emergent marshes here are typical tule-sedge mix with some cattail.

Several sensitive plants occur here: Mason's lilaeopsis, Suisun marsh aster, and soft bird's beak.

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
TBEL	Grizzly Isl W/L Refuge	CA Dept. of Fish & Wildlife	(707) 425-3828
	Eric Larson	CA Dept. of Fish & Wildlife, Bay/Delta	(707) 944-5528
	Staff Office	Suisun Resource Conservation District	(707) 425-9302

ADDITIONAL SITE SUMMARY COMMENTS:

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2-665 - A Site Strategy - Simmons Island / Suisun Cutoff

County and Thomas Guide Location TG Solano Solano NOAA CHART SUISUN BAY 18658/18652/18656

Last Page Update :

10/1/2005

CONCERNS and ADVICE to RESPONDERS:

This channel, Suisun Cutoff, is the major avenue for oil to move to Honker Bay, Spoonbill Creek and island marshes. This is a key location because strategy-.1 is key to excluding oil from vast shorelines at this and other sites. There are marshes along the margins which are also vulnerable but of lesser strategic importance. Responders should always minimize trampling of marsh vegetation and tracking oil into marshes and sediments.

HAZARDS and RESTRICTIONS:

There are shallows and obstructions along shore and inside the barrow channels.

SITE STRATEGIES

<u>Strategy 2-665.1</u> Objective: Collection/Exclusion of heavy oil flow though Suisun Cutoff, divert the oil to shore collection areas.

Cascade boom across Suisun Cutoff to direct oil toward quitewaters near shore for collection. Set up shore collection/skimming system either at duck club or dock west of duck club or both. Set additional boom at shore tc protect shore and trap oil once it is diverted. Currents are strong and channel is deep: heavy chain and long scope will be necessary. Anchoring skill is a must for this deployment to succeed.

Strategy 2-665.2 Objective: Exclude oil from entering barrow channels and slough entrances.

There are multiple breaks in the north shore. On Suisun Cutoff side, exclude oil from entering side channels by deploying boom across openings (a) Andy Mason Slough - 600' 9x9+Hboom, (b) 400'+ 4X4+swp boom/3seg., c 700' 4X4+ swp boom/6seg. On the Grizzly Bay side (d), close the through channel (Andy Mason Slough) (800' 4X4+swpboom) and the barrow channel (50' 4X4+ swpboom). (Back with sorbant as necessary). If current is carrying oil out of Suisun Cutoff at Pt Buckler, deploy Hboom (500' 9x9+) off Pt to deflect oil back into Suisun Cutoff. Leave trailing ends to shore to insure agains shortcircuiting.

<u>Strategy 2-665.3</u> Objective: Protective Booming: If there is threat of heavy oiling and saturation of the marsh front, deploy protective boom coverage, when resource use will not preclude defending other sites against impacts.</u>

If foregoing strategies are inadequate to keep oil off marshy shorelines, deploy exclusion booming around threatened marshfronts: this strategy can be found in Potential Oil-Spill Protection Strategies for San Francisco Bay, California. (Hayes and Montello, 1994). This would require 6 miles of a combination of intertidal, 9x9+ Hboom, and 4X4+Hboom.

Table of Response Resources															
strategy	harbor	swamp	Other	sorb	Α	nchoring	Boom	Skiffs	Skim	mers		Special	Equipment or comment	staff	Staff
number	boom	boom	boom type	boom	no	type and gear	boat	punts	No	Туре	No	and	kinds	deploy	tend
2-665.1	4000				15	22#+ danforth & CHAIN	4	2	2 SS	S		3500' c	fline	16	
2-665.2	1100	1950			16	16/22+/danforth + chanin	2	4				very sh	allow craft, airboat, hovercraft etc.	15	
2-665.3	10000	15000			15	anchors and stakes	10	6				2 hove	craft/airboat; 4 very shallow Bboat	44	

Table of Response Resources

LOGISTICS

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

Land access is from the private levee roads along the bay. They may be reached from Hwy 12 in Suisun City, then south on Grizzly Island road to Grizzly Island Wildlife Refuge. For further access and entry, contact Grizzly Island Wildlife Refuge (707-425-3828) or Suisun Resource Conservation District staff (707-425-9302). Nearest boat access is 3 miles southeast at McAvoys Marina, Bay Point (9 mi to Martinez, 7 mi to Pittsburg). This site includes the 4 miles of bay frontage on Suisun Cutoff and berm islands of Simmons Island from Noyce Slough on the east to Pt. Buckler. There are several land ownerships - all are duck clubs.

LAND ACCESS: ALL TYPES WHEN LEVEES ARE DRY

WATER LOGISTICS: VERY SHALLOW DRAFT < 2' NEAR SHORE.

Limitations: depth, obstruction

Launching, Loading, Docking McAvoy/Harris Marina at Bay Point. Pittsburg Marina. Martinez Marina. and Services Available:

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

The duck clubs have power and good small boat docking facilities.

Nearest major deployment site/field post is McAvoy's/Harris', full service marinas, or Concord Naval Weapons Station.

COMMUNICATIONS PROBLEMS: none known

ADDITIONAL OPERATIONAL COMMENTS:

