

County: **Solano**  
USGS Quad: **Honker Bay**

Thomas Guide Location

Latitude N      Longitude W  
38 08.8      121 59.5

NOAA Chart: **18656 Suisun Bay/Roe Island & vicinity**

Last Page Update : 9/4/1997

**SITE DESCRIPTION:**

This site includes Snag and Freeman Islands which are located just south of Dutton Island and east of Ryer Island in north central Suisun Bay. Both are properties of Concord Naval Weapons Station. These two islands have emergent marsh margins. Snag Island is high marsh with cattails and shrubs. Freeman Island is low saltmarsh. It has an inside channel which goes all the way around the inside of the island and supplies water to the inner marsh with small channels. Tide water is admitted to this inner channel via breaks in its margin: there four breaks in the southwest shore and two on the north shore of Freeman Island. It also has a convoluted marshy shoreline.

**SEASONAL and SPECIAL RESOURCE CONCERN**

The marshy areas have A-protection priority at all times. Winter is a particularly important time for waterfowl.

**RESOURCES OF PRIMARY CONCERN**

Both Islands are marshes which have great sensitivity. Freeman Island is much more vulnerable than Snag because Freeman is more vulnerable to oil intrusions to the inner marshes via multiple tidal channels and its low marshy fringe. Snag Island has no tidal channels but has a marshy fringe and supports high marsh species.

There is extensive marsh bird habitat: Sensitive Species include Suisun Song Sparrow and probably black rail.

These islands are inhabited by small semi-aquatic mammals such as river otter, beaver, mink and muskrat.

Fish species using these waters include: adults and juveniles of the various sensitive Delta species- Delta smelt, longfin smelt, and Winter-run chinook. Major fish stocks move through this area: salmon, steel head, sturgeon, striped bass, American shad.

The emergent marshes here are predominately tule, but cattails and sedges are also important.

Several sensitive plants occur here: Delta tule pea, 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)**

Type	Name / Title	Organization	Phone
	Eric Larson	US Navy, Concord Naval Weapons Station, Enviro	(925) 246-4024
		CA Dept. of Fish & Wildlife, Bay/Delta	(707) 944-5528

**ADDITIONAL SITE SUMMARY COMMENTS:**

## 2-667 -A Site Strategy - Freeman & Snag Islands

County and Thomas Guide Location

Solano

NOAA CHART

18656 Suisun Bay/Roe Island & vicinity

## 2-667 -A

Latitude N

Longitude W

38 08.8 121 59.5

Last Page Update : 10/1/2005

### CONCERNS and ADVICE to RESPONDERS:

These island marshes and the endangered plants and animals living there, are very vulnerable to oil damage. Primary concern is penetration of oil into the marsh via tidal channels and secondarily into emergent marsh margins. Responders should minimize trampling of marsh vegetation and avoid tracking oil into marshes and sediments. Small endangered plants and animals are present.

### HAZARDS and RESTRICTIONS:

There are shallows and obstructions around and inside the island. Suisun bay can have aggressive waves.

### SITE STRATEGIES

Strategy 2-667.1 Objective: Exclude oil from entering openings to perimeter barrow channel and interior channels of Freeman Island.

There four breaks in the southwest shore and two on the north shore of Freeman Island, all of them open to an inside barrow channel which goes all the way around the inside of the island and supplies water to the inner marsh. On the south side, exclude oil entry by deploying chevron "V" exclusions with about 300' each of 9x9"+ Hboom with mid-point anchors and staking at shoreline in front of the openings. To be sure to stop movement of any oil passing these wave exposed openings, then deploying shore segments of 4x4"+ swamp boom across barrow channel to the left and right of the large openings. On the northerly shore, exclude oil from the two openings with short segments of 4x4"+ swamp boom in small chevrons.

Strategy 2-667.2 Objective: divert oil threat from west (Suisun Cut) past windward pockets to minimize shore oiling for Freeman

On westerly end of Freeman Island, deploy deflection boom at the best angle to protect windward shore from approaching oil using 1300' of 9x9"+Hboom. (See diagram 2-668.2A.)

Strategy 2-667.3 Objective: Deflection for S & SW winds, divert oil past windward pockets to minimize shore oiling for Freeman and Snag Island.

deployment should be set to the southerly side of the island and a similar deployment will be needed on Snag Isl (2600' of 18"+ Hboom total needed) See diagram 2-668.3.

Strategy 2-667.4 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 SO 5 and 6 impacts.

If foregoing strategies are inadequate to keep oil off marshes, deploy exclusion booming around threatened marshfronts: this strategy can be found in Potential Oil-Spill Protection Strategies for San Francisco Bay, California. (Hayes and Montelo, 1994).

### Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	tyoe and gear	Boom boat	Skiffs punts	Skimmers No	Type	Special Equipment or comment No and kinds	staff deploy	Staff tend
2-667.1	1200	250			8	8/12+/danforths & stakes	1	2				7	
2-667.2	1300				6	6/22+/danforths & stakes	2					6	
2-667.3	2600	0	0	0	9	22+/danforths	3	0	0	0		9	
2-667.4	4000	13000			18	18/22+/danforth & stakes	5	3				21	

### LOGISTICS

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

There is no land access. Nearest land access is across channel to Dutton Island. Nearest boat access is 3 miles southeast at McAvoy's Marina, Bay Point (8 mi to Martinez, 7 mil to Pittsburg). This site includes Snag and Freeman Islands which are located just south of Dutton Island and east of Ryer Island in north central Suisun Bay. Both are properties of Concord Naval Weapons Station.

**LAND ACCESS:** NONE

**WATER LOGISTICS:** VERY SHALLOW DRAFT < 2' NEAR ISLAND

Limitations: depth, obstruction

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

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

The only alternative to marina facilities are duck clubs at nearby Dutton and Simmons Isls including good docking facilities.

**COMMUNICATIONS PROBLEMS:** none known

### ADDITIONAL OPERATIONAL COMMENTS:

