

County: **Solano**  
 USGS Quad: **Vine Hill**

Thomas Guide Location  
 NOAA Chart: **18656 Suisun Bay**

Latitude N  
 3 8 05  
 Longitude W  
 122 02

Last Page Update : 1/1/2000

**SITE DESCRIPTION:**

This site includes all of Ryer Island and is a property of the US Army, Military Ocean Terminal Concord (MOTCO). This marshy island in Suisun Bay is divided in two parts by a channel. The western end of the island is a high tidal marsh and supports a rich diversity of native marsh plants. It has never been diked or channelized. The west-most tip is wave eroded and is used occasionally as a haulout by harbor seals. The eastern three-fourths of the island was once diked, and the interior of the island subsided. The dikes are now broken in several places, and because of the subsidence, strong tidal currents fill and empty the interior with every tide. This eastern portion is a flooded maze of tule pockets and channels with a large deep channel running east-west. The outer perimeter of the island has complicated shoreline of small marshy islands and barrow channels. There are mature trees on the levees particularly at the east end.

**SEASONAL and SPECIAL RESOURCE CONCERN**

The marsh is "A" priority all year. Sensitive plant and animal species occur here throughout the year.

**RESOURCES OF PRIMARY CONCERN**

This island has several different habitats which are vulnerable to oil impacts and collateral impacts from response. The west end and the fragmented pieces left when barrow channels were excavated, high marsh habitat. This high marsh is almost undisturbed and uncommon habitat which sustains many native species. The high ground of the levees are upland habitat. The upland sustains shrubs and trees which is uncommon habitat for bird and mammals in the middle of Suisun marsh. Both the high marsh and upland are unlikely to sustain direct oil impacts due to elevation, but are vulnerable at their emergent edges and are vulnerable to trampling, activity and noise disruptions during response. The margins and interior provide extensive emergent marsh. The interior of the east portion is patches of emergent tules and convoluted channels.

The area is important to migratory waterfowl. It is also prime breeding habitat for marsh birds. Threatened bird species occur here including black rails, endangered California clapper rails, salt marsh common yellowthroat and Suisun song sparrow. A great diversity of passerines and raptors including peregrine falcons use this area as winter habitat.

There is a full suite of aquatic mammals residing here, including the endangered saltmarsh harvest mouse. The western most point is occasionally used as a haulout by harbor seals.

Among the rich variety of flora occurring here are rare plants, including Mason's lileopsis and Delta tule pea.

**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
T/B	Kathy Hieb Senior Fisheries Biologis	CA Dept. of Fish & Wildlife, Bay/Delta	(209) 942-6078
	Eric Larson	CA Dept. of Fish & Wildlife, Bay/Delta	(707) 944-5528

**ADDITIONAL SITE SUMMARY COMMENTS:**

## 2-632 -A Site Strategy - Ryer Island

County and Thomas Guide Location

Solano

NOAA CHART  
18656 Suisun Bay

2-632 -A

Latitude N Longitude W

3 8 05 122 02

Last Page Update : 3/10/2011

### CONCERNS and ADVICE to RESPONDERS:

The main concern is the potential for oil to be carried into the interior of the islands particularly eastern Ryer Island: on east Ryer there is a strong flood flow into the island though openings on the north, the south, the east and the west. The north opening and west opening are most likely to have oil entries. Also of concern is the oiling of the emergent vegetation on the margins and surrounding small islands: closing sloughs and openings will reduce the amount of marsh exposed. There are rare plants and threatened species here; avoid trampling vegetation and trampling oil into sediments.

### HAZARDS and RESTRICTIONS:

There are extreme shallows and obstructions around these islands.

### SITE STRATEGIES

Strategy 2-632.1 Objective: Exclude oil from entering east section of Island though levee breaks and penetrating the west section interior via tidal inlets.

Primary concern is excluding oil from East Ryer Island. West Ryer Island should come after. Most actions require very shallow operations, and at least one very shallow draft boom boat is necessary. Target time is 2 hours for deployment:

On East Ryer Island are four major openings and plus some smaller inlets.

a) - North shoreline on Suisun Cut: Use chevron configuration (600' 9X9+ Hboom with 3 22#+ anchors and stakes) to exclude oil from a large gap in the levee. There are four narrow openings to the east of the break, each requiring 100' of 4X4+ and 1/5#+ anchors and stakes each. Back with sorbent (1000')

- Cross Island channel may need booming at north end: 200' of 9X9 at the north end. 200' sorbent.

b) west shore: All require very shallow operations. Back with sorbent 500.

- Exclude oil from two small opening just east of cross island channel 50' and 100' of 4X4+ each with 1- 5#+ anchor and stakes in a chevron "V" exclusion. Set "V" apex and stakes as far from current opening as possible.

- Exclusion chevron "V" in the larger channel immediately to south, with 350' 9X9+ Hboom with 22#+ anchors & stakes.

- Exclusion boom in three inlets starting at 100 yds south of above channel, boom with 100' ,100' and 50' of 4X4+ river (swamp) boom staked in place. (no sorbent necessary.)

c) South shore: two openings - a wide funnel opening fronted with pilings and submerged pilings: deploy Chevron "V" exclusion with 400' 9X9+ Hboom with anchors to keep boom off the pilings. Back with 200' sorbent. Exclude oil from second opening about 200 yds east: 100' 4X4+ boom. Back with 50' sorbent.

d) East shore: Chevron "V" exclusions of four openings though outer fringe islands: two most easterly opening 350' and 150' 9x9+ (both with 22# danforths), two south easterly side 150' and 150' of 4X4+ boom (both with 5#+ mid channel anchors). Back with 600' sorbent.

On West Ryer Island are four tidal inlets. These require extremely shallow operations.

e) Near the northwest tip just east of Garnett Pt is a funnel mouth slough: 200' 4X4+ swamp (river) boom staked in place and 100' sorbent.

f) on the south side, Chevron "V" exclusions using 4X4+ boom - 150' at the cross island cut and slough immediately to the west and further west 100' at each of two other sloughs. Back with sorbent.

Strategy 2-632.2 Objective: Deflect oil away from seal haulout at northwest tip.

Deflect oil past north west tip (Garnett Point) using 400' of 9X9+ Hboom. At least four heavy anchors will be necessary to hold the boom in position in this wave washed area.

Strategy 2-632.3 Objective: Reducing south shore impacts by closing barrow channel inlets.

Closing barrow channel inlets can reduce oil exposure to the south margin by about 1/2. If oil is likely to impact south side of Ryer Island, close openings to barrow channels. 3000' 4x4+ boom with stakes and occasional anchors.

### Table of Response Resources

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Boat tvpe and gear	Boom boat	Skiffs punts	Skimmers No	Special Equipment or comment	staff deploy	Staff tend
2-632.1	1850	1850		2800	30	15/22#+& 15/5#+/danforth, 20 stakes	4	3		1 very shallow draft boats & 18 flags	18	
2-632.2	400				4	4/22+/danforhts + 20'+ chain					3	
2-632.3	0	3000			5	5/12+/- anchors + 40 stakes	1	1		boats - very shallow draft	4	

### LOGISTICS

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

There is no land access. By water, Ryer Island is located about a mile north of the Naval Weapons Stations piers in Suisun Bay. The Island is about six miles northeast from Martinez and about four miles northwest from McAvoy's. North and south margins are deep. Wherever channels cross old levee, there are obstructions. Interior channels are all very shallow but

may be traversed with outboards when tides high. This site includes all of Ryer Island and is a property of the US Army, Military Ocean Terminal Concord (MOTCO).

**LAND ACCESS:** foot traffic only and extremely difficult

**WATER LOGISTICS:** North and south margins deep; channels shallow & obstructions

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Nearest launch is McAvoy's (4 miles) or Martinez -Benicia (7 miles). All have good services.

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

Either Martinez, Benicia, or McAvoy's (Bay Point) have good facilities for field outposts. All have good support and security potential. Martinez has widest variety of support services.

**COMMUNICATIONS PROBLEMS:** none known

**ADDITIONAL OPERATIONAL COMMENTS:**

