

2-312 -A Site Summary- Oyster Bay Marshes

2-312 -A

County: **Alameda**
USGS Quad: **San Leandro**

Thomas Guide Location
AAA Fremont - N
Latitude N
37 .71
Longitude W
122..19
NOAA Chart: **San Francisco Bay, Southern Part**

Last Page Update : 7/1/2005

SITE DESCRIPTION:

The site is made up of wetlands at Oyster Bay Regional Shoreline located along the east side of San Francisco Bay, bounded to the northwest by Oakland International Airport, to the east by the San Leandro Davis Street Waste Transfer Station, and to the southwest by San Francisco Bay. The site consists of 4 acres of emergent marsh bordering the Oyster Bay Regional Shoreline to the north and 5 acres of tidally influenced marsh located along the southeast portion of the shoreline.

The marsh in the northern portion of the site occurs on both side sides of the drainage channel and consists primarily of cordgrass. Access should be made through Davis St. gate managed by EBRPD. Access is restricted on the north side of the channel (Oakland Airport property).

The marsh along the southeast portion of the shoreline is bordered to the east by private industrial facilities, and to the south by a mudflat cove where shorebirds are present.

The shallow mudflats in the vicinity of Oyster Bay Regional Shoreline, which provide habitat for numerous shorebirds, may make access for deployment of large boom sections problematic at low tide.

SEASONAL and SPECIAL RESOURCE CONCERN

The site is an "A" priority all year.

RESOURCES OF PRIMARY CONCERN

The endangered salt marsh harvest mouse, California least tern, and the California clapper rail are known to occur in the general area. This area is used by migratory waterfowl.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Ohlone cultural sites may be nearby. 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 |
|------|--------------------------------|---------------------------------|----------------|
| ELO | EBRPD Dispatch EBRP | East Bay Regional Park District | (510) 881-1833 |
| E/T | MLK/Oyster Bay Park Supervisor | East Bay Regional Park District | (510) 544-3115 |

ADDITIONAL SITE SUMMARY COMMENTS:

2-312 -A Site Strategy - Oyster Bay Marshes

County and Thomas Guide Location
AAA Fremont - N Alameda

NOAA CHART
San Francisco Bay, Southern Part

2-312 -A

Latitude N Longitude W
37 .71 122..19

Last Page Update : 10/1/2005

CONCERNS and ADVICE to RESPONDERS:

Should oil enter the marsh, expect injury and death of marsh vegetation, small mammals, shorebirds and waterfowl. Avoid trampling marsh vegetation and trampling oil into mud.

HAZARDS and RESTRICTIONS:

Shallow water, seas to 3 feet. Soft mud.

SITE STRATEGIES

Boom can be delivered to shore. Site is immediately adjacent to streets and marina. Area is exposed at low tide.

Strategy 2-312.1 Objective: Exclude oil from entering the marshes. Should oil enter the marshes, contain oil to the smallest possible area

a) Deploy 700 ft of swamp boom having a minimum freeboard of 4 inches and a minimum draft of 4 inches in the tidal channel on the north side of Oyster Bay Regional Shoreline. Depths near shoreline are shallow. Shorelines are manmade riprap. A skimmer and portable storage device may be located here if significant quantities of oil can be accumulated.

b) Deploy 250 ft of swamp boom across the mouth of the salt marsh at the southeast corner of Oyster Bay Regional Shoreline. Stakes must be used to keep boom in place. Water is very shallow at low tides. Access is through East Bay Regional Park gate at the northern-most end of Neptune Drive.

Strategy 2-312.2 Objective: Exclude oil from salt marsh at the southern end of Oyster Bay Regional Shoreline.

Deploy 2,500 ft. of 9X9+ Hboom from the southern most point of Oyster Bay Regional Shoreline to Mulford Landing near the intersection of Marina Blvd. and North Dike Rd. One boom boat, two john boats and 6 people will be needed at this site. Angle of boom may be altered to take advantage of wind. Divert oil to an accessible shoreline.

Strategy 2-312.3 Objective: Oil Recovery by skimming

A portable skimmer and a vac truck will be needed to recover oil as it accumulates as a result of strategies .1 and/or .2, deploy skimmers or vac truck to recover product.

Table of Response Resources

| strategy number | harbor boom | swamp boom | Other boom type | sorb boom | Anchoring no type and gear | Boom boat | Skiffs punts | Skimmers No Type | Special Equipment or comment No and kinds | staff deploy | Staff tend |
|-----------------|-------------|------------|-----------------|-----------|-------------------------------|-----------|--------------|------------------|---|--------------|------------|
| 2-312.1 | | 950 | 0 | 0 | 6 2/12#+ danforths +4/ stakes | 0 | 2 | | | 4 | |
| 2-312.2 | 2500 | 0 | 0 | 0 | 8 22# danforths | 1 | 2 | | | 6 | |
| 2-312.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3SSS | 3 vac trucks | | |

LOGISTICS

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

Take Highway S 880 to Alameda/San Jose. Take Davis Street exit. Proceed west on Davis St., access through the Davis Street Waste Transfer Station. To San Leandro Marina: Take Highway 880 to San Leandro. Take Marina Blvd. exit. Go west on Marina Blvd. to San Leandro Marina.

West bank access can be made through the East Bay Regional Parks trail located on Neptune Drive, just south of the Davis Street Waste Transfer Station. Alternate access to the marsh inlet may be made through Paradise Mechanical, Inc. located at 2600 Williams Drive. The site is made up of wetlands at Oyster Bay Regional Shoreline located along the east side of San Francisco Bay, bounded to the northwest by Oakland International Airport, to the east by the San Leandro Davis Street Waste Transfer Station, and to the southwest by San Francisco Bay.

LAND ACCESS: Access for trucks on well maintained, graveled levee roads.

WATER LOGISTICS: Shallow draft vessels <3'.

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Boat launching available at San Leandro Marina. Small skiffs may be launched from levees.

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

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



2-354 -A Site Summary- Islais Creek - Pier 94 Saltmarsh**2-354 -A**

County: **San Francisco**
 USGS Quad: **San Francisco South**

Thomas Guide Location

Latitude N
 37 44.3 Longitude W
 122 22.5

NOAA Chart: **18649/18650 Entrance to SF Bay**

Last Page Update : 10/1/2002

SITE DESCRIPTION:

This 10+ acre site is the corner of Pier 94 at the south edge of the mouth of Islais Creek Channel and extends from Pier 96 back into the channel about a third of a mile. The shoreline is under management of the Port of San Francisco. It is a narrow 200+ yard wide parcel along the south side of the channel with high ground and about 5 acres of high saltmarsh. The site had been undergoing fill and there are mounds of rubble interspersed across the pickleweed and saltgrass marsh. The north side is a rip rapped shore with low sensitivity. There is a small tidal inlet on the east margin near the Pier 96 wharf which admits tidal exchange to an interior marsh. This site has "A" sensitivity because it is a wetland under restoration and has heavy waterbird and shorebird use during winter.

SEASONAL and SPECIAL RESOURCE CONCERN

This site has "A" sensitivity because it is a wetland under restoration and has heavy waterbird and shorebird use during the winter migration.

RESOURCES OF PRIMARY CONCERN

This site is traditional saltmarsh that has undergone some filling. It provides valuable wetland habitat in a heavily industrialized portion of the Bay. It has demolition debris fill, high ground vegetation, pickleweed marsh, and saltmarsh ponds. The perimeter shoreline is primarily riprap.

A variety of water birds, shorebirds and marsh birds.

This is potentially endangered saltmarsh harvest mouse habitat.

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 |
|------|-----------------------|-----------------------------------|----------------|
| E | City of San Francisco | San Francisco, City and County of | (415) 701-2323 |
| E | Sidonie Sansome | Port of San Francisco | (415) 274-8065 |

ADDITIONAL SITE SUMMARY COMMENTS:

2-354 -A Site Strategy - Islais Creek - Pier 94 Saltmarsh

County and Thomas Guide Location

San Francisco

NOAA CHART

18649/18650 Entrance to SF Bay

2-354 -A

Latitude N Longitude W

37 44.3 122 22.5

Last Page Update : 10/1/2002

CONCERNS and ADVICE to RESPONDERS:

The tidal inlet could admit oil to the ponds and low marsh areas on this site. The openings are at the east end and can be protected with exclusion booming at the inlet and protective booming just offshore. Avoid trampling marsh vegetation. This is a marsh restoration site.

HAZARDS and RESTRICTIONS:

Riprap poses slip, trip and fall hazards. Vessels beware of submerged objects and shallows at margins.

SITE STRATEGIES

Strategy 2-354.1 Objective: Exclude oil from entering inlet and protect site from oil.

- Place 600 feet of swamp boom at opening of rocks near Pier 96 wharf and back with sorbent. Stake in place.
- Deploy 1,300 feet of 9X9+ Hboom from Pier 94 to the south shore of the entrance to Islais Creek. Place anchors at 150' intervals due to strong offshore currents.

Table of Response Resources

| strategy number | harbor boom | swamp boom | Other boom type | sorb boom | Anchoring | | Boom boat | Skiffs punts | Skimmers | | Special Equipment or comment | | staff deploy | Staff tend |
|-----------------|-------------|------------|-----------------|-----------|-----------|--------------------------|-----------|--------------|----------|------|------------------------------|-----------|--------------|------------|
| | | | | | no | type and gear | | | No | Type | No | and kinds | | |
| 2-354.1 | 1300 | 600 | | 50 | 9 | 3/22+/danforths & stakes | 1 | 1 | | | | | 3 | |

LOGISTICS

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

By boat the site is at the south margin of the mouth of Islais Creek Channel (which is Pier 94): proceed south along the SF waterfront about 4 miles from the Bay Bridge to Islais Creek Channel (just south of Army St. Terminal-North Container Terminal -Pier 80). By vehicle, exit Hwy 101 south of SF center at Army St. Continue east toward Bay on Army and turn south (right) on 3rd St. and then left on Cargo Way. Access through industrial drives toward bay - Pier 94 and Pier 96. This 10+ acre site is the corner of Pier 94 at the south edge of the mouth of Islais Creek Channel and extends from Pier 96 back into the channel about a third of a mile. The shoreline is under management of the Port of San Francisco.

LAND ACCESS: Foot & ATV on site. All types to adjacent piers.

WATER LOGISTICS: Submerged objects and shallows at margins.

Limitations: depth, obstruction

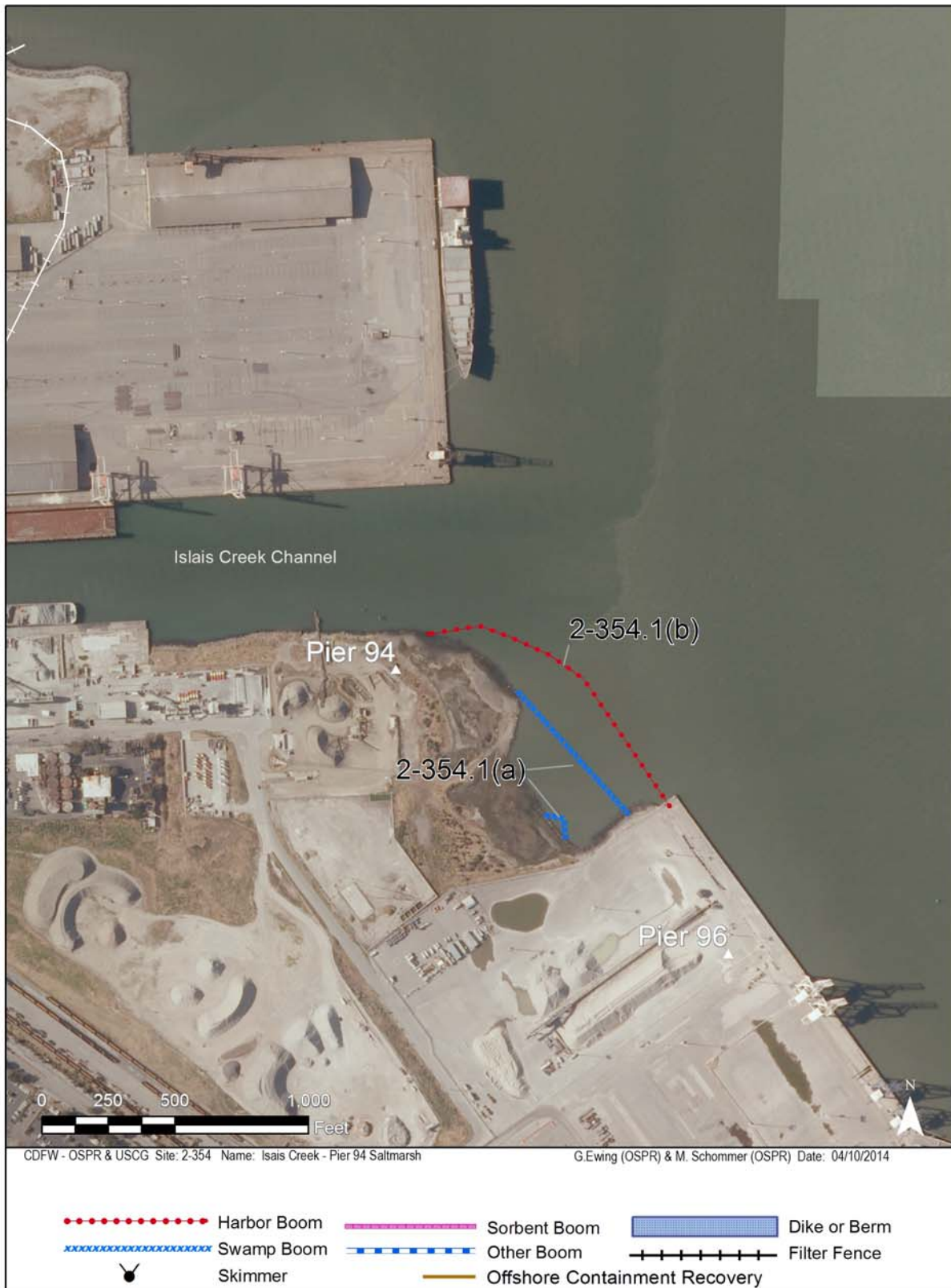
Launching, Loading, Docking and Services Available: Launch on south shore of India Basin or at South Beach Marina near the Bay Bridge, where there are facilities, fuel and mooring.

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

Staging on Pier 96 or Pier 80, either side of the channel.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



County: **Contra Costa**
 USGS Quad: **Richmond**

Thomas Guide Location Latitude N Longitude W
 3 7 54 122 19
 NOAA Chart: **18649/18650 Entrance to SF Bay**

Last Page Update : 7/1/2005

SITE DESCRIPTION:

This site includes the embayment and tributary marshes between the Pt. Isabel and the Golden Gate Fields peninsula. This site is managed by East Bay Regional Park District (EBRPD). Both peninsulas are largely fill and ripped along most of their margins. The two peninsulas roughly form a rectangle with the back marsh making the shore end. The back bay marsh is pickleweed marsh fronted with a sheltered tidal flat extending and very gradually deepening bayward and around the south side toward the mouth. Over half the bay is exposed tidal flat at low tide. There is almost no wave action at the marsh margin and very little past the mouth. The extensive tidal flats are used by shorebirds for foraging and water birds shelter in the calm of this bay.

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 two endangered species. These marshes and the adjacent tidal flats are heavily used by migratory shorebirds and waterfowl from September through April.

RESOURCES OF PRIMARY CONCERN

The primary habitats of concern are the pickleweed marsh and the fronting sheltered tidal flats. Both are natural collection sites and both would be exceedingly difficult to cleanup or rehabilitate. The flats and the becalmed bay are important habitat for birds for foraging and resting particularly during the wintering period.

The flats are feeding habitat for shore birds. and embayment is resting habitat for waterbirds (particularly during rough weather), including ducks, loons, grebes and gulls. The marsh is habitat for marsh birds including the endangered California clapper rail.

Endangered saltmarsh harvest mouse inhabits the pickleweed marsh.

The mudflats have an extensive infauna and a wide variety of fish forage here during high tides.

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 |
|------|-------------------------------|---------------------------------|----------------|
| E/T | Brooks Island Park Supervisor | East Bay Regional Park District | (510) 881-1833 |
| E | EBRPD Dispatch EBRP | East Bay Regional Park District | (510) 881-1833 |
| E/T | Shoreline Park Supervisor | East Bay Regional Park District | (510) 544-3172 |

ADDITIONAL SITE SUMMARY COMMENTS:

2-480 -A Site Strategy - Albany Marsh

County and Thomas Guide Location

Contra Costa

NOAA CHART
18649/18650 Entrance to SF Bay

2-480 -A

Latitude N Longitude W

3 7 54 122 19

Last Page Update : 10/12/2010

CONCERNS and ADVICE to RESPONDERS:

The concern here is the back bay which has extensive shallow mudflats and pickleweed marshes which have endangered species and lots of bird use. The habitat is very sensitive and almost impossible to cleanup. Keep oil from entering the mouth of the bay and/or to divert it to shore near the mouth for collection. Please stay off the marsh and mudflats and avoid trampling vegetation or oil into muds.

HAZARDS and RESTRICTIONS:

The water is reasonably deep at the mouth, but becomes progressively shallower as you proceed inward to shore. Beware of possible obstructions.

SITE STRATEGIES

As with several other shallow embayments in SF Bay, there is little tidal flow into this bay and simple exclusion booming is possible. In general flood flow tends to favor the Pt Isabel side and result in a slight outflow on the south side. There is an abrupt shallowing shelf inside as indicated in charts: operations inside may not be possible during low water. There are skimming opportunities at each shore depending on wind direction and boom set.

Strategy 2-480.1 Objective: Exclude oil from embayment on west or northwesterly winds.

Deploy boom from the northern tip of Albany Bulb to Pt. Isabel: 1500' 9X9+ Hboom. Use a minimum of 5 anchors. One every 150 to 200ft starting 200ft from Point Isabel. Use concrete blocks on shoreline for anchor points. Leave loose boom at each shoreline anchorage to maintain boom seal when tide is low. In most conditions a second layer of boom will be required to intercept and exclude oil washed over the first layer by wave actions (see 2-480.3). If potential for collection exists, establish collection pocket on Pt. Isabel, with shallow water skimmer and vac truck: double line the collection pocket: advise Incident Command.

Strategy 2-480.2 Objective: Exclude oil from embayment on southwesterly winds.

Deploy boom from the Golden Gate Fields Peninsula to Pt. Isabel: 1700' 9X9+ Hboom. In most conditions a second layer of boom will be required to exclude oil washed over the first layer by wave actions (see 2-480.3). If significant oil possible: establish collection pocket on Golden Gate Fields Peninsula and deploy shallow water skimmer and vac truck : double line the collection pocket.

Strategy 2-480.3 Objective: Backup initial exclusion strategy when strong winds or wave conditions are likely to move oil past initial exclusion deployment.

Repeat the deployment with a second deployment (1,500 ft for 2-456.1 or 1,700 ft for 2-456.2) of swamp boom. Front the deployment with sorbent (1500-1700' sorbent).

Strategy 2-480.4 Objective: Skimming when skimmable thicknesses of oil are present.

A skimming pocket will be necessary to keep oil from getting behind exclusion and to ensure that collection oil is focused to skimmer. Back the skimming pocket with sorbents (or Oil Snare if oil is group 4 or 5). Shallow water skimming head will be needed. Whether skimming with 2-456.1 or 2-456.2 exclusion, in both situations the backup exclusion is advisable (2-456.3).

Table of Response Resources

| strategy number | harbor boom | swamp boom | Other boom type | sorb boom | Anchoring no | type and gear | Boom boat | Skiffs punts | Skimmers No | Type | Special Equipment or comment No and kinds | staff deploy | Staff tend |
|-----------------|-------------|------------|-----------------|-----------|--------------|-----------------|-----------|--------------|-------------|---------|---|--------------|------------|
| 2-480.1 | 1500 | | | 100 | 8 | 22#+ /danforths | 2 | 2 | | | very shallow Bboats | 11 | |
| 2-480.2 | 1700 | | | 100 | 9 | 22#+ /danforths | 2 | 1 | 1 | shallow | | 8 | |
| 2-480.3 | | 3200 | | 1700 | 6 | 22#+ /danforths | 1 | 1 | | | very shallow draft vessels | 5 | |
| 2-480.4 | 0 | 200 | 0 | 200 | 3 | 6#+ anchors | 0 | 1 | 1 | SSS | 0 | 2 | 2 |

LOGISTICS

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

There is access to this area from Pt. Isabel Regional Park: From I-80 or I-580 just south of Richmond, exit on Central Ave and drive bayward to Pt. Isabel. There is access on the south shore though Golden Gate Fields at Buchannon St exit. This site includes the embayment and tributary marshes between the Pt. Isabel and the Golden Gate Fields peninsula. This site is managed by East Bay Regional Park District (EBRPD).

LAND ACCESS: access good all types except on marshy margin

WATER LOGISTICS: Very shallow particularly toward back. Beware, obstructions

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Launching and moorage at Richmond Marina and Berkeley Marina.

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

Full facilities at both Richmond and Berkeley. Boom can be delivered to either shoreline.

COMMUNICATIONS PROBLEMS: none known

ADDITIONAL OPERATIONAL COMMENTS:

2-480 -A Strategy Diagram- Albany Marsh

2-480 -A



2-503 -A Site Summary- Pinole Pt. Marshes-South

2-503 -A

County: **Contra Costa**
USGS Quad: **Mare Island**

Thomas Guide Location
AAA Richmond
NOAA Chart: **San Pablo Bay 18654**

Latitude N
3 7 59
Longitude W
122 21.6

Last Page Update : 7/1/2005

SITE DESCRIPTION:

The site is bounded on the north by Point Pinole and continues south approximately 2 miles to the Richmond Rod and Gun Club skeet range. Point Pinole is under management of East Bay Regional Park District (EBRPD). Approximately 50 acres of salt marshes run intermittently from one mile south of Pinole Point to a filled area approximately 2 miles south of Pinole Pt. Predominately contained within the Point Pinole Shoreline under EBRPD. The south 0.5 mile of shoreline access is controlled by private owners (Richmond Rod and Gun Club, Bruener Property now under EBRPD). Salt marshes front most of the two miles of shoreline from 0.3 mi. south of the San Pablo Creek mouth to 0.5 mi. south of Pinole Point. This prograding marsh is up to 0.4 mi. wide and vulnerable to oiling along the entire length of the shoreline since there are no levees.

SEASONAL and SPECIAL RESOURCE CONCERN

This is an A priority all year.

RESOURCES OF PRIMARY CONCERN

This area has very prime and sensitive habitats. Tidal marshes are habitat for the marsh life including some endangered species; there are both cordgrass emergent marshes and higher pickleweed marshes on the southerly portions of the site. The shallow mud flats have a rich fauna and are important feeding areas to migratory waterfowl, resident wading birds, waterbirds and fish life. The relatively protected waters here make the bay a favored resting area for migratory birds and gulls.

Species which may occur in the marshes include: the endangered salt marsh harvest mouse, endangered California clapper rail, and California black rail. There is heavy bird use of this area. During the winter and spring, migratory birds rest and feed on the cove and tidal flats.

A variety of surfperch, flatfish, sturgeon, striped bass and salmon are present in the waters over the mudflats.

A variety of shrimp, worms and other invertebrates are present on the mudflats.

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 |
|------|----------------------|---------------------------------|----------------|
| E/T | Pt. Pinole Park Sup. | East Bay Regional Park District | (510) 237-6896 |
| E | EBRPD Dispatch EBRP | East Bay Regional Park District | (510) 881-1833 |

ADDITIONAL SITE SUMMARY COMMENTS:

2-503 -A Site Strategy - Pinole Pt. Marshes-South

County and Thomas Guide Location
AAA Richmond Contra Costa

NOAA CHART
San Pablo Bay 18654

2-503 -A

Latitude N Longitude W
3 7 59 122 21.6

Last Page Update : 7/1/2005

CONCERNS and ADVICE to RESPONDERS:

Should oil enter the marsh injury and death of vegetation and wildlife can be expected.

HAZARDS and RESTRICTIONS:

CAUTION: Just offshore there's a line of concrete piling running N to S completely submerged below 5.0' tides, piling are 12' apart. Shallow water, eelgrass may foul propellers. Wind chop to three feet possible.

SITE STRATEGIES

Extreme shallows here require vessel approach from north (Pt Pinole) and follow channel near shore.

Strategy 2-503.1 Objective: Exclusion booming to prevent oil from entering the marsh.

Exclude oil from the inlets leading into Parchester Marsh. Place harbor or swamp boom backed by sorbent boom in each of the four inlets draining the marsh. Two of the inlets can be protected using one 500' chevron (see diagram) From the South inlet -boom lengths of each inlet are: 200', 500' (deploy boom from jetty to jetty to close off cove and protect secondary inlet) 500' and 200'. The type of sorbent should be adjusted to the type of oil spilled.

Strategy 2-503.2 Objective: Exclusion/Protection booming of entire emergent marshfront

If high tides are anticipated, protection of the marsh front is needed. Deploy 5,400 feet of 9X9+ Hboom (2 layers of swamp boom held by 3 to 6 feet apart may be substituted) immediately east of the rows of piles offshore of Parchester Marsh. Backed with 6,000 feet of sorbent boom or oil snare.

Table of Response Resources

| strategy number | harbor boom | swamp boom | Other boom type | sorb boom | Anchoring no | type and gear | Boom boat | Skiffs punts | Skimmers No | Type | Special Equipment or comment No and kinds | staff deploy | Staff tend |
|-----------------|-------------|------------|-----------------|-----------|--------------|-------------------------|-----------|--------------|-------------|------|---|--------------|------------|
| 2-503.1 | | 1400 | | 1400 | 12 | 12+ lb Danforth anchors | 1 | 1 | | | | 5 | |
| 2-503.2 | 5400 | 0 | 0 | 6000 | 16 | 22+ lb Danforth anchors | 2 | 1 | 0 | 0 | | 8 | |

LOGISTICS

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

Approximately 50 acres of salt marshes run intermittently from one mile south of Pinole Pt. On the north to a filled area approximately 2 miles south of Pinole Pt. From I-80 in Richmond, exit at the Richmond Parkway. From the Richmond Parkway, turn right onto Giant Highway and proceed to the park entrance. Limited access can also be obtained through Goodrick Ave, off Richmond Parkway. The site is bounded on the north by Point Pinole and continues south approximately 2 miles to the Richmond Rod and Gun Club skeet range. Point Pinole is under management of East Bay Regional Park District (EBRPD).

LAND ACCESS:

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking

and Services Available:

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

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:



County: **Contra Costa**
 USGS Quad: **Honker Bay**

Thomas Guide Location

Latitude N

Longitude W

3 8 08

121 58.8

NOAA Chart: **SUISUN BAY 18658/18556/18656**

Last Page Update : 7/1/2005

SITE DESCRIPTION:

This site extends from McAvoy's Marina west to General Chemical Plant (just east of the chemical plant at Middle Pt) and bounded on the south by the SP RR. There are three ownerships: California Department of Fish and Wildlife owns the parcel next to the Marina, the US Navy Concord Weapons Station owns the parcel next to the chemical plant, and the East Bay Regional Park District (EBRPD) owns the "J" channel that feeds the marsh directly north of the Bay Point Regional Shoreline. This site is a combination of tidal and high marsh with both tule/cattails and pickleweed. It has an abrupt bank typical of eroding marsh front. Several finger sloughs carry tidal exchange to the back marsh. There are several dead-end sloughs. There is a channel along the shore front.

SEASONAL and SPECIAL RESOURCE CONCERN

These marshy areas have A-protection priority always. Migratory waterfowl and marsh birds use this area during winter months.

RESOURCES OF PRIMARY CONCERN

This site is predominantly pickleweed/spartina marsh, but there are substantial cattail and tule growths. And there are some ponded areas. The bayward eroding edge is habitat for Mason's lilaeopsis. The small tidal inlets admit tidal exchange to the back marsh and must be boomed to exclude oil from entering.

The marshy margins are prime marsh bird and waterfowl habitat including California clapper rail, Suisun song sparrow and black rail.

The saltmarsh harvest mouse has been found here. The emergent marshes are inhabited by semi-aquatic mammals such as river otter, raccoon, beaver and muskrat. Western pond turtle has been found here.

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

Several sensitive plants occur here: Mason's lilaeopsis, Suisun marsh aster, 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 |
|------|-------------------------------------|--|----------------|
| B | Richard Bicknell Supervising Ranger | Baylands Nature Preserve | (650) 617-3156 |
| | EBRPD Dispatch EBRP | East Bay Regional Park District | (510) 881-1833 |
| | Eric Larson | CA Dept. of Fish & Wildlife, Bay/Delta | (707) 944-5528 |

ADDITIONAL SITE SUMMARY COMMENTS:

2-608 -A Site Strategy - Shore Acres Marsh

County and Thomas Guide Location

Contra Costa

NOAA CHART
SUISUN BAY 18658/18556/18656

2-608 -A

Latitude N Longitude W

3 8 08 121 58.8

Last Page Update : 11/18/2014

CONCERNS and ADVICE to RESPONDERS:

This is a sensitive saltmarsh with endangered plants and animals. Primary concern is to prevent oil from being carried into the marsh through tidal openings by using exclusion booms. Also of concern is oiling of the marsh front when tides flood the marsh front. Responders should make an effort to minimize trampling of vegetation and be aware that tiny endangered plants and animals are present. Also, don't trample oil into sediments.

HAZARDS and RESTRICTIONS:

There is a channel immediately along shore, but there is a bar farther out.

SITE STRATEGIES

Immediately along shore there is a channel which usually affords adequate depth for deployments.

Strategy 2-608.1 Objective: Exclude oil from McAvoy's and Shore Acres Marsh tidal channels which admit oil to back marshes. Close dead-end sloughs to reduce oil margin impacts.

Shore Acres Marsh has several small tidal channels entering the marsh, They are located about 800' (200' boom), 2000' (25' boom), 2300' (25' boom) and 5000' (at the deadend slough near chemical plant) (400' boom) west from the western McAvoy entry. There are two inlets at the McAvoy Marina, use 200' of 4x4+ swpboom each. Boom anchoring may be necessary (as opposed to staking) because bridging may admit oil at low flood. Repeat deployment if currents or waves are likely to overtop boom. Leave trailing boom ends to insure a seal. Back with sorbent as necessary.

Strategy 2-608.2 Objective: Deflect oil away from shoreline and into main channel. Deflect any by-passing oil to shore capture/collection.

- a) From Middle Point deploy 9x9+ deflection boom at the best angle to send oil past marsh front and into main channel into collection leg. Degrees of angle should be approximately 90 degrees to collection leg.
- b) Setup a deflection to shore and a shore skimming collection system at General Chemical shoreline to intercept any oil which escapes above deflection.

Strategy 2-608.3 Objective: Marsh front protective booming: If there is threat of heavy oiling and saturation of the marsh front, and when such use will not preclude defending other sites with Strategic Objectives 5 and 6 action (seek concurrence of the trustee strategist).

When foregoing strategies are inadequate to keep oil off marshes, 8000 ft of harbor boom will be deployed along the entire marsh front to keep heavy oiling off the marsh. Multiple layers may be required if oil is washing over the first layer (second layer may then be swamp boom.) (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 type and gear | Boom boat punts | Skiffs No | Skimmers Type | Special Equipment or comment No and kinds | staff deploy | Staff tend |
|-----------------|-------------|------------|-----------------|-----------|-----------------------------------|-----------------|-----------|---------------|---|--------------|------------|
| 2-608.1 | 0 | 1050 | | 1050 | 16 16/3/danforths & stakes | 1 | 1 | | | 3 | |
| 2-608.2 | 3000 | | | | 18 18/22#+ danforths + 15' chains | 3 | 2 | 1 SSS | | 11 | |
| 2-608.3 | 8000 | | | | 10 10/22+/danforths & stakes | 4 | 2 | | | 16 | |

LOGISTICS

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

This site can be reached taking the Bay Point (Willow Pass) exit from Hwy 4 and then to Port Chicago Highway: marsh access through a locked gate (This is Concord Naval Weapons Station property). Also, via the General Chemical Plant. By water, the site is immediately west of McAvoy's Marina. This site extends from McAvoy's Marina west to General Chemical Plant (just east of the chemical plant at Middle Pt) and bounded on the south by the SP RR. There are three ownerships: California Department of Fish and Wildlife owns the parcel next to the Marina, the US Navy Concord Weapons Station owns the parcel next to the chemical plant, and the East Bay Regional Park District (EBRPD) owns the "J" channel that feeds the marsh directly north of the Bay Point Regional Shoreline.

LAND ACCESS: ALL TYPES DEPENDING ON WEATHER

WATER LOGISTICS: none have been identified.

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: McAvoy/Harris Marina at Bay Point is immediately to the east. Martinez Marina (9 mi. W). Pittsburg Marina (6 mi. E).

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

Deploy from Pittsburg, Martinez or McAvoy's marinas. McAvoy's is possible field post and staging / support site: all manner of facilities, except housing, are available, and area can be secured.

COMMUNICATIONS PROBLEMS: none known



2-755 -A Site Summary- Spoonbill Creek**2-755 -A**County: **Solano County**
USGS Quad: **Honker Bay**Thomas Guide Location
Solano County
NOAA Chart: **Suisun Bay**Latitude N
38 02.0
Longitude W
121 49.0

Last Page Update : 7/1/1996

SITE DESCRIPTION:

Site extends from its easterly mouth on Suisun Bay to about mid-point and includes openings to pocket sloughs and adjacent borrow channels. This tidal channel lies between Chips Island and Van Sickle Island. It connects Honker Bay with eastern Suisun Bay. The Creek has a strong tidal current on both ebb and flood. Expect the water to flow to the northwest, toward Honker Bay, on the ebb tide and to the southeast, toward Suisun Bay on the flood tide. The levee on the east side, Van Sickle Island, is well maintained and has a narrow dirt road on top. It may support vac trucks, although a turn around has not been identified. There are also Eucalyptus trees on this levee that can be used to anchor boom. The easterly mouth of Spoonbill Creek is an extensive marshy area. The waterway has marshy margins with openings to a borrow channel that is separated from Suisun Bay by low marshy islands.

SEASONAL and SPECIAL RESOURCE CONCERN

The site is an "A" priority year-round. Several Special Status Species occur here.

RESOURCES OF PRIMARY CONCERN

This extensive saline-fresh marsh system is good habitat for marsh birds and mammals of all kinds including the following special status species: California black rail, saltmarsh harvest mouse.

This is nesting and foraging habitat for all manner of waterfowl and marsh birds including the Special Status Species: California black rail (ST).

The marsh also supports a wide diversity of marsh mammals and other vertebrates including Special Status Species: saltmarsh harvest mouse (F/SE).

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 |
|------|------------------------------|--|----------------|
| | 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 |
| | Staff Office | Suisun Resource Conservation District | (707) 425-9302 |

ADDITIONAL SITE SUMMARY COMMENTS:

2-755 -A Site Strategy - Spoonbill Creek

County and Thomas Guide Location
Solano County Solano County

NOAA CHART
Suisun Bay

2-755 -A

Latitude N Longitude W
38 02.0 121 49.0

Last Page Update : 1/15/2007

CONCERNS and ADVICE to RESPONDERS:

Major concern is transport and spread of oil to sensitive areas including Honker Bay and marshes within Spoonbill Creek as well as oil penetration of the marshes at the mouth of Spoonbill Creek.

HAZARDS and RESTRICTIONS:

Shallow water at entrance into Spoonbill Creek, submerged obstructions likely. Wind chop to three feet possible in Suisun Bay. Strong currents in Spoonbill Creek, but no chop.

SITE STRATEGIES

Strategy 2-755.1 Objective: Exclude oil from entering the southern end of Spoonbill Creek by deploying deflection boom in the Sacramento-San Joaquin River channel just south of the creek mouth.

Deploy 3000 feet of harbor boom (boom having a freeboard of not less than 8 inches and a draft of not less than 6 inches) across the mouth of Spoonbill Creek and along the north shore of the Sacramento-San Joaquin river not less than 1000 feet either side of the creek mouth. Anchor the ends of the boom well up onto the shoreline, above the high tide line if possible. Fasten an anchor to the boom near the middle of the creek mouth pull the anchor south into the river until the boom forms a shallow, taunt "V" and set the anchor.

Strategy 2-755.2 Objective: Back-up to exclusion, diversion to shore-side collection out of current (usually Chipps shore) to prevent movemnt toward Honker Bay.

Deploy 1,500 feet of swamp boom (less than 6 inches of freeboard and less than 4 inches of draft) at a shallow angle across the creek. Anchor one end of the boom on the west side of the creek. This is the oil collection and recovery point. Anchor the other end of the boom 1500 feet inside the creek mouth on the east bank of the creek. The east bank of the creek is a levee with a graded road on top. Vehicle access may be possible. The shoreline should be lined with sorbent at this point, and there must be a means of placing tension on the boom so it remains taught and straight. If any portion of the boom approaches an angle perpendicular to the current, oil will entrain and a second boom must then be deployed down current from the first.

Strategy 2-755.3 Objective: An alternative to the previous collection strategy is to collect oil entering Spoonbill Creek with a vessel mounted skimming system.

Deploy a vessel mounted, self propelled skimming system in the middle of Spoonbill creek with 500 feet of boom deployed between each bank and the skimmer in such a way as to increase the encounter rate of the skimmer and prevent oil from getting around the skimmer.

Table of Response Resources

| strategy number | harbor boom | swamp boom | Other boom type | sorb boom | Anchoring no | tyde and gear | Boom boat | Skiffs punts | Skimmers No | Type | Special Equipment or comment No and kinds | staff deploy | Staff tend |
|-----------------|-------------|------------|-----------------|-----------|--------------|----------------------------------|-----------|--------------|-------------|----------|---|--------------|------------|
| 2-755.1 | 3000 | | | | 5 | 22+ lb danforth, 30' chain, 100' | 3 | 1 | | | | 11 | |
| 2-755.2 | 0 | 1500 | | 500 | 2 | 2 | 2 | 1 | | | | 6 | |
| 2-755.3 | 1000 | | | 500 | 2 | 2 | 2 | 1 | 1 | self pro | | | |

LOGISTICS

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

Water access from west Pittsburg. Some levee access from Van Sickle Island. Take Hwy 12 to Grizzly Island Road to Van Sickle Island. Local Fish and Game warden can arrange for access over graded private roads. Site extends from its easterly mouth on Suisun Bay to about mid-point and includes openings to pocket sloughs and adjacent borrow channels.

LAND ACCESS: Van Sickle Island LEVEE ROAD

WATER LOGISTICS: DEEP EXCEPT BAR AT MOUTH

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Boat launching and other vessel services are available at several locations along the south shore of the river and Suisun Bay (northeastern Contra Costa County) including Pittsburg, Antioch, and Bay Point marinas.

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

There are several locations along the south shore of Suisun Bay that may be suitable for staging areas and field posts, including Pittsburg, Antioch, and Bay Point marinas. On the north shore, Collinsville has limited facilities but equipment can be loaded onto vessels there. There are moorage and docks and small amounts of support including water, phones, power and food.

COMMUNICATIONS PROBLEMS: none known

ADDITIONAL OPERATIONAL COMMENTS:



2-757 -A Site Summary- Van Sickle Island

2-757 -A

County: **Solano**
USGS Quad: **Honker Bay, Antioch North**

Thomas Guide Location
NOAA Chart: **SUISUN BAY 18652/18656**

Latitude N
38 03.5
Longitude W
121 53

Last Page Update : 7/1/1996

SITE DESCRIPTION:

This site is the south margin of Van Sickle Island which fronts on Suisun Bay between Spoonbill Creek and Montezuma Slough. This Island margin is a levee with emergent marsh on the Suisun Bay side. On the Spoonbill end there is a barrow channel behind the front marsh which is about one third the length of the exposure (which is an important path to close to oil spread).

SEASONAL and SPECIAL RESOURCE CONCERN

The site is an "A" priority year-round. Several Special Status Species occur here.

RESOURCES OF PRIMARY CONCERN

This extensive saline-fresh marsh system is good habitat for marsh birds and mammals of all kinds including special status species.

This is nesting and foraging habitat for all manner of waterfowl and marsh birds including the Special Status Species: California black rail (ST).

The marsh also supports a wide diversity of marsh mammals and other vertebrates including Special Status Species: saltmarsh harvest mouse (F/SE).

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 |
|------|------------------------------|--|----------------|
| | 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 |
| | Staff Office | Suisun Resource Conservation District | (707) 425-9302 |

ADDITIONAL SITE SUMMARY COMMENTS:

2-757 -A Site Strategy - Van Sickle Island

County and Thomas Guide Location

Solano

NOAA CHART
SUISUN BAY 18652/18656

2-757 -A

Latitude N Longitude W

38 03.5 121 53

Last Page Update : 7/1/1996

CONCERNS and ADVICE to RESPONDERS:

Potential impacts of concern include oiling of emergent marsh, oil entering small sloughs, penetration of levees via animal burrows.

HAZARDS and RESTRICTIONS:

Riprap poses slip, trip and fall hazards. Vessels beware of submerged objects and shallows at margins.

SITE STRATEGIES

Strategy 2-757.1 Objective: Exclude oil from small sloughs and from slough behind berm island at mouth and deploy protective boom along emergent marshes.

At the east tip of the berm island (about a half mile east of Spoonbill Creek) close the inside channel with 100 ft. 6x6+ exclusion boom. Deploy 4x4+ boom from the tip along the front of the berm island.. If wind chop is likely to lift oil over this boom use double booming and use larger boom. Anchor near shore and leave trailing boom ends to make a tidal seal. West anchor: (38.053854/-121.887663) East anchor: (38.056829/-121.880247)

Table of Response Resources

| strategy number | harbor boom | swamp boom | Other boom type | sorb boom | Anchoring no tvpe and gear | Boom boat | Skiffs punts | Skimmers No Type | Special Equipment or comment No and kinds | staff deploy | Staff tend |
|-----------------|-------------|------------|-----------------|-----------|----------------------------|-----------|--------------|------------------|---|--------------|------------|
| 2-757.1 | 0 | 3500 | | | 8 8/25lb/danforths | 2 | 1 | | | 16 | |

LOGISTICS

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

Levee and private roads provide land access from Collinsville. By water, the site is a mile northwest from the Pittsburg Marina. This site is the south margin of Van Sickle Island which fronts on Suisun Bay between Spoonbill Creek and Montezuma Slough.

LAND ACCESS: NO LAND ACCESS

WATER LOGISTICS: SHALLOWS AND OBSTRUCTIONS COMMON

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Boat launch is available at South Shore (Contra Costs) locations including Pittsburg, Antioch, and Bay Point Marinas.

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

There are various staging and facilities along the south shore. Collinsville has limited facilities but would be a good local deployment site. There are moorage and docks and small amounts of support including water, phones, power, and food.

COMMUNICATIONS PROBLEMS: none known

ADDITIONAL OPERATIONAL COMMENTS:

