2-655-A Site Summary - Joice Island, Suisun Slough, and Montezuma Slough

County: Solano ACP Division/Segment: SO - H - S004

NOAA Chart: 18656 Suisun Bay Map Book:

Decimal Degrees: 38.131542 -122.071101

2-655-A

Site Description:

This site includes the mouth of Suisun Slough and Montezuma Slough and the salt-marsh tip of Joice Island at the northeast corner of Grizzly Bay. Joice Island lies between the mouths of the Montezuma Slough and Suisun Slough. The southern tip of Joice Island is undiked marshland with two tidal channels connect it with Grizzly Bay. While the salt-marsh tip is a large natural wetland, the greater concern is the strategic importance of these two great tidal sloughs. These two sloughs are the main tidal avenue for all of Suisun Marsh, the largest wetland in California. These two waterways could become conduits for oil conveyance to the extreme interior of Suisun Marsh. There are miles of branching channels between the diked marshes and at times when tide gates are open (particularly in the fall and winter) to the vast acres of duck club and wildflife refuge marshes behind the island levees. Most of Suisun Marshland is owned by duck clubs or is part of the Californian Deptment of Fish and Wildlife Grizzly Island Wildlife Refuge system. Joice Island has become public property and is being operated for salt-marsh research.

Resources at Risk:

ESI and Habitat: 10A Salt - and brackish-water marshes

9B Vegetated low banks

8D Sheltered rocky rubble shores

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	California Ridgeway's rail	FE, SE		Feb-Aug
Birds	California black rail	FP, ST		Mar-Aug
Birds	migratory waterfowl	FP		
Birds	California least tern	FE, SE		Apr-Jun
Fish	longfin smelt	ST		Nov-May
Fish	delta smelt	FT, SE		Mar-May
Mammals	salt-marsh harvest mouse	FE, SE		
Plants	Mason's lilaeopsis	SR		Apr-Nov
Plants	soft bird's beak	FE, SR		Jul-Nov

FT-Federally Threatened, FE-Federally Endangered, FP-Federally Protected, SE-State Endangered, ST-State Threatened, SP -State Protected, SR-State Rare, SSC-Species of Special Concern, BGEPA-Bald and Golden Eagle Protection Act, SSSP-State Special Status Species

List of Key Contacts:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
0	/Dispatch, 24-hr	California State Parks	(916) 358-1300
0	/Office	Suisun Resource Conservation District	(707) 425-9302
Т	/Office	Audubon Society, Solano County Chapter	(707) 643-7089
Т	/Environmental Program Manager	CA Dept. of Fish & Wildlife, Bay Delta Region	(707) 576-2837
Т	/Wildlife Area Manager	CA Dept. of Fish & Wildlife, Grizzly Island WR	(707) 738-3485
Т	/Oil Spill Point of Contact	NOAA National Marine Fisheries Service	(707) 480-3496
Т	/Restoration Ecologist	US Department of Agriculture	(530) 304-2304

C – Cultural, Historic, Archaeological; E – Entry/Owner/Access; O – Other; S – Safety; T – Trustee; X – Exclusion or Security

Additional Site Summary Comments:

This area is a waterfowl refuge. There are several sensitive plant species in the area. Assign a DFW Botanist to mark off sensitive plant areas.

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Concerns and Advice to Responders:

This site is the two mouths of Suisun Slough and Montezuma Slough where oil entry would result in exposure to miles of salt-marsh. Between these two slough mouths is sensitive marsh with small tidal channels leading into the unleveed marsh. The objectives in order of importance are: 1) are to exclude oil from entering the major sloughs, 2) to close the small tidal sloughs near the mouths of the big channels, and 3) to protect exposed margins from oiling. Responders should avoid trampling marsh vegetation and tracking oil into marsh sediments.

Hazard and Restrictions:

Shallow near shoreline. Submerged obstacles throughout area.

Site Strategies:

Site Validation Level: II

Strategy: **2-655.1** *Objective:* Prevent oil from entering Montezuma and Suisun Sloughs, and from entering tidal inlets of Joice Island: Exclusion booming offshore of Sloughs and Joice Island / Prevent oil from entering vast interior wetlands as well as Joice Island.

Strategy: Outside of Suisun and Montezuma Sloughs: use exclusion booming. Deploy 7,500 ft Hb (9x9+) or Swmpbm (6x6+) (depending on wave chop) from shoreline 400' south of Suisun Slough to 200' west of Montezuma Slough.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	9x9 inch	7500 feet	
Anchor	Danforth	22 lb	25	
Vessel	Boom Boat		3	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		11	_

Strategy: **2-655.2** *Objective:* Exclude from minor and major sloughs: deflect to collection Suisun and Montezuma Slough mouths and chevron exclusion at tidal inlets.

Strategy: a) At Suisun and Montezuma Slough mouths: exclude oil by deflection to collection. From the shoreline, deploy collection boom arms to collection by stationary floating skimmer (SFS) or self propelled skimmer (SPS) positioned in the channels. About 2000 ft of 9X9+ harbor boom will be needed for Suisun Slough and about 1700' for Montezuma Slough

b) At the tip of Joice Island, there are nine or more tidal inlets to the marsh at the tip of Joice Island between Montezuma and Suisun Sloughs. To exclude oil, deploy swamp boom (6X6+) in a chevron "V" outside the mouth of each opening: using skiffs, anchor the midpoint and stake or anchor the ends at the shoreline outside the channel mouths. 50' lengths will be needed for most openings. About 800 ft of boom will be needed for this deployment.

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	9x9 inch	3700 feet	
Boom	Swamp	6x6 inch	800 feet	
Anchor	Danforth	22 lb	15	
Vessel	Boom Boat		2	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		10	-

Table of Response Resources

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Strategy: 2-655.3 Objective: Protective booming of undiked tip of Joice Island

Strategy: Protective Booming: If it appears that othe strategies will not keep oil out of the wetlands recommend that exclusion boom be deployed along the face of the marsh where feasible. The portion of Joice Island lying between the entrances to Suisun and Montezuma Sloughs is a high priority for such protection. It is estimated that 8,000 to 9,000 ft of exclusion boom will be required to exclude oil from the undiked wetlands at the south end of Joice Island. A strategy for deployment of exclusion boom is illustrated in Potential Oil-spill Protection Strategies for San Francisco Bay, California (Hayes and Montello, 1994)

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	9x9 inch	9000 feet	
Anchor	Danforth	22 lb	19	
Vessel	Boom Boat		3	
Vessel	Skiff or Punt		1	
Staff			10	_

Logistics:

Directions: Access by water only. If launching from Benicia/Martinez, proceed northeast past the Reserve Fleet and into northwest corner of Grizzly Bay. From Pittsburg, go northwest via Suisun Cut to Grizzly Bay and on the Montezuma. From Suisun/Fairfield, travel down Montezuma or Suisun Slough to their mouth on Grizzley Bay.

Land Access: No land access except by foot.

On-Water Limitations: No limitations except shallow margins. Launch, fuel, moorage at Benicia & Martinez Marinas and City of Suisun. Also, launch Ramp at nearby Pearce's harbor.

Facilities, Staging Areas, Command Posts, Available Equipment: Best staging at Martinez or Benicia sites. *Communications Problems:*

