2-553-A Site Summary - Gallinas Creek Marshes

County: Marin ACP Division/Segment: MR - W - S001 MR - W - S002

NOAA Chart: 18654 San Pablo Bay Map Book: Marin County, S Decimal Degrees: 38.021801 -122.5025

Site Description:

This siite includes Gallinas Creek and the bayfront salt-marshes from the creek north to Hamilton Field. Boundaries include the south shore of Gallinas Creek as the south boundary, to the levee and tower at the south end of Hamilton Field Marsh as the north boundary. Site is under jurisdiction of Marin County Open Space. Extensive cordgrass and pickleweed salt-marsh habitats are present on both sides of Gallinas Creek and on the San Pablo Bay marshfront. Mudflats extend out into San Pablo Bay from the marshes during low tides. At least seven major interior tidal channels (lat/lon locations on diagram) into the salt-marsh exposed to San Pablo Bay.

Resources at Risk:

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

9B Vegetated low banks

8B Sheltered solid man-made structures

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	California Ridgeway's rail	FE, SE	Year-round	Feb-Aug
Birds	California black rail	FP, ST	Year-round	Mar-Aug
Birds	song sparrow	FP, SSC	Year-round	Mar-Jul
Birds	burrowing owl	SSC	Year-round	Mar-Apr
Fish	longfin smelt	ST	Year-round	Nov-May
Fish	chinook salmon - Winter-run	FE, SE	Year-round	Oct-May
Mammals	salt-marsh harvest mouse	FE, SE	Year-round	
Plants	Pt. Reyes bird's-beak	SSSP	Year-round	May-Jun

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
Е	/Office	Bucks Landing	(415) 472-1502
Е	/Dispatch, 24-hr	California State Parks, Bay Area District	(916) 358-0333
Е	/Emergency Service Coordinator	Marin County Office of Emergency Services	(415) 250-0267
Е	/Office	Marin County Open Space District, McInnis Park	(415) 446-4423
Е	/Dispatch, 24-hr	Marin County Sheriff's Department	(415) 479-2311
0	/Office	Audubon Society, Marin County Chapter	(415) 924-6057
0	/Research Coordinator	San Francisco Bay Estuarine Research Reserve	(415) 338-3724
Т	/Environmental Program Manager	CA Dept. of Fish & Wildlife, Bay Delta Region	(707) 576-2837
Т	/Spill Response Coordinator	USFWS, SF Bay-Delta Office	(916) 799-0588

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

Additional Site Summary Comments:

Access to shoreline via on-water is shallow. Submerged hazards from old pier pilings and rocks.

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Concerns and Advice to Responders:

The large and extensive salt-marsh along Gallinas Creek and north of the creek mouth with several interior tidal channels are extremely vulnerable to oil. The large tidal mudflats create access difficulties and potentially increase the risk of oiling. There are numerous channels that connect the marshes with San Pablo Bay. Avoid trampling of marsh vegetation and trampling oil into mud.

Hazard and Restrictions:

Shallow water and mudflats are extensive. Power lines over creek running north to south and parallel to shoreline will be a hazard to low flying aircraft. HAZARD: there is a poorly marked submerged wreck in the Bay-side entrance to the channel.

Site Strategies:

Site Validation Level: III

Strategy: **2-553.1** *Objective:* Deflect/collect oil to prevent from entering Gallinas Creek and interior marsh channels along bayfront.

Strategy: Charts do not properly reflect the mouth of the Gallinas Creek. The creek is drained through the main channel and smaller channels serve the salt marshes.

Deploy 1000 ft. of deflection harbor boom across Gallinas Creek to boat ramp. Anchor boom on north shore in the high marsh near the power line tower. May need tidal barrier boom across mudflat and marsh to provide an adequate seal.

Deploy 500 ft. of swamp boom on south shore from boat ramp, extending towards the bay, in front of dock, across mudflat and marsh towards power line tower.

Deflect to collection pocket at boat ramp. Skim oil at boat ramp.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	9x9 inch	2500 feet	Strategy Updated: 12/1/2016
Anchor	Danforth	22 lb	12	<i>Last Test:</i> 12/1/2016
Vessel	Boom Boat		1	
Vessel	Skiff or Punt		1	
skimmer	shoreside		1	
Staff	Staff to Deploy		7	

Strategy: **2-553.2** *Objective:* Exclude oil from entering marsh channels and/or marshfront north of Gallinas Creek.

Strategy: Seven interior tidal channels exist in the marsh north of Gallinas Creek. Use exclusion booming techniques to prevent oil entry. Deploy a combination of "V" shaped swamp booms across each channel opening (50 ft. each). Back each chevron with sorbent boom.

Table of Response	Resources
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Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	6x6 inch	350 feet	Strategy Updated: 2/6/2019
Boom	Sorbent		350 feet	<i>Last Test:</i> 2/6/2019
Anchor	Danforth	22 lb	4	
Anchor	Stakes		8	
Vessel	Skiff or Punt		1	
Staff	Staff to Deploy		2	_

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Strategy: 2-553.3 Objective: Prevent oil from entering Gallinas Creek.

Strategy: This is a fall-back strategy to strategy 2-553.1:

Further inside Gallinas Creek, on a flood tide, deploy 600 ft. of harbor (300 ft each leg) boom in a "V" formation with an apex at mouth of skimmer.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	9x9 inch	600 feet	Strategy Updated: 2/6/2019
Boom	Sorbent		200 feet	<i>Last Test:</i> 2/6/2019
Anchor	Danforth	22 lb	4	
Vessel	Boom Boat		1	
Vessel	Skiff or Punt		1	
skimmer	self propelled		1	
Staff	Staff to Deploy		8	_

Logistics:

Directions: From Hwy 101 in San Rafael, Marin County, take the San Pedro Road exit east towards China Camp State Park. Turn left at road to Buck's Landing and launch ramp for access to Gallinas Creek. There is no road access to the shore north of Gallinas Creek.

Land Access: Large truck okay on south side, no land access on north side.

On-Water Limitations: Shallow draft vessels only, Small boat launch at Buck's Landing. Additional water access at China Camp, Bullhead Flat. And at McNear's Beach.

Facilities, Staging Areas, Command Posts, Available Equipment: Staging and launch at Buck's Landing.

Communications Problems: Good cell reception throughout area.



Imagery: NAIP 2010 (Summer) 4-Band