

South Bay Anchorages



NAME	TYPE	CLASS	SYMBOL	REMARKS
2-490	Sensitive Site	1	Red dot	
2-495	Sensitive Site	1	Red dot	
2-401	Sensitive Site	1	Red dot	
2-351	Sensitive Site	1	Red dot	
2-400	Sensitive Site	1	Red dot	
2-350	Sensitive Site	1	Red dot	
2-354	Sensitive Site	1	Red dot	
2-353	Sensitive Site	1	Red dot	
2-352	Sensitive Site	1	Red dot	
2-307	Sensitive Site	1	Red dot	
2-309	Sensitive Site	1	Red dot	
2-310	Sensitive Site	1	Red dot	
2-312	Sensitive Site	1	Red dot	
2-315	Sensitive Site	1	Red dot	
2-320	Sensitive Site	1	Red dot	
2-324	Sensitive Site	1	Red dot	
2-361	Sensitive Site	1	Red dot	
2-E08	Potential Place of Refuge	1	Black anchor	
2-E09	Potential Place of Refuge	1	Black anchor	
2-E12	Potential Place of Refuge	1	Black anchor	
2-E14	Potential Place of Refuge	1	Black anchor	
2-E00	Potential Place of Refuge	1	Black anchor	

Legend

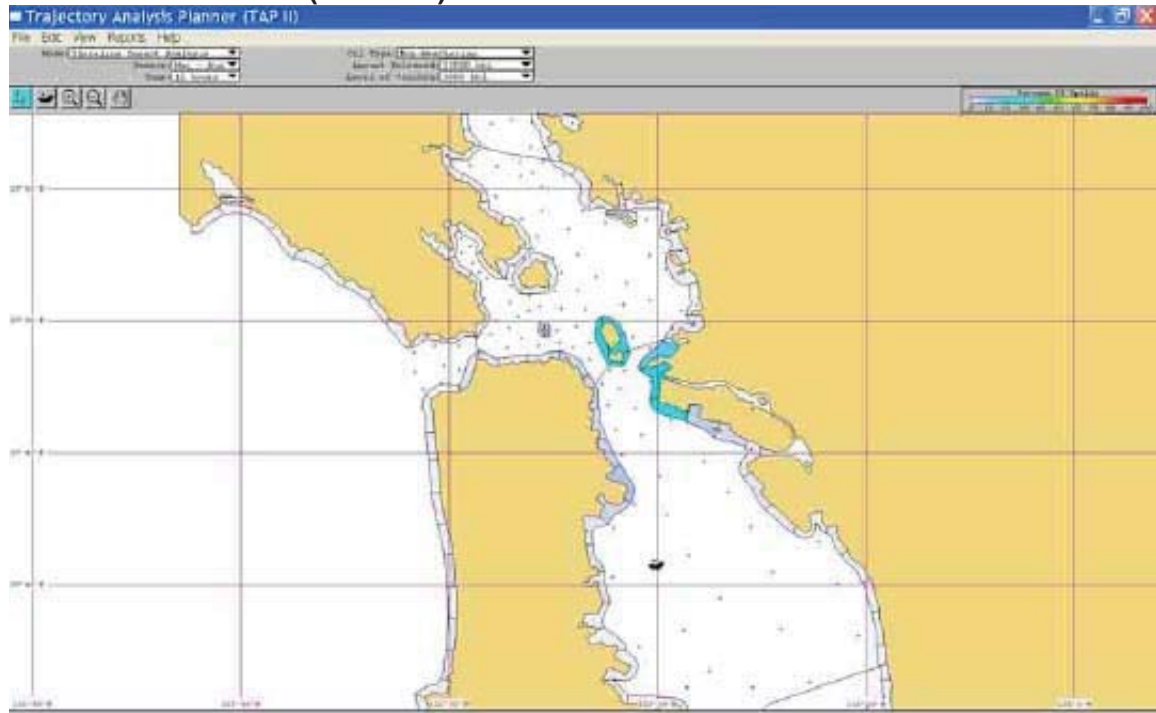
-  Sensitive Sites
-  Potential Places of Refuge

0 1.25 2.5 5 Nautical Miles
Section 8000-85

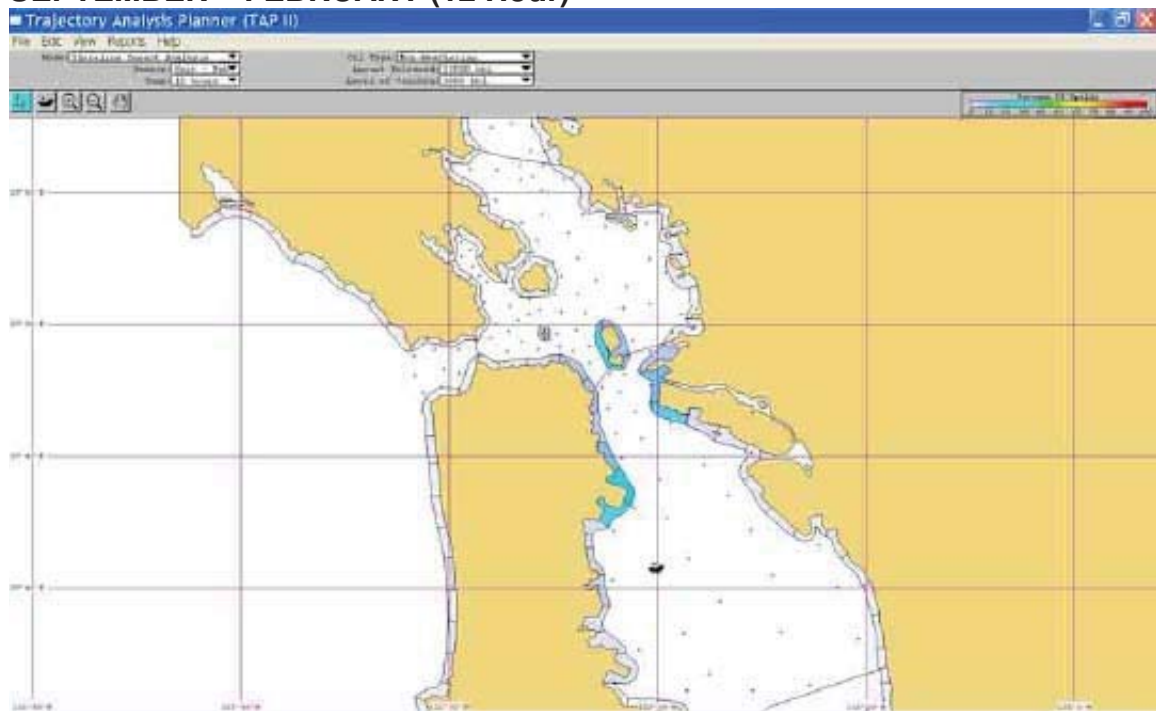
October 1, 2011

TRAJECTORY ANALYSIS PLANNER (TAP Model)
Location: 2-E00 (Undesignated Anchorages)

MARCH – AUGUST (12 Hour)



SEPTEMBER – FEBRUARY (12 Hour)



PPOR Pre-Incident Information Summary South Bay Anchorages: any other Anchorage

2-E00

Type:

Anchorage

Latitude 37° 41' 122.4 Longitude 122° 2 122.354

County San Francisco-Alameda

Location Description:

This is the most desirable of all the open water anchorages because it is isolated from populations and because the currents are less aggressive here and permit less threat of pollution spreading and greater opportunity for open water containment than most places in the Bay. This characterization is based on on historic spills and computer models which indicate that this trend more pronounced as you move south in the Anchorage. The middle of the bay is relatively isolated from populations under most conditions and because it is a traditional location for anchorage, is not visually objectionable.

Marshes in this area support large populations of endangered California clapper rails and salt marsh harvest mice, and managed ponds support the largest population of Western snowy plovers in San Francisco Bay. The Bair Island Restoration Project and the South Bay Salt Pond Restoration Project (the largest tidal marsh restoration project on the west coast of the United States) are being implemented within this area by the USFWS and the California Department of Fish and Game. Almost 20,000 acres of former commercial salt ponds are targeted for restoration in the South Bay.

Natural Resource Concerns and Issues for this Place / Site

Threatened and Endangered Species (TAES):

(East Shoreline)

Alameda NAS-(S/F E/E) California least tern, present Apr-Aug, nest May-Aug, restoration area.

San Leandro Bay/Arrowhead Marsh-(S/F E/E) California clapper rail present year-round and nests Mar-Jul, (S-T) black rail nests Mar-May,(S/F E/E) salt marsh harvest mouse, (S/F T/T) salt marsh wandering shrew present year-round, (SSC) salt marsh common yellowthroat present year-round. Also, (S/F-E/E) California least tern forage.

Bay Farm Island (F/T) Western snowy plover present Feb-Sep, also rare plant alkali milk-vetch present year-round.

Oyster Bay Marshes-(F/T) Western snowy plover nest present from Feb-Sep; (S/F T/T) salt marsh wandering shrew present year-round.

San Lorenzo Creek/Bunker & North marshes - (S/F E/E) California clapper rail present year-round and (S-T) black rail forage and nest, (S/F E/E) salt marsh harvest mouse present year-round. (S/F E/E) California least tern forage.

Oro Loma, Frank's Dump West & Triangle marshes - (S/F E/E) California

Critical Habitat for TAES:

Arrowhead Marsh supports a number of listed/sensitive species and currently has the highest density of breeding California clapper rails in San Francisco Bay. Emeryville lagoon/mudflat provides pickleweed habitat for listed species. East Bay Regional Park District shoreline salt marshes support number of listed species.

Heron's Head Park/India Basin and Islais Creek/Pier 94 have high value as salt marsh habitat on industrialized SF Peninsula. Also suitable habitat for presence of (S/F-E/E) salt marsh harvest mouse.

PPOR Pre-Incident Information SummarySouth Bay Anchorages: any other Anchorage			
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clapper rail and (S-T) black rail forage and nest, (S/F E/E) salt marsh harvest mouse present year-round. S/F E/E California least tern and (F/T) western snowy plover forage. Cogswell, Hayward & HARD marshes – (S/F E/E) California clapper rail present year-round, forage and nest; (S/F E/E) salt marsh harvest mouse present year-round; (S/F E/E) California least tern present Apr-Aug, nests May-Aug; (F/T) western snowy plover forage/nest in salt-pond area. Emeryville Lagoon/Mudflat (S/F-E) California clapper rail, (S/F-E) salt marsh harvest mouse present year-round, also North Coast bird's beak (rare plant). (West Shoreline) YBI-(S/F E/E) peregrine falcon present year-round, nest Mar-Aug. Heron's Head Park/India Basin and Islais Creek/Pier 94: (F/E) California seablite plant present year-round at HHP. Both potential suitable habitat for (S/F-E/E) salt marsh harvest mouse. Colma Creek area marshes – (S/F E/E) California clapper rail present year-round, nesting Mar-Jul. Airport Mudflat – (S/F E/E) California clapper rail present year-round in marsh in back of cove, nesting Mar-Jul. (S/F E/E) California clapper rail present year-round in several small strip marshes between Colma Creek and Bair/Greco area, nesting Mar-Jul.			
Sensitive Non-protected (Non-TAES) Species: SFACP2:307C/A,309A,310C/A,312A,315A,320A,324A,350E/X,351A/B,352B,353A,354A,361A,400C/X,401B,490A,495A; ESI/SFB-Maps 16,17,18,19,20, 21,22 (East Bay Shoreline) Alameda NAS eelgrass, harbor seal haulout area. Alameda eelgrass beds support herring spawning in winter, seabirds/shorebirds utilize area year-round, brown pelican May-Nov.			
Critical Habitat for Non-protected (Non-TAES) Species: East Bay Regional Park District shoreline salt marshes have extensive cordgrass and mudflats which support listed and non-listed species. In general, extensive mudflats on both east and west bay shorelines support heavy use by variety of shorebirds (e.g., herons and egrets), wading and diving birds, and harbor seals. Open waters support heavy use by migratory waterfowl. Sloughs, mudflats support fish, shellfish,			

PPOR Pre-Incident Information SummarySouth Bay Anchorages: any other Anchorage			2-E00
Latitude 37° 41'	122.4 Longitude 122° 2	122.354	Type: Anchorage
County San Francisco-Alameda			
San Leandro Bay/Arrowhead Marsh supports listed species, rare/sensitive plants, wading birds, shorebirds, waterfowl, brown pelican forage. Bay Farm Island eelgrass beds support herring spawning in winter, seabirds/shorebirds utilize area year-round. Oyster Bay marshes and mudflats support migratory waterfowl, shorebirds. San Lorenzo Creek/Bunker & North marshes and Oro Loma, Frank's Dump West & Triangle marshes and Cogswell, Hayward, HARD marshes support heavy use by migratory waterfowl, shorebirds, wading (e.g., heron, egret nesting), and diving (Caspian terns) birds. East span Bay Bridge supports large double-crested cormorant colony. Emeryville Lagoon/Mudflat important habitat for seabirds, shorebirds, migratory waterfowl for roost/forage, listed species, rare plants. (West Bay Shoreline) SF South Collection-herring spawn in winter, seabirds and fish present year-round. YBI-Small cobble pocket beaches south side island are pinniped haulout/rookery Mar-Jun, bird roosting (double-crested cormorant) year-round, nesting. South Basin/Hunters Point important fringe marshes, tidal mudflats, eelgrass, concentrations waterfowl/shorebirds present year-round, higher numbers (1000s) in winter, brown pelican May-Nov. Heron's Head Park/India Basin and Islais Creek/Pier 94 wetland restoration sites with high ground vegetation, pickleweed marsh, saltmarsh ponds/lagoons, mudflats supporting variety water birds, shorebirds, upland songbirds. Airport Mudflat and cove serve as feeding/resting area for waterfowl, wading birds, shorebirds, highest use in winter. SF Waterfront herring spawning in winter, birds roost/forage year-round. Pier 39 sea lion haulout year-round, highest numbers Aug-Mar.			infauna.
Subsistence-use Species:			Critical Habitat for Subsistence Species:
Essential Fish Habitat:			Historic and Cultural Resources:
Bay fish species move in/out of channels and ponds in these areas.			Cultural/historic resources likely present in/around Arrowhead Marsh and Bay Farm Island. EBRPD shoreline Ohlone cultural sites in area. Hayward Landing is historic site.
Commercial Fisheries / Species:			Recreational Species and Habitat:
Commercial fishing from TI/YBI. Herring spawning in shorelines of Berkeley and Emeryville eelgrass beds.			Elsie Roemer Bird Sanctuary located southeast end of Crown Beach.

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Human Health and Safet

South Bay Anchorages are near population centers of San Francisco (764,976), Oakland (420,183) and Alameda (72,259)--population are provided in parenthesis.

Economic Impact on Maritime Commerce and Shipping:

May affect shipping lanes to Alameda Point, Entrance to Oakland Inner Harbor Channel and the Port of Redwood City. Redundant piers and accommodations exist to counter problems that may arise as a result of a Places of Refuge incident. As long as shipping channels are clear of obstructions, most commercial shipping will continue.

Economic Impact on Commercial Fishing and Aquaculture:

San Francisco has a large-scale commercial fishing industry Recent Cosco Busan oil spill in Nov 2007 is evidence enough to show how 50000 gals of oil can significantly affect recreational and commercial fishing.

Economic Impact on Recreational Fishing and Marine Tourism:

San Francisco has a large-scale commercial fishing industry Recent Cosco Busan oil spill in Nov 2007 is evidence enough to show how 50000 gals of oil can significantly affect recreational and commercial fishing. Marine Tourism might be affected.

Economic Impact on Non-maritime Commerce:

Nothing significant other than onward movements of cargoes from ships that may be stuck at anchorages.

Other Economic Impacts:

Airborne release of a hazardous substance or a catastrophic incident will most likely impact population desire to stay away from affected areas or any large metropolitan areas due to a fear factor.

Stakeholder List for this Place / Site

Name / Title Organization

Park Supervisor	EBRPD-Martin Luther King Shoreline Park	(510) 544-3115	more details
Park Supervisor	EBRPD-Crown Memorial State Beach	(510) 544-3171	
Shoreline Unit Manag	East Bay Regional Park District	(510) 544-3172	
Dispatch	East Bay Regional Park District	(510) 881-1833	
Park Supervisor	EBRPD-Hayward Regional Shoreline Park	(510) 544-3082	
City of Alameda, Parks	City of Alameda Dept. of Parks and Recreation	(510) 748-4565	
Joy Albertson	US Fish & Wildlife Service, SF Bay (NWR)	(510) 792-0222	
Carol Bach	Port of San Francisco	(415) 274-0568	
Baylands Nature Pres Office	Baylands Nature Preserve	(650) 329-2506	
John Bradley Refuge Manager	SF Bay National Wildlife Refuge Complex	(510) 792-0222	
DPR Dispatch	US National Park Service, Golden Gate (NRA)	(415) 561-4620	
John Krause	CA Dept. of Fish & Game, Region 3	(415) 454-8050	
Clif Marceetti Marina Manager	Berkeley, City of, Dept. of Parks	(510) 981-6737	
Butch Paredes	Cargill Salt	(510) 790-8165	
City of San Francisco	San Francisco, City and County of	(415) 556-8371	
Linda Scourtis	SF Bay Conservation and Development Commission	(415) 352-3644	
Operations State Water Project	CA Department of Water Resources	(916) 574-2714	

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2-E00
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Characteristics and Tactical Considerations

Primary Jurisdictional Contact: USCG Sector SF Marine Fire Fighting Resources SF PIER 24: 37-47.42, 122-23.24

Approximate Tug Response Time 2 HOURS

List of Nearby Environmentally Sensitive Sites SFACP2: 307C/A,309A,310C/A,312A,315A,320A,324A,350E/X,351A/B,352B,353A Is Containment Possible? ☐

Coast Pilot and Navigation Chart Information

Prevailing Winds	Tidal Range	Bottom Type	Max Water Depth	Min Water Depths	Currents	Sea Conditions	Fog	Shelter From Severe Storms	Navigational Approach	Pilot Requirements
W	6	MUD	26	0			SEASONAL	YES		☒

Specific Site Details

Site ID	Site Name	Vessel Capacities			Site Capacities and Facilities		Containment Possibilities:
		Max Size	Mini Size	Max Draft	Swing Room or Dock Face	Facilities, capabilities, and any other issues or concern	
03	any other Anchorage	1000	Deep	80		SWING ROOM OR DOCK FACE: 1/2 MILE SF PIER 22 1/2 IS HOME OF FIRE BOAT GUARDIAN AND PHOENIX; OTHER FIREFIGHTING RESOURCES COME FROM FOSS/CHEVRON/OAKLAND AND RICHMOND.	Potential for successful primary containment increases the further south one goes in the Bay because currents significantly diminish to the south. Anchorage 8 is not likely to have good primary containment. Potential for secondary confinement of oil escaping primary containment is minimal because the only opportunity is the openwater which is problematic due to spreading even if there is no current exceeding 0.7 knt.

Site Contact/Leasee/Owner: VTS