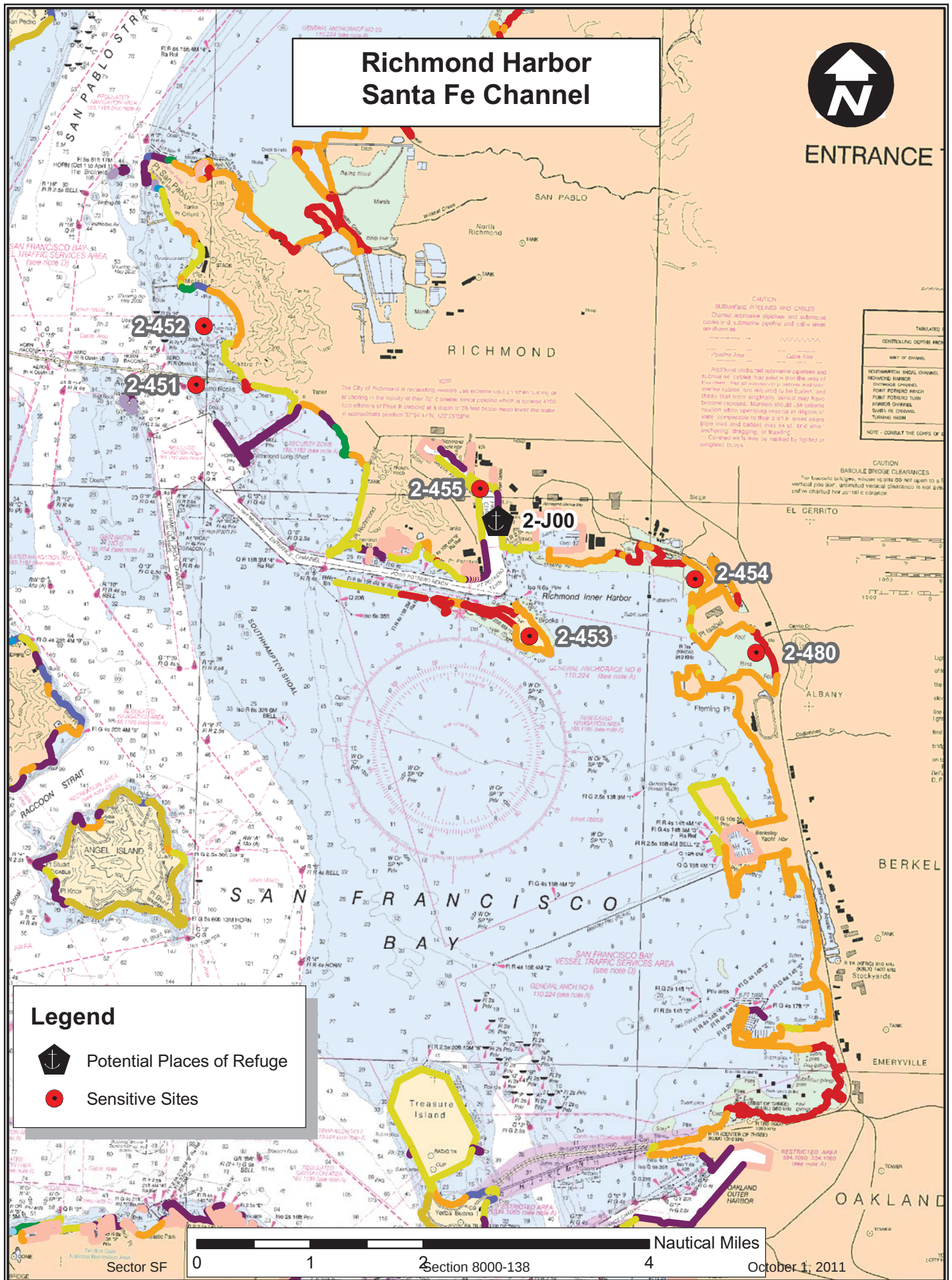


Richmond Harbor Santa Fe Channel

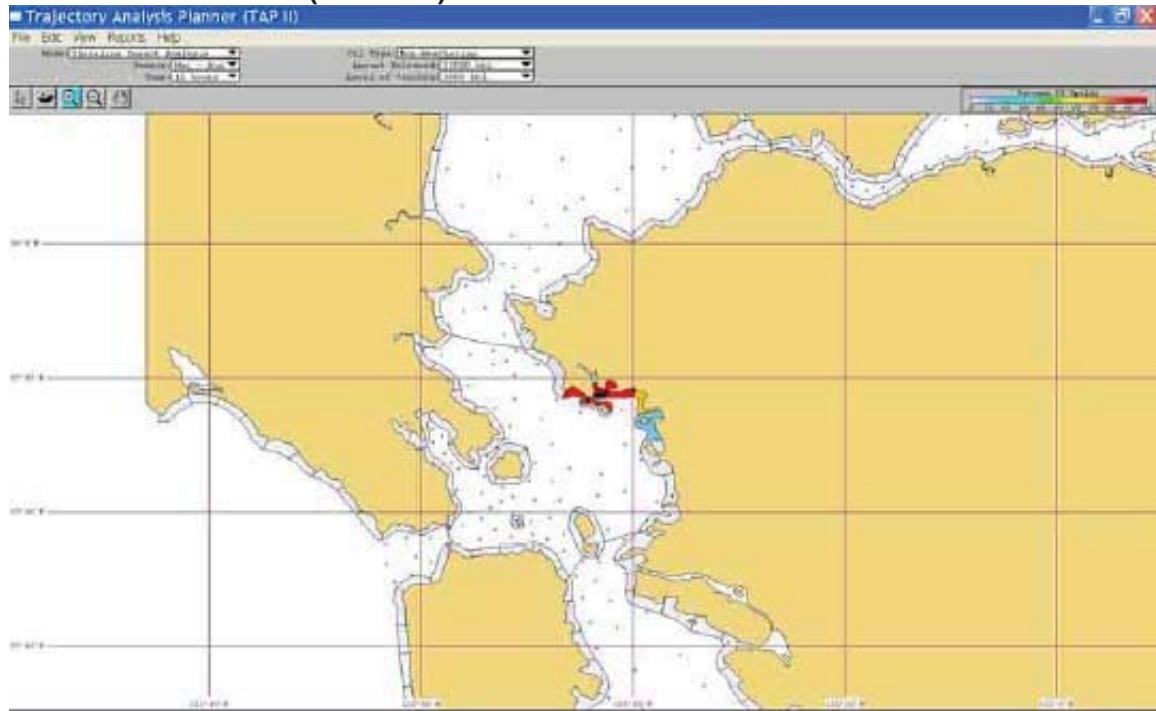


ENTRANCE

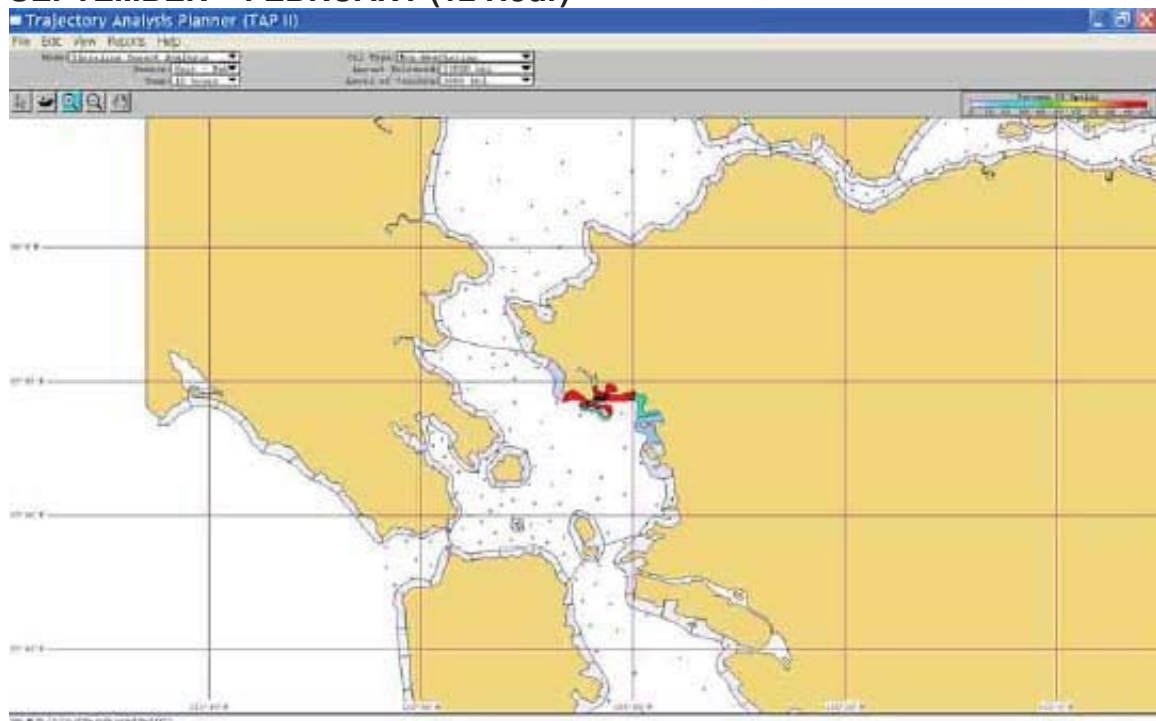


TRAJECTORY ANALYSIS PLANNER (TAP Model)
Location: 2-J00 (Port of Richmond: Terminals 2-7)

MARCH – AUGUST (12 Hour)



SEPTEMBER – FEBRUARY (12 Hour)



PPOR Pre-Incident Information SummaRichmond Harbor / Santa Fe Channel-PARR3: any site

2-J00

Type:

Latitude 37° 54. 122.4 Longitude 122° 2 122.362

County Contra Costa

Location Description:

FROM AN ARMY CORPS OF ENGINEERS 1996 PRESS RELEASE: The Richmond Harbor Navigation Improvement Project located in Richmond, California, will create a safe navigation channel of sufficient depth for modern bulk carriers scheduled to use the Port's terminal facilities. The project area includes a channel extending from the Long Wharf Maneuvering Area through the Richmond Entrance Channel, the Potrero Reach and Sharp Turn with a turning basin at Point Potrero, the Inner Harbor, and the Santa Fe Channel. Furthermore, the existing 35-foot-deep channel has sharp turns that are increasingly difficult for large vessels to navigate, especially against strong winds, waves and currents, at night and under foggy conditions. The recommended plan for navigation improvement would deepen the existing 4.0 nautical miles of the Richmond Harbor channel from 35 feet mean lower low water (MLLW) to 38 feet MLLW. The plan includes a new 1,200-foot turning basin at the Potrero Sharp. The Corps proposed a two-phase channel improvement plan to meet the Port's present and future needs, while avoiding the expenditure of funds before the full dimensions of the project are required. The recommended Phase 1 of the project, is designed for bulk vessels (38 feet MLLW), while Phase 2 will be designed for containerhips (41 feet MLLW). Construction of Phase 2 has been deferred indefinitely. The Port of Richmond is northern California's most diversified cargo handler. With its roots in petroleum and liquid bulk cargos, Richmond has expanded its dry bulk, break-bulk, and containerized cargo handling capabilities and has increased its automobile processing facilities. Today, Richmond ranks Number One in liquid bulk and automobile tonnage among ports on San Francisco Bay.

Natural Resource Concerns and Issues for this Place / Site

Threatened and Endangered Species (TAES):

California clapper rail (S/F-E): Hoffman/Stege marshes – Nest March-July, present year-round; Albany Marsh: present year-round.

Saltmarsh harvest mouse (S/F-E): Hoffman/Stege marshes; present year-round.

Sensitive Non-protected (Non-TAES) Species:

SFACP2:451A,452A,453A,454A,455C/X,480A; ESI/SFB-Maps14,15
The east section of the Richmond-San Rafael Bridge supports a large double-crested cormorant colony. Castro Rocks used as harbor seal rookery in spring (15 March-10 June), haulout in winter, heavy bird use area (e.g.,cormorants, pelicans). Extensive eelgrass beds present in shallow (<10 foot) nearshore areas, most vulnerable during spring/summer at low tides and provide for spawning of herring in winter, food for waterfowl in spring, nursery area for fish and invertebrates summer and fall. Brook's Island high ecological sensitivity of marsh and mudflat (invertebrate) sites, especially March-June during breeding of ground nesting species (e.g. Caspian tern restoration), harbor seal haulout. Albany Marsh extensive mudflats and baywaters important habitat for foraging/resting birds. Abundant waterfowl and waterbirds (some migratory), including ducks, loons, grebes, scoters, and gulls use area during wintering period (September-April).

Critical Habitat for TAES:

Hoffman/Stege and Albany marshes provide habitat for listed species.

Critical Habitat for Non-protected (Non-TAES) Species:

PPOR Pre-Incident Information SummaRichmond Harbor / Santa Fe Channel-PARR3: any site

Latitude 37° 54. 122.4 **Longitude** 122° 2 122.362

County Contra Costa

2-J00

Type:

Subsistence–use Species:

Critical Habitat for Subsistence Species:

Essential Fish Habitat:

Historic and Cultural Resources:

Mudflats have extensive infauna and wide variety of fish forage in area during high tides.

Ohlone cultural sites nearby, historic buildings on former Point Molate Naval Fuel Depot. Historic use of entire Richmond shoreline, including use as Chinese fishing village. Brook's Island high cultural, historic sensitivity.

Commercial Fisheries / Species:

Recreational Species and Habitat:

Eelgrass beds extremely valuable habitat for herring spawning (fishery) in winter.

Human Health / Safety Concerns and Economic Issues for this Place / Site

Human Health and Safet

Economic Impact on Maritime Commerce and Shipping:

CITY OF RICHMOND POPULATION IS 103,818.

Port of Richmond has a large scale automobile processing facility receiving Roll–on/Roll–off ships. 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:

Economic Impact on Non–maritime Commerce:

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 ruin recreational and commercial fishing.

Collateral effects due to a disturbance in intermodal transportation systems may happen if the maritime transportation system is obstructed.

Economic Impact on Recreational Fishing and Marine Tourism:

Other Economic Impacts:

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 ruin recreational and commercial fishing.

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

Phone

more details

Shoreline Unit Manag

East Bay Regional Park District

(510) 544-3172

Dispatch

East Bay Regional Park District

(510) 881-1833

Park Supervisor

EBRPD-Eastshore State Park

(510) 544-3108

Sarah Allen

US National Park Service, Pt. Reyes (NS)

(415) 464-5187

John Henderson FWS Biologist

US Fish & Wildlife Service, Environmental Contami

(916) 414-6595

Damian Higgins

U.S. Fish & Wildlife Service

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Cyndy Shafer

CA Department of Parks and Recreation

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Vika Sirova EnvProtectSpecialist

US National Park Service, Golden Gate (NRA)

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Sector SF

Section 8000-141

October 1, 2011

