2-400 -C/X Site Summary- San Francisco Waterfront Protection/Collection

		Thomas Guide Location	Latitude N	Longitude W				
County:	San Francisco	AAA - San Franc	3746	122 23				
USGS Quad:	San Francisco North	NOAA Chart: Entrance to San Fra	an Francisco Bay18649					

SITE DESCRIPTION:

The shoreline of San Francisco from Fort Mason to the Bay Bridge. This shoreline consists of man made structures including piers, seawalls and rip rap. The bottom of the channels generally consist of soft sediments. Currents can be strong, approaching 6 knots.

SEASONAL and SPECIAL RESOURCE CONCERN

Herring spawn during the winter on the pier pilings.

RESOURCES OF PRIMARY CONCERN

Aquatic vegetation and invertebrates growing on pilings, seawalls and riprap may be injured by oil and cleanup activities. Herring spawn on these surfaces during the winter months (Nov-Apr).

Sea birds are present throughout the year.

Herring spawn here in the winter. Fish are present throughout the year.

Algae and invertebrates live on all hard surfaces. Native Olympia Oysters present.

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)

Туре	Name / Title	Organization	Phone
T/E	GGNRA Dispatch	US National Park Service, Golden Gate (NRA)	(415) 561-5505
T/E	Daphne Hatch	US National Park Service, Golden Gate (NRA)	(415) 289-1840
0	City of San Francisco	San Francisco, City and County of	(415) 701-2323
T/E	Vika Sirova	US National Park Service, Golden Gate (NRA)	(415) 561-4731

ADDITIONAL SITE SUMMARY COMMENTS:

2-400 -C/X

Last Page Update : 12/15/2005

2-400 -C/X Site Strategy - San Francisco	2-400 -C/X		
County and Thomas Guide Location	NOAA CHART	Latitude N	Longitude W
AAA - San Franc San Francisco	Entrance to San Francisco Bay18649	3 7 46	122 23
CONCERNS and ADVICE to RESPONDERS:		Last Page Update :	12/1/2005

This collection strategy should be used to take advantage of the slow water between piers and the boats at anchor to divert oil out of swifter along shore currents to shoreline where collection is possible.

HAZARDS and RESTRICTIONS:

There are sunken obstructions to navigation in many areas, sunken vessels and old pier pilings.

SITE STRATEGIES

Oil moving along the SF waterfront tends to move swiftly in the currents off the end of the wharfs were current may exceed 6 knots, but alongshore eddies and pier pilings slow currents making opportunities to collect oil. Oil may be deflected to collection into these calmer waters, between piers, and eventually at collection points in the slow moving water at the shoreline.

Strategy 2-400.1 Objective: Deflect to Collection at shoreline: recover oil at seawalls where there is shoreline access. Deflect oil to areas where current is slowest to minimize the distance the oil travels, especially on the ebb tide.

Deflect oil to the shoreline and setup shore side skimmers (SSS). Some potential collection sites are at the steps on the promenade near the foot of Howard St.and the foot of pier 39. Also, deploy short pieces of small boom between piers and other manmade structures down current from the spill source to direct oil to slowest waters at shoreline. The boom should be placed at an angle to the current to prevent entrainment, and should be tightened sufficiently to prevent the current from bending the boom such that some portion of it is perpendicular to the current. Where oil entrains under a boom another length of boom must be placed down current of the first to catch the entrained oil and deflect it to slower moving water near shore.

Table of Response Resources

strategy	harbor s	swamp	Other	sorb	Anchoring		Boom	Skiffs	Skimi	mers	Special Equipment or comment		staff	Staff	
number	boom	boom	boom type	boom	no	type and dear	boat	punts	No	Туре	No	and	kinds	deploy	tend
2-400.1	6000			500	30 22+#		2	2	1 SSS	6				10	

LOGISTICS

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

Boat launch ramp near pier 50 at Mission Rock Resort, 817 China Basin St. Shoreline access from the Embarcadero and China Basin St. The shoreline of San Francisco from Fort Mason to the Bay Bridge.

LAND ACCESS: There is access for large trucks on most piers and seawalls.

WATER LOGISTICS:

There are sunken obstructions to navigation.

Limitations: depth, obstruction

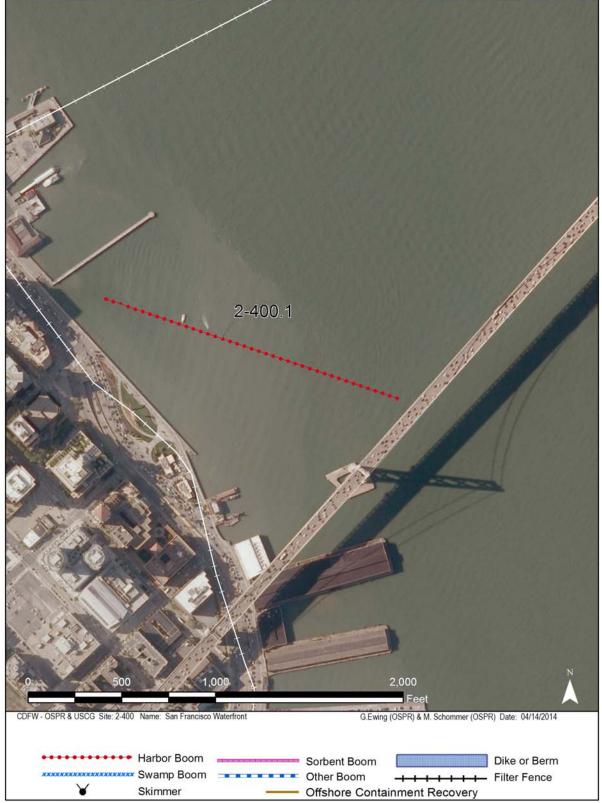
Launching, Loading, Docking Boat launching is available near pier 50 at Mission Rock Resort, 817 China Basin St. and Services Available:

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

Flat paved areas for staging and field posts are common throughout this area

COMMUNICATIONS PROBLEMS: none known

ADDITIONAL OPERATIONAL COMMENTS:



Imagery: NAIP 2010 (Summer) 4-Band