4-450 -A Site Summary- Santa Maria River Inlet

4-450 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Luis Obispo/Santa Barbara	774 A-5	34.95913	120.64543
USGS Quad:	Point Sal	NOAA Chart: Pt. Sur to Pt. Conception 18700		

Last Page Update : 5/1/2014

SITE DESCRIPTION:

See Division K map. Santa Maria River is the border between Santa Barbara and San Luis Obispo County lines. A 365 acre wetland, one of the largest in San Luis Obispo/Santa Barbara Counties, provides habitat for migrating shorebirds and waterfowl, fish and amphibians. North and south of the river mouth are wide extensive fine to medium grained sandy beaches backed by well developed sand dunes. Strong winds and high surf conditions are common. River mouth may be closed by sand berm, especially during summer months. Just south of the river Santa Barbara County Parks owns and manages Guadalupe Dunes Natural Preserve and the Guadalupe Oil Field is on north side of river (site #445).

SEASONAL and SPECIAL RESOURCE CONCERN

Species of concern are present year round.
Tidewater gobies (critical habitat) nest in estuary sediments April - July. Steelhead (critical habitat) peak spawning March - July. Southern sea otters peak pupping Jan-March. Red-legged frog breeding season is Nov.- March.
Western snowy plovers nest in the foredunes March-Sept. California least terns nest April-Sept. Over-wintering during the non-nesting months of October to March adult snowy plovers may continue to utilize beach habitats. Adult least terns migrate south.
Designated critical habitat for leatherback sea turtles (endangered), most commonly observed Aug. – Nov.

RESOURCES OF PRIMARY CONCERN

Santa Maria River estuary is a 365 acre wetland, one of the largest in San Luis Obispo/Santa Barbara Counties, provides habitat for migrating shorebirds and waterfowl.

Western snowy plovers nest on this beach. Snowy plovers may have active nests, or chicks may be actively moving about the area. Care should be given to minimize disturbance and avoid injury to either nests, or chicks. Snowy plovers are small, white and tan colored shore birds. Beach bird-nesting sites are shallow depressions scratched out from the sand surface on sandy beaches above the highest tide line. The nest sites are typically very well disguised and difficult to see, even for trained eyes. Nest sites may contain either eggs, or chicks which are potentially vulnerable to trampling by vehicles or foot traffic. Snowy plover adults and chicks are known to move between the nest sites and the active water line. Over-wintering snowy plover adults may be foraging throughout the response area.

Waterfowl, shorebirds, seabirds, brown pelicans, and peregrine falcons utilize this habitat year round. Sensitive fish species include steelhead trout (threatened species) and the endangered tidewater goby which can be found from creek mouth to 2 miles upstream (designated goby Critical Habitat). Red-legged frogs (threatened) utilize this habitat. Sensitive plant species are also of concern, e.g. la graciosa thistle. Southern sea otters (threatened) can be observed offshore.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

Known archaeological sites. Contact SHPO and Native American Heritage Commission

KEY CONTACTS: Trustee (T); Entry/Owner/Access (E); Cultural (C); or Other Assistance (O)

Type	Name / Title	Organization	Phone
E	Michael Allen Park Manager	Santa Barbara Co. Parks Dept.	(805) 686-5076
T	Melissa Boggs Environmental Scientist	CDFW-OSPR	(805) 558-1005
E	Carri Douglass Guadalupe Oil Field Mgr.	Chevron	(805) 343-0836
C	Lynn Gamble Historic Info Center	SHPO/UCSB	(805) 893-7341
T	Mike Harris Sea otter expert	CDFW-OSPR	(805) 772-1135
O	Brian Hatfield Marine mammal expert	Bio Res Div. USGS	(805) 927-3893
T	Jenny Marrek Biologist	U.S. Fish and Wildlife Service	(805) 644-1766
C	Larry Meyer	Native American Heritage Commission	(916) 373-3712
T	Elizabeth Petras Biologist	National Marine Fisheries Service	(562) 980-3238
C	SHPO	State Office of Historic Preservation	(916) 445-7000

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location	NOAA CHART	Latitude N	Longitude W
774 A-5 San Luis Obispo/Santa Barbara	Pt. Sur to Pt. Conception 18700	34.9591	120.64543

Last Page Update : 5/1/2014

CONCERNS and ADVICE to RESPONDERS:

Wetland/riparian habitat – Mud flats, marshlands, and creeks contain fragile habitat subject to damage from human activities such as walking and vehicle use. Oil can be trampled into sediments by responders where it will not be recoverable. Avoid walking in mudflats, marshy areas, and riparian habitat/waterways whenever possible. When crews must walk in soft bottom wetland areas to access cleanup sites, restrict the number and size of pathways. Mark authorized pathways with flagging or tape. Place temporary ramps (e.g. plywood sheets) in sensitive marshy areas where heavy use is expected.

Fish Disturbance - Avoid disturbing bottom lagoon sediments to protect tidewater gobies (goby critical habitat) especially April-May goby nesting season and March - July peak steelhead (critical habitat) spawning. If creek conditions allow, boom deployment and recovery to be done by only having one person slowly walk across the creek to position the boom (and fence posts on the bank) to reduce disturbance. Limit disturbing creek to reduce turbidity. Equipment and foot traffic entering wetted areas should be avoided to the maximum extent practical to prevent crushing tidewater gobies, their burrows, and eggs. Any anchors deployed in water should be placed in waters greater than 4 feet deep to avoid crushing tidewater goby burrows. If supplemental water is used to flush recommend gradually increasing the intensity/volume during the flush.

Nov. - April for red-legged frog breeding.

Wave washover - May carry oil over natural berm into the lagoon during extreme onshore and tidal conditions.

PRIMARY PLOVER PROTECTION STRATEGY: During nesting season, March-September, to aid in avoiding damage to nests, consider delineation of nesting areas and designate responder "pathways" with flagging or tape. Nests and critical habitat protection areas will require oversight by natural resource specialist prior to response effort execution. All responders should be briefed on procedures for avoiding birds and nest sites to aid in minimizing damage to nest sites and associated wildlife. Oil spill response and cleanup activity should be limited to locations below high tide line unless otherwise authorized by trustee agency specialist, or designee (biological monitor). The area to be protected will be monitored by an assigned biological monitor. Oil removal will be conducted by hand crews unless other methods are recommended by the biological monitor. Pre-clean the beach and stockpile kelp and surfgrass rack in designated areas for re-distribution after response efforts are completed. A staging area will be determined as most suitable for response and natural resource protection.Travel on beach should be restricted to the wet sand as much as possible; vehicle traffic should be operated at slow enough speeds to avoid/minimize impacts to wildlife (15 MPH); if possible avoid driving over wrack.

SECONDARY PLOVER PROTECTION STRAGEGY: At the discretion of the biological monitor, in consultation with the U.S. Fish and Wildlife Service, Snowy plover or least tern eggs may be removed from nest's by authorized and qualified personnel to an approved facility to avoid injury. This determination will be made on-site utilizing oil trajectory and oil impact timing information.

OTHER ENVIRONMENTAL CONCERNS:
Oil Burial - Wind drift and sand may bury beached oil.

Dune Habitats – Minimize mechanical and human activities in vegetated dune habitat.

Sensitive Biota - Nearshore waters, within a mile of the shoreline include sensitive rafting areas for birds, sea otters, and other marine mammals. To protect seabirds offshore, limit spill response activities within 1,000 feet of nesting seabirds when possible. Try to remain at least 100 yards away from marine mammals and sea turtles and if approached closely by a marine mammal or turtle while motoring, reduce speed and shift to neutral; do not engage props until the animals are observed at the surface, clear of the vessel.

SHORELINE PRE-CLEANING may be warranted before oil reaches the beach when the shoreline is covered with kelp, driftwood, etc which could become oiled and create more oiled waste. Consult with trustees prior to engaging in activities on shoreline. Move unoiled vegetation, driftwood, etc. above the high tide line. When the shoreline is narrow, un-oiled debris may need to be stockpiled elsewhere. It is suggested that photos be taken to document distribution of beach debris prior to collection so that it can be replaced to its pre-spill distribution when spill cleanup is complete. Pre-cleaning of shorelines should be conducted by hand crews to the greatest practical extent to minimize disturbance to wildlife and their habitats.

HAZARDS and RESTRICTIONS:
Contact resource agencies due to nesting birds on beach and sensitive fish species in estuary.

SITE STRATEGIES

Strategy 4-450.1 Objective: Exclude oil from this river inlet and beach.

- Offshore containment and recovery (OCR) is the preferred option although heavy surf may hinder these operations. No specific response equipment listed due to the many variables associated with each spill regarding OCR. Early consideration should be given to the use of applied response technologies.

Strategy 4-450.2 Objective: Exclude oil from river with berm

When river mouth is open, under low flow conditions block entrance with sediment berm or sandbag berm (fine to medium grained sand), and install flow through pipes as necessary to prevent flooding. To create protective berm take sand from active unvegetated beach face to prevent damage to dune habitat. When erosion from waves or overflows could erode berm, armor berm and banks by covering with plastic sheeting anchored by sand bags. When overflow could occur due to accumulation of water behind the containment berm install underflow piping and/or a spillway in the berm. When overwash could bring oil into inlet over berm back exclusion/containment berm with containment and/or sorbent booms and/or snare. Regular monitoring and maintenance will be necessary (2 staff twice daily). Check for berm effectiveness and integrity, overwash, and leakage problems, boom position and security, and sorbent replacement as necessary.

Strategy 4-450.3 Objective: Exclude oil from river with boom.

If river mouth is open, block river mouth with containment boom. Placement will vary greatly due to meandering river mouth and lagoon area. Place boom at appropriate angle for swift currents and changing tidal influences. Install exclusion boom at mouth of Inlet/lagoon using short skirted boom and snare boom. Deploy exclusion/containment boom across and near mouth of lagoon to minimize likelihood of oiling estuary. Install boom in a configuration/angle which blocks channel and diverts oil to a collection point. If needed, line river/stream bank, and sandy beaches within lagoon, seaward of the exclusion/containment booms to restrict oil to open water area of main channel to protect vegetated banks and sensitive areas within the inlet/estuary. Use swamp boom backed by sorbent booms, if waters are shallower, and use harbor boom backed by sorbent booms, when water depths are greater. Check/maintain boom for effectiveness and integrity, overwash, and leakage problems, boom positioning and security, and sorbent replacement as necessary.

Strategy 4-450.4 Objective: Prevent oil from impacting estuary by fencing.

When river mouth is closed consider installing excelsior fencing along top of natural berm to capture oil when there is a potential for high tidal washover.

When river mouth is open use a filter barrier for exclusion/containment – Use this method when the cross-section of the watercourse does not exceed 20 feet in width, water flow volume is low, the channel bottom is capable of receiving and holding metal stakes, the spill consists of heavy petroleum, and berming or booming methods are not feasible due to lack of materials or accessibility. Construct a filter barrier across the channel using two parallel rows of metal stakes, upon which construction fencing is fastened. Place permeable sorbent materials such as snare or excelsior, between the two lines of fencing to capture oil. Re-adjust sorbent materials as necessary minimize entrainment and/or leakage and to accommodate flow, tidal, oceanic, and meteorological changes. Replace sorbent materials as necessary to maintain sorbent quality.

Strategy 4-450.5 Objective: For inland spill, control as close to source as possible.

Confine the spill and recover the oil as close to the source of discharge as possible using hay bales, booming techniques, sorbents, skimmers, vacuum trucks and other appropriate means. Building a sediment dike in river should be last response priority due to sensitivity of riparian habitat.

When oil from an inland spill cannot be confined to upstream locations and threatens the estuary/lagoon and coastal resources consider two response alternatives to minimize contamination of wetland habitat in the estuary consult with resource agencies.

Alt. 1 Confine and recover oil within the open water area of the main channel of the lagoon when water flows are low by lining river bank within the lagoon with swamp boom backed by sorbent booms, if waters are shallower and with harbor boom backed by sorbent booms, when water depths are greater; deploy boom across river mouth to recover oil within the open water of the estuary.

Alt 2. Line river bank within the lagoon as stated in Alt. 1. Channel oil from inland sources through the estuary/inlet, into the ocean and divert oil to appropriate collection area(s) along the shoreline.

Monitor and Maintain Booms. Check for boom effectiveness and integrity, overwash, and leakage problems, boom positioning and security, and sorbent replacement as necessary.

strategy number	harbor boom	swamp boom	Other boom type	sorb boom	Anchoring no	Anchoring type and gear	Boom boat	Skiffs punts	Skimmers No	Skimmers Type	Special Equipment or comment No	Special Equipment or comment and kinds	staff deploy	Staff tend
4-450.1												Offshore containment & recovery		
4-450.2									1	SSS		Backhoe or sandbags, piping, plastic sheeting	6	6
4-450.3		1000			4			1	1	SSS			6	6
4-450.4			1000 FF						1	SSS		metal stakes	6	6
4-450.5														

LOGISTICS

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

From the north: Take Hwy 101 S (or Hwy 5 S to Hwy 41 W to Hwy 46 W to Hwy 101 S) to Halcyon Rd. exit in Arroyo Grande and go straight (south) to Hwy 1 (Cienega St. which turns into Mesa View Dr.), turn left (south) on Hwy 1. Continue on Hwy 1 for approx. 10 miles to Main St. in Guadalupe (Hwy 166) and turn right (west). Continue west on Main St.. For 1.2 miles to beach parking lot.
From the south: Take Hwy 101 N to Hwy 166 in Santa Maria. Go west on 166 (Main St.) to the beach parking lot. If gate at kiosk is locked call SB County Parks for access (Michael Allen 805-686-5076). Santa Maria River inlet is north of parking area approximately half mile.

LAND ACCESS: ATV or 4-wheel drivvehicle access possible w/ permission from agencies

WATER LOGISTICS:

Limitations: depth, obstruction

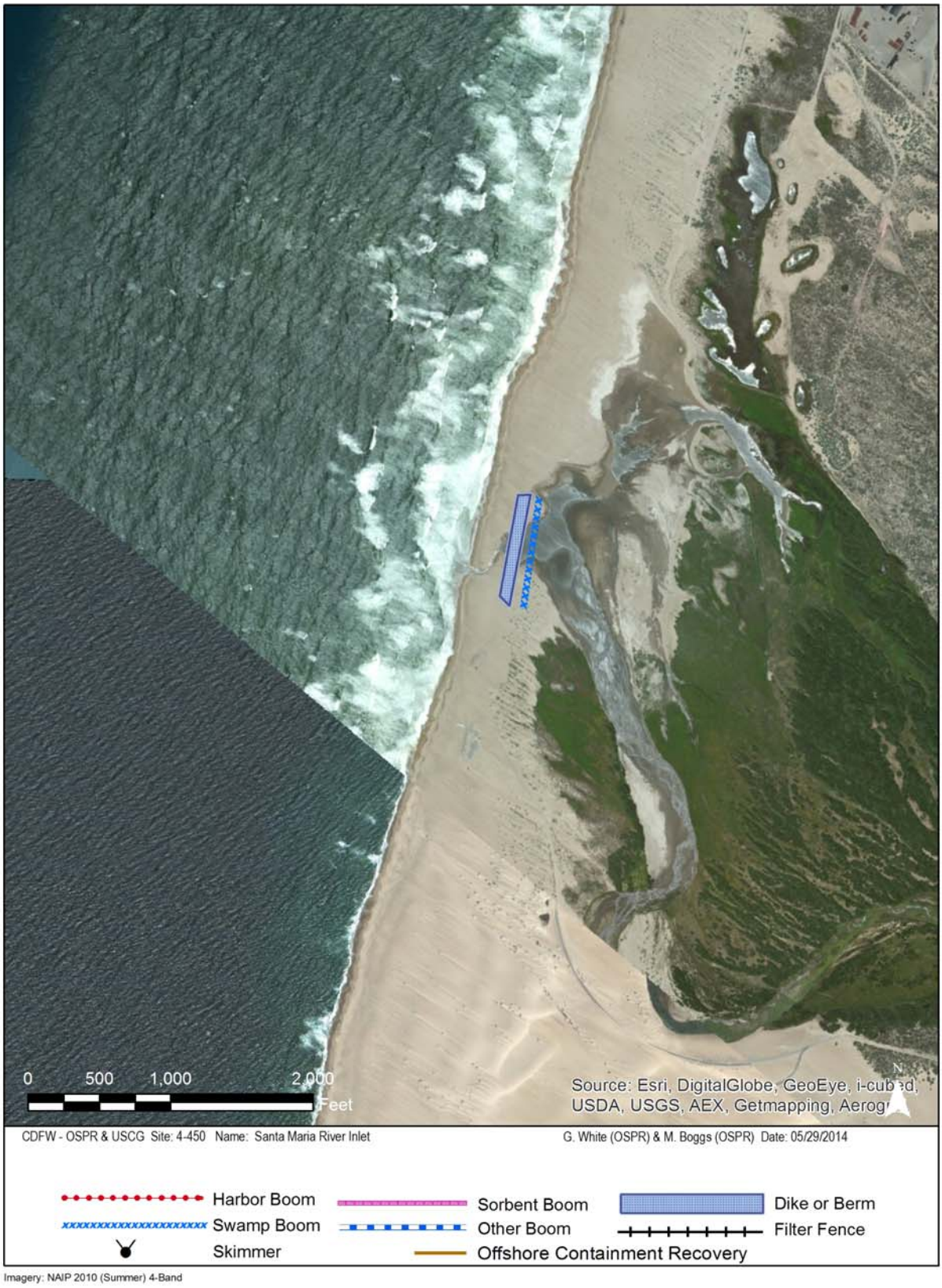
Launching, Loading, Docking and Services Available: Port San Luis Harbor, approx. 40 miles north

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

Staging Area: Guadalupe Beach parking lot.
Command Post: Hotels in Santa Maria.
Airports: SLO County Airport is approx. 45 min. north. Santa Maria Airport is approx. 15 miles south east.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS: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Feet
Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerog
N
CDFW - OSPR & USCG Site: 4-450 Name: Santa Maria River Inlet
G. White (OSPR) & M. Boggs (OSPR) Date: 05/29/2014
Harbor Boom
Swamp Boom
Skimmer
Sorbent Boom
Other Boom
Offshore Containment Recovery
Dike or Berm
Filter Fence
Imagery: NAIP 2010 (Summer) 4-Band