Site Summary- Pismo Creek Upstream

4-410 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Luis Obispo	694	35.1859	120.6181
USGS Quad:	Pismo Beach & Arroyo Grande NE	NOAA Chart:		

Last Page Update : 5/1/2014

SITE DESCRIPTION:

Pismo Creek upstream, much of Pismo Creek meanders next to Price Canyon Rd. The Southern Pacific Railroad track also borders much of the creek. Much of the creek is bordered by private property, agriculture land. Pismo Creek contains a lush growth of vegetation growing along the edges. Plant species along the creek include sycamores, willows, coast live oaks, poison oak, horsetail, duckweed, blackberry, and the invasive castor bean. Fish include, steelhead trout, prickly sculpin, and brown bullhead. Additionally, southwestern pond turtles and red-legged frogs inhabit this creek. Snowy plovers (threatened) nest on the beach.

Freeport-McMoRan Oil and Gas (FMO&G) oil production and storage facility is located approximately 4 miles upstream from the creek mouth. The crude produced at this facility is 14.6 API. FMO&G crude oil pipeline crosses Pismo Creek approx. 3.5 miles from the creek mouth. There are actually 7 pipelines running through a conductor outer shell. FMO&G has built sediment berms around each oil well near the creek to aid in containment. FMO&G has one power source to turn off in the event of a spill, which shuts off power to all the oil wells. Pipeline valves have to be shut off manually. FMO&G has NPDES permit associated with water reclamation project and have potential ability to reduce or increase flow into creek.

ConocoPhillips also operates a crude oil transportation pipeline which crosses Pismo Creek near Addie/ Dolliver Bridge. Pipeline runs underneath creek estuary.

SEASONAL and SPECIAL RESOURCE CONCERN

Species of concern are present year round. Steelhead (critical habitat) peak spawning March - July. Red-legged frogs breed Nov-March. Tidewater goby peak nesting April-July, burrow in the estuary sediments (critical habitat).
Snowy plover nesting on the beach is March - September (beach is designated critical habitat for plovers)..

RESOURCES OF PRIMARY CONCERN

Southwestern pond turtles (species of special concern); red-legged frogs (threatened). Fish species include steelhead trout (threatened), prickly sculpin, and brown bullhead.

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

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/T	District Office	State Dept. Parks & Rec Oceano Dunes District	(805) 773-7170
T	Melissa Boggs Environmental Scientist	CDFW-OSPR	(805) 558-1005
E/L	Paul Delorenzo Sr. Production Foreman	Freeport-McMoRan Oil and Gas	(805) 547-8969
E	Byron Everist Sr. Env. H&S Advisor	Freeport-McMoRan Oil and Gas	(805) 934-8219
C	Lynn Gamble Historic Info Center	SHPO/UCSB	(805) 893-7341
T	Jenny Marrek Biologist	U.S. Fish and Wildlife Service	(805) 644-1766
C	Larry Meyer	Native American Heritage Commission	(916) 373-3712
O	Mark Mitchell	ConocoPhillips	(805) 438-6201
T	Elizabeth Petras Biologist	National Marine Fisheries Service	(562) 980-3238
C	SHPO	State Office of Historic Preservation	(916) 445-7000
E/T	Dispatch State Parks	State Dept. Parks and Recreation	(951) 443-2969

ADDITIONAL SITE SUMMARY COMMENTS:

County and Thomas Guide Location	NOAA CHART	Latitude N	Longitude W
694 San Luis Obispo		35.1859	120.6181

Last Page Update : 5/1/2014

CONCERNS and ADVICE to RESPONDERS:

Steelhead trout (critical habitat) peak spawning March - July. 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. When possible, deploy boom/dike where there is limited overhanging vegetation or large rocks where fish can hide. Tidewater gobies (endangered fish) nesting season in estuary sediments (critical habitat) is April - July. 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 if possible to avoid crushing tidewater goby burrows. If supplemental water is used to flush recommend gradually increasing the intensity/volume during the flush.

Coordinate with agencies before earth moving in the creek and regarding strategies below If oil from inland is diverted or flows to beach due to snowy plover issues (threatened species) nests March - September.

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.

HAZARDS and RESTRICTIONS:

Poison oak. Private property at access location #2 (1056 ft. south of Ormonde Rd, Avila Ranch).
Freeport-McMoRan Oil and Gas (FMO&G) has spill response equipment at their facility. FMO&G has NPDES permit associated with water reclamation project and have potential ability to reduce or increase flow into creek.

General strategies for this site: Contain and recover oil as close to point of discharge as possible using booming, berming, sorbents, hay bales, skimmers, vacuum trucks and other appropriate means. Building a sediment dike/berm in creek should be the last response option 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 below to minimize contamination of wetland habitat in the estuary:

Alt. 1 (preferred alternative) - contain and recover oil within the open water area of the main channel of the lagoon when water flows are low by lining creek bank and rip rap 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 creek mouth to recover oil within the open water of the estuary.
Alt 2. (least preferred alternative; obtain natural resource trustee agency approval); line creek bank within the lagoon as stated in Alt. 1. Channel oil from inland sources through the estuary/inlet, out into the ocean and divert oil to appropriate collection area(s) along the shoreline (would likely only consider this alternative during non-plover nesting season and not March - Sept).

SITE STRATEGIES

Strategy 4-410.1 Objective: Strategy for inland spill, contain oil in creek as close to release site as possible with boom

Table of Response Resources

Boom creek with short skirted containment boom at appropriate angle for swift currents. Boom can be placed manually without the use of boats. Foot access for boom deployment. Length of boom needed is dependent on creek width which varies. Consider placing secondary containment just downstream from primary boom using sorbent boom, pom poms, sweep boom, or other permeable barrier e.g. hay bales with appropriate underflow piping if necessary. Vacuum truck access at locations 1, 2, & 4 below.

Boom access locations along Pismo Creek:
1) NE side of oil field entrance at Hyla Creek/Pismo Creek crossing (also slide gate location)
2) 1056 ft. south of Ormonde Rd, (Avila Ranch, boom deployment location #2 in FMO&G Response Manual).
3) Bello Street, at rail road bridge crossing
4) Dolliver St. Bridge at estuary (this access site requires 300' of boom)

Strategy 4-410.2 Objective: Strategy for inland spill; slide gate strategy at Hyla Creek/ Pismo Creek crossing

Slide gate strategy: Strategy for spill from northeast side of oil field, at Hyla Creek/ Pismo Creek crossing (within the Freeport-McMoRan oil field property, boom deployment location #3 in Freeport-McMoRan Response Manual). Existing bridge crossing has slide gates and boards to block existing culverts. Leave openings at bottoms of culverts to allow water to flow through bottom but allow slide gate to contain oil. Vacuum truck access to bridge.

Strategy 4-410.3 Objective: Strategy for inland spill; contain oil in creek as close to release site as possible with sediment dike/berm

Berming/diking: Under low flow conditions contain oil as close to source of release as possible with sediment berm or sandbag berm, and install flow through pipes as necessary to prevent flooding. Can use hand crew/shovels to build berm. When overflow could occur due to accumulation of water behind the containment berm install underflow piping and/or a spillway in the berm. Regular monitoring and maintenance pf berm is necessary. Check for berm effectiveness and integrity, overwash, and leakage problems, boom position and security, and sorbent replacement as necessary.

Berming access locations along Pismo Creek:
1) NE side of oil field entrance at Hyla Creek/Pismo Creek crossing
2) 1056 ft. south of Ormonde Rd, (Avila Ranch, boom deployment location #2 in Freeport-McMoRan Response Manual.
3) Bello Street, at rail road bridge crossing

Strategy 4-410.4 Objective: Strategy for inland spill; Dolliver Bridge access location; furthest downstream boom containment location within creek before oil reaches creek mouth from an inland spill

Boom at Dolliver Bridge within estuary (approximately 4 miles downstream from Freeport-McMoRan oil facility. Containment boom across estuary at appropriate angle for swift currents. Also consider lining rip rap on both sides of bridge abutment in estuary with boom; this would require approximately 1500' of containment boom. Vacuum truck/heavy equipment access possible. Foot access for boom deployment. Minimize trampling in estuary - see Environmental Concerns section above.

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
4-410.1		100						1	SSS			Fence posts, vacuum truck	4	4
4-410.2												Vacuum truck	4	
4-410.3								1	SSS			sandbags, piping, shovels, vaccum truck	4	4
4-410.4	300							1	SSS			Anchors or fence posts, vacuum truck	6	6

LOGISTICS

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

From the south: Take Hwy 101N to Pismo Beach/ Price Street exit; right (east) onto Price Canyon Rd (PCR, to the west is Hinds Ave). Continue east on PCR approx. 4 miles to Freeport-McMoRan facility.
From the north: Take Hwy 101 S (or Hwy 5 S to Hwy 41 W to Hwy 46 W to Hwy 101 S) to HWY 1/Dolliver St./Price St. (exit 191A); streight on Price St; left (east) at PCR/ Hinds Ave. intersection. Continue east on PCR approx. 4 miles to Freeport-McMoRan Oil & Gas facility.

Creek access locations:
1) NE side of FMO&G oil field entrance at Hyla Creek/Pismo Creek crossing (slide gate location); 35.185022, -120.617373
2) 1056 ft. south of Ormonde Rd, (Avila Ranch, boom deployment location #2 in FMO&G Response Manual); access site west side of creek N35.17488, W120.62249 and access site east side of creek N35.17364, W120.62129. To access east side of creek turn onto Ormonde Rd. drive 600' to dirt road which parallels RR track; FMO&G has key to gate.
3) Bello Street, at rail road bridge crossing; 35.142826, -120.633130
4) Dolliver St. Bridge at estuary (this access site requires 300' of boom); 35.136820, -120.638763

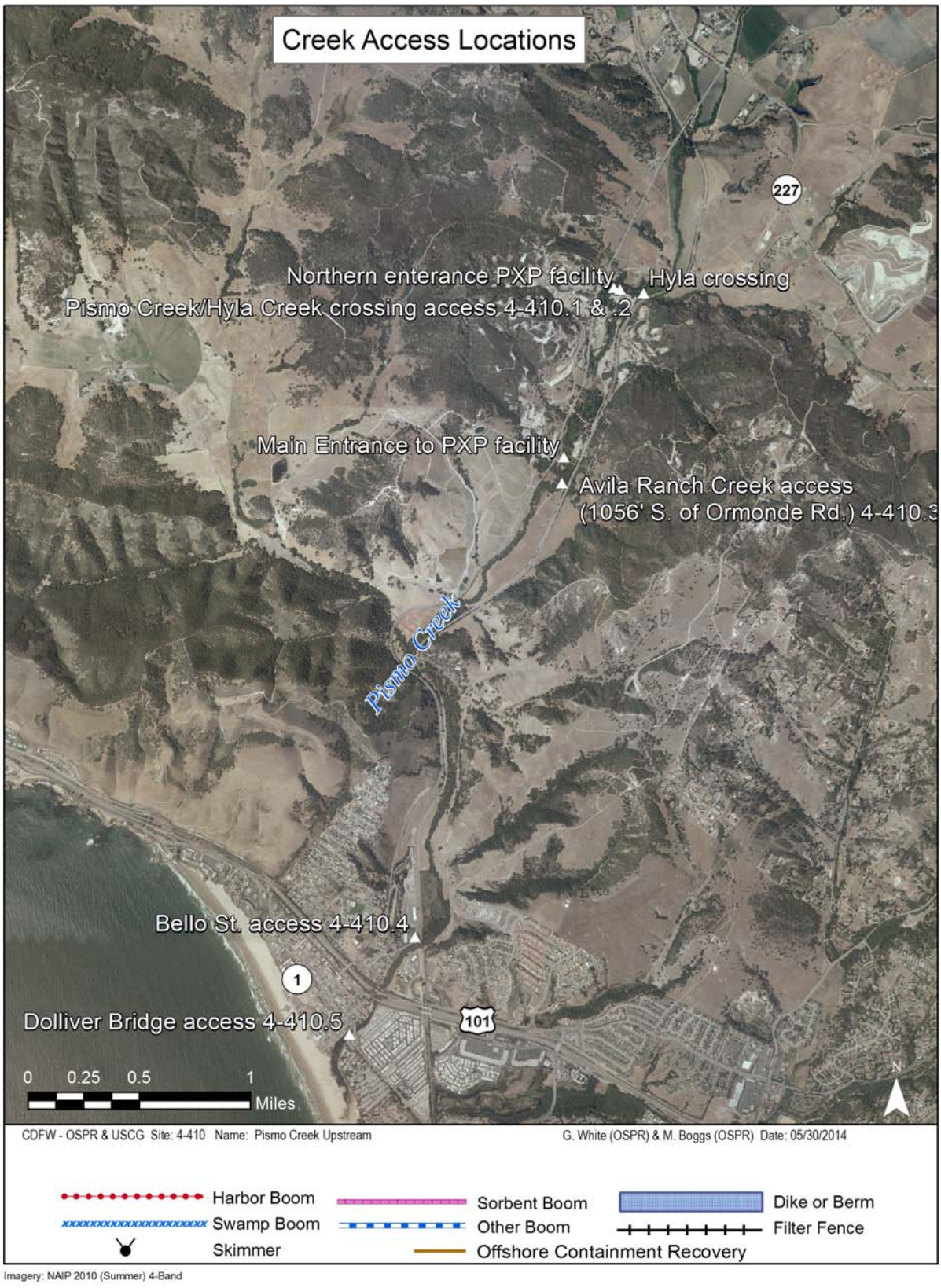
LAND ACCESS: Vehicle/heavy equipment limited in upper regions of creek.

WATER LOGISTICS:
Limitations: depth, obstruction
Launching, Loading, Docking and Services Available:

FACLITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:
Staging Area: Freeport-McMoRan Oil & Gas production /storage facility located at 1821 Price canyon Road, Arroyo Grande.
Command Post: Freeport-McMoRan Oil & Gas oil field office located at 1821 Price canyon Road, Arroyo Grande.
Airports: SLO County Airport approx. 15 miles north.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:


Creek Access Locations
227
Northern enterance PXP facility
Hyla crossing
Pismo Creek/Hyla Creek crossing access 4-410.1 & .2
Main Entrance to PXP facility
Avila Ranch Creek access
(1056' S. of Ormonde Rd.) 4-410.3
Pismo Creek
Bello St. access 4-410.4
1
Dolliver Bridge access 4-410.5
101
0 0.25 0.5 1
Miles
N
CDFW - OSPR & USCG Site: 4-410 Name: Pismo Creek Upstream
G. White (OSPR) & M. Boggs (OSPR) Date: 05/30/2014
Harbor Boom
Swamp Boom
Skimmer
Sorbent Boom
Other Boom
Offshore Containment Recovery
Dike or Berm
Filter Fence
Imagery: NAIP 2010 (Summer) 4-Band