

County: San Luis Obispo **ACP Division/Segment:** SL - A - S 04**NOAA Chart** 18700**Map Book :** 324 E-4**Decimal Degrees** 35.70997 -121.31044**Site Description:**

Arroyo de la Cruz/Arroyo de la Laguna inlet has a well developed freshwater marsh fronted by medium to coarse grained sandy beach. Within Hearst San Simeon State Park property, and within Monterey Bay National Marine Sanctuary and Sea Otter Game Refuge. Site is also within Pierdas Blancas State Marine Reserve MPA, and is governed by special protections established by the DFW Marine Region. Sandy beach just south of creek is a snowy plover nesting beach. Black abalone may be present in rocky intertidal habitat (designated critical habitat). Designated critical habitat for steelhead and leatherback sea turtles. Western pond turtles in creek. Shorebirds include western gulls, willets, sandpipers, black oyster catchers (on rocky intertidal); sea birds include brown pelicans, pelagic cormorants, grebes, loons, scoters, common murre. Kelp beds and southern sea otters common offshore. Compact cobweb thistle, arroyo de la cruz mariposa lily, and dwarf goldenstar can be found on the coastal bluffs.

Resources at Risk:**ESI and Habitat:** 10A Salt - and brackish-water marshes

4 Coarse-grained sand beaches

2A Exposed wave-cut platforms in bedrock, mud, or clay

List of Resources at Risk:

	Resource Name	Status	Presence
Birds	Western snowy plover	FT	Year-round
Fish	steelhead - Central/Northern California	FT	Year-round
Invertebrates	black abalone	FE	Year-round
Mammals	Southern sea otter	FT, SP	Year-round
Plants	Arroyo de la Cruz mariposa lily	SSC	
Plants	dwarf goldenstar		
Plants	compact cobweb thistle		
Reptiles	leatherback sea turtle	FE	Aug - Nov
Reptiles	western pond turtle	SSC	Year-round

FT-Federally Threatened, FE-Federally Endangered, FP-Federally Protected, SE-State Endangered, ST-State Threatened, SP -State Protected, SR-State Rare, SSC-Species of Special Concern, BGEPA-Bald and Golden Eagle Protection Act, SSSP-State Special Status Species

List of Key Contacts:

Type	Name/Title	Organization	Phone
C	/	Central Coast Archeological Information Center	(805) 893-2474
C	/	Native American Heritage Commission	(916) 373-3710
O	Brian Hatfield/Marine Mammal Expert	US Geological Survey, Biological Division	(805) 927-3893
T	Mary Larson/Steelhead	California Department of Fish & Wildlife	(562) 537-8624
T	Becky Ota/Marine Conservation Manager	California Department of Fish & Wildlife, MPAs	(650) 631-6789
T	Steve Wertz/Senior Environmental Scientist	California Department of Fish and Wildlife, Marine	(562) 343-3808
T	SURCOM (24-hr)/	California State Parks (Dispatch)	(951) 443-2969
T	Carolyn Skinder/Biologist	Monterey Bay National Marine Sanctuary	(805) 927-2145
T	Regulatory Coordinator/24hr	Monterey Bay National Marine Sanctuary	(831) 236-6797
T	Justin Viezicke/Marine Mammal Stranding	NOAA National Marine Fisheries Service	(562) 506-4315
T	Melissa Neuman/Marine Biologist	NOAA National Marine Fisheries Service	(562) 481-4594
T	Rick Bush/Fisheries Biologist	NOAA National Marine Fisheries Service	(562) 980-3562
T	Tina Fahy/Sea Turtle Recovery Coordinator	NOAA National Marine Fisheries Service	(562) 980-4023
T	/	US Fish and Wildlife Service, Federal T&E Species	(805) 644-1766

C – Cultural, Historic, Archaeological; E – Entry/Owner/Access; O – Other; S – Safety; T – Trustee; X – Exclusion or Security

Additional Site Summary Comments:

Steelhead peak spawning March - July; western pond turtles breed May - August; leatherback sea turtles most commonly observed August - November; southern sea otters pup year-round. Western snowy plovers nest March - September and overwinter rest of year on this beach; refer to Typical Sandy Beach Site Summary and Strategy pages (Site 4-000-A) for information on response operations when dealing with snowy plovers and least terns.

Concerns and Advice to Responders:

Refer to Typical Sandy Beach Site Summary and Strategy pages (Site 4-000-A) for information on response operations when dealing with snowy plovers and least terns. Minimize disturbance in riparian/wetland areas when possible. When crews must walk in soft bottom wetland/riparian areas, restrict the number and size of pathways and avoid trampling oil into sediments. If creek conditions allow, boom/fencing deployment and recovery to be done by only having one person slowly walk across creek to position the boom/fencing to reduce disturbance. Steelhead (critical habitat, threatened) peak spawning March - July. Black abalone (endangered) may be present on nearby rocky intertidal habitat. Southern sea otters (threatened) pup year-round.

Hazard and Restrictions:

Poison oak along path to beach. State Park property, site is within Monterey Bay Marine Sanctuary and Sea Otter Game refuge. This site falls within MPA, and is governed by special protections established by the DFW Marine Region.

Site Strategies:**Strategy 4-015.1 Objective:** Deploy Containment Boom

Strategy When creek mouth is open block entrance with short skirted containment boom (swamp boom) at appropriate angle for swift currents and changing tidal influences; place above high tide line. 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 or anchors on the bank) to reduce disturbance. Install boom in a configuration/angle which blocks channel and diverts oil to a collection point. Consider booming shorelines of inlet to prevent oiling. Maintenance/monitoring necessary; check boom for effectiveness.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Swamp			100	feet	
Anchor				2		
skimmer				1		
Staff				4		
Vehicle	ATV			1		

Strategy 4-015.2 Objective: Erect Filter Fence

Strategy When creek mouth is closed install excelsior fencing along top of natural berm to capture oil when there is a potential for high tidal washover. When creek mouth is open use a filter fence barrier for exclusion/containment. Use this method when the cross-section of the watercourse does not exceed 30 feet in width, water flow volume is low, the channel bottom is capable of receiving and holding metal stakes, and the spill consists of heavy oil. If creek conditions allow, filter fence deployment and recovery to be done by only having one person slowly walk across the creek to position fencing (and fence posts) to reduce disturbance. Maintenance/monitoring of filter fencing necessary.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Fence	Construction			100	feet	
	Fencing					
stakes						
skimmer				1		
Staff				4		
Vehicle	ATV					
Misc.	Stake Driver			1		
Misc.	Oil Snare (pom-pom)					

Strategy 4-015.3 Objective: Build Berm

Strategy When creek mouth is open, under low flow conditions block creek entrance with sediment berm or sandbag berm, and install flow through pipes as necessary to prevent flooding. Cover berm with plastic sheeting to minimize erosion; and consider backing berm with 10" swamp boom and/or sorbent boom. To create protective berm, take sand from active unvegetated beach face to prevent damage to dune habitat. Manual building of berm preferred over heavy equipment even when heavy equipment can access site. Maintenance/monitoring necessary; check for berm effectiveness.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
skimmer				1		
Heavy Equip	Backhoe					
Sandbags				6		
Staff						
Piping						
Vehicle	ATV			1		

Strategy 4-015.4 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART

Strategy 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.

Table of Response Resources

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Logistics:

Directions: From the south: Take Hwy 101 N to Hwy 1, Morro Bay exit in San Luis Obispo. Take Hwy 1 N approx. 4 miles north of Piedras Blancas Lighthouse. Mile marker 66.9. From the north: Take Hwy 101 S to Hwy 46 W to Hwy 1 N (or Hwy 5 S to Hwy 41 W to Hwy 46 W to Hwy 1 N). Continue as above.

Land Access: Foot path, and ATV access from vista turnout .2 mi. S. of creek.

On-Water Limitations: Limitations: Launching, Loading, and Services Available: Docking Morro Bay boat launch facility approx. 40 miles south.

Facilities, Staging Areas, Command Posts, Available Equipment: Staging and Command Post: US Geologic Survey research facility is located at the Piedras Blancas Lighthouse, approx. 4 miles south on Hwy 1. Staging, parking, water and phones available. Hotels in San Simeon; State Parks office at Hearst Castle. Airports: San Luis Obispo County Airport, approx. 1 hour south. Paso Robles Airport approx. 45 min inland. There is a private landing strip for small planes north of Hearst Castle Visitor's Center, approx. 15 min. south.

Communications Problems: None.

Additional Operational Comments:

