

4-050-A Site Summary - Oak Knoll Creek (a.k.a. Arroyo Laguna) and Beach**4-050-A****County :** San Luis Obispo **ACP Division/Segment :** SL - B - S 02**NOAA Chart :** 18700**Map Book :** 324 G-6**Decimal Degrees** 35.65107 -121.21963**Site Description:**

Oak Knoll Creek (AKA Arroyo Laguna) is an intermittent creek fronted by a sandy beach (fine grained). Species of concern are present year round. Designated critical habitat for tidewater goby, steelhead, leatherback sea turtles, and western snowy plovers. Under Hwy 1, creek bed is lined with rip rap. Western pond turtles and California red-legged frogs present in this creek. Site is in Hearst San Simeon State Park property and is within Monterey Bay National Marine Sanctuary and is within the Sea Otter Game refuge. Shorebirds and seabirds present year round including dunlin, longbilled curlew, sandpipers, ducks, gulls, egrets, willets, crows, coots, killdeer, great blue herons. Northern elephant seals utilize this beach. Southern sea otters observed offshore. Black abalone may be present in rocky intertidal habitat (designated critical habitat). Sensitive plant species include Arroyo de la Cruz manzanita. Elephant seals present year-round.

Resources at Risk:*ESI and Habitat:* 3A Fine- to medium-grained sand beaches

10A Salt - and brackish-water marshes

6B Riprap

List of Resources at Risk:

	Resource Name	Status	Presence
Amphibians	California red-legged frog	FT	Year-round
Birds	Western snowy plover	FT	Year-round
Fish	tidewater goby	FE	Year-round
Fish	steelhead - Central/Northern California	FT	Year-round
Invertebrates	black abalone	FE	Year-round
Mammals	harbor seal	FP	Year-round
Mammals	Southern sea otter	FT, SP	Year-round
Mammals	Northern elephant seal	FP	Year-round
Plants	Arroyo del la Cruz manzanita		
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	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 Viezbicke/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:

Tidewater goby peak nesting in estuary sediments April - July; steelhead peak spawning March - July; California red-legged frogs peak breeding November - March. Marine mammal pupping seasons: Harbor seals March - June; southern sea otters year-round; northern elephant seals December - March. Leatherback sea turtles most commonly observed August - November. Western snowy plovers nest March - September; 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:

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. Avoid disturbing bottom lagoon sediments to protect tidewater gobies (endangered) especially April-July, goby nesting season. Steelhead peak spawning March - 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. If supplemental water is used to flush recommend gradually increasing the intensity/volume during the flush for gobies. Black abalone (endangered) may be present on nearby rocky intertidal habitat (designated critical habitat). Designated critical habitat for leatherback sea turtles, extends from shore out to 100 miles offshore. Sensitive Biota - Nearshore waters include sensitive rafting areas for birds, sea otters, and other marine mammals. 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. Portion of creek under Hwy 1 bridge is lined with rip rap. Consider lining rip rap with boom. Southern sea otters (threatened) pup year-round.

Hazard and Restrictions:

Hearst San Simeon State Park property and is within Monterey Bay National Marine Sanctuary.

Site Strategies:

Strategy: 4-050.1 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			200	feet	
Anchor				2		
Staff				4		
skimmer				1		
Vehicle	ATV					

Strategy: 4-050.2 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 stakes	Construction Fencing			200	feet	
Staff				30		
skimmer				4		
Misc.	Oil Snare (pom-pom)			1		
Vehicle	ATV			1		
Misc.	Stake Driver			1		

Strategy: 4-050.3 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
Heavy Equip	Backhoe			1		
Sandbags						
Staff				6		
skimmer				1		
Piping						
Vehicle	ATV					

Logistics:

Directions: From the north: Take Hwy 101 south to Hwy 46 W to Hwy 1 N (or Hwy 5 S to Hwy 41 W to Hwy 46 W to Hwy 1 N) approx. 20 miles, one mile past Hearst Castle, cross over bridge (post mile marker 59.88), and turn left into turnout. Turnout and locked gate are approx. 1/10 mile north of bridge. Mile marker 59.88. From the south: Take Hwy 101 N to Hwy 1 exit in San Luis Obispo, continue 35 miles as above.

Land Access: Foot or ATV access with permission (State Parks) through locked gate.

On-Water Limitations: Limitations: Depth, obstruction. Launching, Loading, Docking and Services Available: Morro Bay boat launch approx. 35 miles south.

Facilities, Staging Areas, Command Posts, Available Equipment: Staging area: Turnout 1/10 mile north of bridge.

Command: Motels in San Simeon is a few miles south. Airports: SLO County Airport, approx. 1 hour south. Paso Robles Airport approx. 45 min. inland. Private landing strip approx. 5 min south, located north of Hearst Castle Visitors Center.

Communications Problems: None.

Additional Operational Comments:

