4-425 -A Site Summary- Arroyo Grande Creek Inlet

4-425 -A

		Thomas Guide Location	Latitude N	Longitude W
County:	San Luis Obispo	734 D-1	35.10540	120.63083
USGS Quad:	Oceano	NOAA Chart: Pt. Sur to Pt. Conception 18700		

Last Page Update : 5/1/2014

SITE DESCRIPTION:

See Division J map. Arroyo Grande Creek mouth is within the Oceano Dunes State Vehicular Recreation Area, (State Beach). Off-road vehicles drive on this beach and drive across creek mouth. Behind beach Pismo Lake Ecological Reserve flows to Meadow Creek, a remnant marsh drainage system that enters Arroyo Grande Creek lagoon just upstream of Arroyo Grande creek mouth. The beach is fine to medium grained relatively flat sand beach. This is the only creek in San Luis Obispo County with a flood control device. This creek has two flap gates, the first by Oceano Lagoon and the second is upstream across the channel. These gates are automatic gravity flap gates which automatically shut if water comes in. Contact County Flood Control (805) 781 5252. High recreational use beach.

SEASONAL and SPECIAL RESOURCE CONCERN

Most the species are present year round. Critical habitat for steelhead (threatened, and peak spawning March-July). California red-legged frogs (breed Nov. - April), southwestern pond turtles, and tidewater gobies (peak nesting April - July) are known to be present in Arroyo Grande Creek lagoon immediately upstream from creek mouth (peak nesting April - July). Steelhead migrate through creek between tide line and Arroyo Grande Creek lagoon to reach spawning grounds upstream during winter or early spring when heavy rains produce high flows. NMFS as opined that vehicles crossing creek mouth are unlikely to injure steelhead because when steelhead are migrating the creek flows are generally too high to allow vehicle passage.

On the beach western snowy plovers (designated critical habitat) and least terns nest March-September. 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.

RESOURCES OF PRIMARY CONCERN

Estuary and riparian habitat at risk as well as beach.
Snowy plovers (threatened) are small, white and tan colored shore birds. Least terns (endangered) are small, gull-like, gray, white and black colored diving birds. Snowy plovers tend to nest in the rack line of the high-high tide, while least terns generally tend to nest in dune areas slightly farther from the shoreline. Nests are usually constructed on loose sand, and are easily stepped on due to their very cryptic nature. Chicks are known to run between nests and the waterline thereby potentially becoming oiled by floating, or stranded product. Chicks and eggs are vulnerable to oil transfer from adults.

Snowy plover adults forage while wadding along the shoreline. Least tern adults dive into the water to forage in shallow, nearshore areas of the open coast, embayments, estuaries, and dune lakes.

The Pismo Lake Natural Reserve is habitat to over-wintering species such as sandpipers and permanent residents such as snowy plovers (threatened), herons, egrets, rails, grebes, dabbling ducks, and diving ducks.

This beach provides habitat for the Pismo Clam

CULTURAL, HISTORIC, and ARCHEOLOGICAL SENSITIVITIES

This area is also an archaeological concerns. 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
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
T	Elizabeth Petras Biologist	National Marine Fisheries Service	(562) 980-3238
C	SHPO	State Office of Historic Preservation	(916) 445-7000
T/E	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
734 D-1 San Luis Obispo	Pt. Sur to Pt. Conception 18700	35.1054	120.63083

Last Page Update : 5/1/2014

CONCERNS and ADVICE to RESPONDERS:

Fish Disturbance - Steelhead (critical habitat) peak spawning March - July. Steelhead migrate through creek between tide line and Arroyo Grande Creek lagoon to reach spawning grounds upstream during winter or early spring when heavy rains produce high flows. NMFS as opined that vehicles crossing creek mouth are unlikely to injure steelhead because when steelhead are migrating the creek flows are generally too high to allow vehicle passage. If creek conditions allow, boom deployment and recovery will 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.

Tidewater gobies (endangered) are also known to be present in Arroyo Grande Creek lagoon immediately upstream from creek mouth (peak nesting 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 to avoid crushing tidewater goby burrows when possible. If supplemental water is used to flush recommend gradually increasing the intensity/volume during the flush.

PRIMARY PLOVER/TERN 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/TERN 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:
Wave washover - May carry oil over natural berm into the lagoon during extreme onshore and tidal conditions.

Oil Burial - Wind drift and sand may bury beached oil.

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

Wetland Habitat – Mud flats are 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 and marshy areas of wetlands and waterways whenever possible.

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.

This is the only creek in SLO County with a flood control device. This creek has two flap gates, the first by Oceano Lagoon and the second is upstream across the channel. These gates are automatic gravity flap gates which automatically shut if water comes in. Contact County Flood Control (805) 781-5252.

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:
State Park, high recreational use.

SITE STRATEGIES

Strategy 4-425.1 Objective: Exclude oil from creek with berming or sandbags.

Ta When creek 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. Opening can be large (600-700 ft.) and beach is low and flat. Avoid taking sand from vegetated dunes 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 4-425.2 Objective: Exclude oil from creek with boom.

When creek mouth is block entrance with a short skirted containment boom at appropriate angle for swift currents and changing tidal influences. When suitable berm materials are unavailable and/or when tidal flows, waterflows, or water depths are too great for berming install exclusion and protective booms near mouth of Inlet/lagoon using short skirted boom and snare boom. Install boom in a configuration/angle which blocks channel and diverts oil to a collection point. If needed, line river/stream bank, rip-rap, side channels, 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 4-425.3 Objective: Exclude oil from creek with fencing.

When creek 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 creek 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 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 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
4-425.1								1	SSS			Backhoe or sandbags, piping, plastic sheeting	6	
4-425.2		300			2			1	SSS				4	
4-425.3			300 FF					1	SSS			Excelsior fencing, metal stakes	4	

LOGISTICS

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

From the south: Take Hwy 101 N to Grand Ave. exit in Arroyo Grande; to Pacific Blvd. (Hwy 1), turn left (south) approx. 1 mile to Pier Ave., turn right onto Pier Ave. to southern beach access (Grand Ave. is northern beach access). Can drive on the beach in this location. Arroyo Grande Creek is approx. 1/2 mile south on beach.
From the north: Take Hwy 101 S to Grand Ave. exit in Arroyo Grande, turn right (west) approx. 3 miles to Pacific Blvd. (Hwy 1), turn left (south) approx. 1 mile to Pier Ave., turn right onto Pier Ave. to southern beach access (Grand Ave. is northern beach access). Can drive on the beach in this location. Arroyo Grande Creek is approx. 1/2 mile south on beach.

LAND ACCESS: Vehicle/heavy equip. access Pier Ave. or Grand Ave.

WATER LOGISTICS:

Limitations: depth, obstruction

Launching, Loading, Docking and Services Available: Port San Luis approx. 15 miles North.

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

Staging Area: State Beach parking lot at Grand Ave. or Pier Ave. beach entrance.
Command Post: State Parks Ranger Station, 928 Pacific Blvd (HWY 1; approx. 1/2 mi north of Pier Ave; between Pier Ave and Grand Ave), Oceano, 805-473-7220.
Airports: SLO County Airport, approx. 15 min. north.

COMMUNICATIONS PROBLEMS:

ADDITIONAL OPERATIONAL COMMENTS:


Meadow Creek
Arroyo Grande Creek
4-425.2
4-425.1
0
500
1,000
2,000
Feet
N
CDFW - OSPR & USCG Site: 4-425 Name: Arroyo Grande Creek 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