

Figure 1: GRA 2 Environmental Sensitive Sites + Operational Divisions Overview

ACP 1 – Humboldt	Co	untv
-------------------------	----	------

9810 Humboldt County (GRA 2)	3
9810.1 Geographic Response Strategies for Environmental Sensitive Sites	4
9810.1.1 GRA 2 Site Index	4
9810.2 Response Summary Tables	75
9810.3 Lists of Economic Resources Susceptible to Oiling	78
igure 1: GRA 2 Environmental Sensitive Sites + Operational Divisions Overvie	ew 1

9810 Humboldt County (GRA 2)

Humboldt County's GRA 2 shoreline extends from the Del Norte County border near Carruthers Cove in Redwood National and State Parks for approximately 110 miles to the Mendocino County border three miles south of Shelter Cove. There are 21 Environmental Sensitive Sites in Humboldt County's GRA 2. Humboldt County GRA 2's variable shoreline is mostly a mix of nearshore and offshore rocks, exposed rocky shore and headlands, wave-cut platforms, fine to medium-grained sand beaches, coarse-grained sand beaches, mixed sand and gravel beaches, gravel beaches and much of it is rugged and inaccessible. There are also several large coastal estuaries and lagoons with sheltered tidal flats, salt- and brackish-water marshes and vegetated low banks, the largest being the Eel River estuary. Many sites in GRA 2 are very remote and have no onsite response strategies but this does not preclude their environmental sensitivity and inclusion in ACP 1.

9810.1 Geographic Response Strategies for Environmental Sensitive Sites

9810.1.1 GRA 2 Site Index

Site #	Site Name	Page #
1-205	Gold Bluffs Beach	5
1-210	Redding Rock	8
1-215	Redwood Creek	11
1-220	Stone Lagoon	14
1-230	Big Lagoon	17
1-235	Sue-Meg State Park to Trinidad Head	21
1-240	Trinidad Bay and McConnahas Mill Creek	24
1-245	Little River Estuary	27
1-250	Clam Beach	31
1-255	Mad River Estuary	34
1-260	Eel River Estuary	38
1-265	Centerville Beach	43
1-268	False Cape Rock	46
1-270	Bear River	49
1-273	Cape Mendocino	52
1-275	Steamboat Rock	55
1-279	Hair Seal Rock	58
1-285	Mattole River	61
1-290	Cooskie Creek	66
1-294	Shubrick Peak	69
1-298	Shelter Cove and Cormorant Hotel	72

1-205-A Site Summary - Gold Bluffs Beach 1-205-A

County: Humboldt ACP Division/Segment: HM - A - S02 HM - A - S01

NOAA Chart: 18600 **Map Book:** CA Road Atlas **Decimal Degrees:** 41.38904 -124.07058

Site Description:

Gold Bluffs Beach is within Prairie Creek Redwoods State Park. This park, along with Del Norte Coast, Jedediah Smith, and the National Park Service's Redwood National Park, are managed cooperatively by the National Park Service and the California Department of Parks and Recreation. Offshore rocks within 0.25 miles of shoreline are managed by National Park Service (Redwood National Park). Gold Bluffs Beach is a pristine public beach that stretches from Carruthers Cove at the north end to Mussel Point in the south. The area is mostly comprized of wide sandy beaches where oil clean up would be fairly straight forward. Espa Lagoon is located here, but far enough from the beach that impacts are unlikely. There is a beach road and considerable large woody debris between the beach and lagoon.

This is a popular camping and hiking destination with lots of public use in the dry months. Commercial fishermen fish the beach for night and surf smelt and redtail surfperch. Sensitive dunes and pocket dune wetlands.

Western snowy plover (FT, SSC)(01-12), nesting (03-09), marbled murrelet (FT, SE)(01-12) forage in nearshore waters, California brown pelicans, Caspian terns, and various gulls loaf on the beach. Peregrine falcons nest on bluffs, Canada geese (01-12), nest in ponds and lagoons along the beach, especially near Ossagon Rock. Haulout area for harbor seals, particularly pups (05-07). The back dunes provide grazing opportunities (01-12) and primary calving area for Roosevelt elk. Coastal cutthroat trout (SSC) in tributaries and lagoons along the beach, surfperch spawn (4-6), surf smelt spawn (5-7). Although usually not in large numbers, salmonids including coho (FT,ST) and chinook (FT) salmon, steelhead (FT), and coastal cutthroat trout (SSC) often forage in the nearshore environment and can be impacted by oiling. Plants of concern if heavy equipment is used include pink sand verbena, Wolf's evening primrose (both CNPS List 1B.1) and other sensitive native dune vegetation in restoration areas. Western bumble bee.

Resources at Risk:

ESI and Habitat: 3A Fine- to medium-grained sand beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Birds	common loon	FP, SSC	Year-round	
Birds	bald eagle	FP, SE	Year-round	
Birds	peregrine falcon	FP, SP	Year-round	Mar-Sep
Fish	salmonids		Year-round	
Mammals	pinnipeds	FP	Year-round	May-Jul
Plants	pink sand verbena		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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Redwood National and State Parks	(707) 464-6101
0	/Supervisor Ranger (24hr)	NORCOM State Parks Dispatch	(916) 358-1300
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201
Т	/	Yurok Tribal Office, Klamath	(707) 482-1350

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

1-205-A Site Summary - Gold Bluffs Beach

1-205-A

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

This is an important public recreational area that can be difficult to access in winter when the single lane dirt road becomes tricky to drive on. Oil cleanup from the sandy beaches would require either heavy earth moving equipment or lots of laborers to pick up stranded oil. Any activity would need to be coordinated with the Redwood National & State Parks to avoid conflicts with wildlife or park users. Large woody debris accumulated at the mouth of Espa Lagoon may need to be addressed. Several small streams including Ossagon, Home, Squashan, Espa, and Major Creeks may require some boom seasonally to prevent oil from coming inland.

Hazard and Restrictions:

The road from Hwy 101 to the beach is narrow, winding, and mostly unpaved. This road may have closures due to wash outs, flooding, and/or slides. Redwood National & State Parks should be able to advise. Beach access in winter is limited south of Major Creek. Cow elk can be aggressive during calving season (05-07) along the coastal trail.

Site Strategies: Site Validation Level: ||

Strategy: 1-205.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* This site is best protected by preventing the oil from arriving here, when possible. Off-site response options including dispersants should be considered.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, go north on Hwy 101 for 46-miles and turn left on Davidson Road at M.P. 123.82. Go west to Gold Bluffs Beach. The road to the beach is unpaved for 3.2 miles.

Land Access: Davidson Rd may require 4WD or may be closed in wet season. Foot trails also.

On-Water Limitations:

Facilities, Staging Areas, Command Posts, Available Equipment: There are camping areas inside of the park which could serve as staging areas for local beach response purposes.

Communications Problems: Remote, limited communications

Additional Operational Comments: Locked gates to beach.

1-205-A

1-210-A Site Summary - Redding Rock 1-210-A

County: Humboldt ACP Division/Segment: HM - A - S03

NOAA Chart: 18600 Map Book: CA Road Atlas Decimal Degrees: 41.34064 -124.17849

Site Description:

Redding Rock (also known as Reading Rock) is managed as part of the California Coastal National Monument by the Bureau of Land Management. Site is adjacent to the following State Marine Protected Area(s): Redding Rock SMR. Redding Rock is a large offshore rock that is 7-miles west northwest of Orick and 5 miles offshore.

The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. Seabirds include common murre, Brandt's cormorant, Western gull, pigeon guillemot. Marbled murrelet (FT,SE) may forage nearby. Steller's sea lion (01-12) in low numbers, groundfish (EFH).

Resources at Risk:

ESI and Habitat: 1A Exposed Rocky Shore

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	bird rookeries		Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Mammals	Steller sea lion	FP	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
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Redwood National and State Parks	(707) 464-6101
0	/Supervisor Ranger (24hr)	NORCOM State Parks Dispatch	(916) 358-1300
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201
T	1	Yurok Tribal Office, Klamath	(707) 482-1350

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

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The offshore rocks have cultural significance for local tribes. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

Overflights and response vessels should give this rock a wide berth to avoid flushing birds and marine mammals from off the rock. The rugged coastline will prevent onshore response over most of this area. Offsite measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Offshore rock with steep sides. Seas can be dangerous. Extreme currents, high energy shoreline. Other offshore rocks in area.

Site Strategies:

Site Validation Level: II

Strategy: 1-210.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* The site is 5 miles from the mainland and the ocean currents and waves can be large and unpredictable. This site is best protected by preventing the oil from arriving here, when possible. Off-site response options including dispersants should be considered.

Table of Response Resources

Last Page Update

Logistics:

Directions: No access. Rock lies approximately 5-miles offshore. Boat access limited due to steep sides. Survey area by helicopter.

Land Access: None

On-Water Limitations: Vessels are discouraged from landing response personnel on this rock.

Facilities, Staging Areas, Command Posts, Available Equipment: The nearest staging area in on the mainland at the Redwood National & State Park's Thomas H. Kuchel Visitor Center near Redwood Creek or at their South Operations Center (SOC) in Orick.

Communications Problems: Remote, limited communications

Additional Operational Comments: Offshore rocks can contain copious amounts of seabird guano. APR, gloves, and Tyvex suits are recommended for personnel that must land on Redding Rock.



1-215-A Site Summary - Redwood Creek 1-215-A

County: Humboldt ACP Division/Segment: HM - B - S01

NOAA Chart: 18600 **Map Book:** CA Road Atlas **Decimal Degrees:** 41.29234 -124.09198

Site Description:

Redwood Creek is managed by the National Park Service as part of Redwood National and State Parks. Site is adjacent to the following State Marine Protected Area(s): Redding Rock SMCA. The mouth of Redwood creek forms a small estuary that can be open to tidal influence during high creek flows. The associated wetlands are highly sensitive to oiling. The response site extends from the mouth of the creek to the upper end of tidal influence within the estuary. There is considerable large woody debris on the north side of the estuary and on the beach north to Mussel Point. There is an armored levee upstream of the mouth to prevent flooding in the area which modifies hydrology of the creek mouth, oxbow and estuary. The shoreline at the mouth of the creek provides haulout habitat for marine mammals and is also a popular spot for fishing during salmonid migrations. This is an important location for commercial fishermen targeting day/night fish and surf perch. Fine to medium-grained sandy beach and estuary with brackish and freshwater marsh habitat.

Shorebirds, waterbirds, seabirds, raptors can be found here year-round including: bald eagle (SE), peregrine falcon, and osprey. Western snowy plover (FT,SSC)(01-12)-nesting period (04-07), California brown pelican (04-11), marbled murrelet (FT,SE)(01-12) feed in open waters. This is a popular haulout area for marine mammals when the mouth is open to tidal influence. River otters and mink present. Fish include anadromous salmonids: coho (FT,ST) and chinook (FT) salmon, steelhead (FT) and coast cutthroat (SSC) trout - spawning runs (08-06)- juveniles/smolts (02-11). Eulachon (FT,SSC), Pacific lamprey (SSC), tidewater goby (FE). Northern red-legged frog (SSC) in nearby wetlands. Plants of concern if heavy equipment is used include beach layia (FE, SE), seaside pea (CNPS List 2.1), pink sand verbena and Wolf's evening primrose (both CNPS List 1B.1).

Resources at Risk:

ESI and Habitat: 10A Salt - and brackish-water marshes

10B Freshwater marshes

3A Fine- to medium-grained sand beaches

5 Mixed sand and gravel beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	marbled murrelet	FT, SE	Year-round	
Birds	Western snowy plover	FT, SSC	Year-round	Apr-Sep
Birds	common loon	FP, SSC	Year-round	
Fish	salmonids		Year-round	
Fish	eulachon	FT	Year-round	
Fish	Pacific lamprey	SSC	Year-round	
Mammals	pinnipeds	FP	Year-round	
Plants	sensitive plant community		Year-round	
Fish Fish Fish Mammals	salmonids eulachon Pacific lamprey pinnipeds sensitive plant community	FT SSC	Year-round Year-round Year-round 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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Ε	/	Redwood National and State Parks	(707) 464-6101
0	/Supervisor Ranger (24hr)	NORCOM State Parks Dispatch	(916) 358-1300
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201
Т	/	Yurok Tribal Office, Klamath	(707) 482-1350

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

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

Oiling of estuary could cause long term damage to sensitive wetlands and important habitats. Contact Redwood National & State Parks for guidance prior to initiating any response due to listed species in area and limited access. Consider booming the confluence of Redwood Creek and South Slough/Strawberry Creek for additional habitat protection if time allows.

Hazard and Restrictions:

Heavy winter runoff may complicate boom strategy. Armored levee may complicate booming strategy.

Site Strategies:

Site Validation Level: II

Strategy: 1-215.1 Objective: Arrest oil spread near the mouth of Redwood Creek on an incoming tide. **Strategy:** Place boom across the channel from the north bank to the south bank to direct incoming oil to a suitable collection site.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	2000 feet		
Staff	Staff to Deploy		6	
Staff	Staff to Tend		4	

Strategy: 1-215.2 **Objective:** Shoreline Pre-Clean: Resource Specialist Supervision Required Strategy: Send in hand crews or heavy equipment to move large woody debris to high ground on the beach and out of the path of oil before it arrives. The number of workers required will be determined by the amount of debris on the beach.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, go north on Hwy 101 for 40-miles, go past Freshwater lagoon and make a left turn following the signs to the Thomas H. Kuchel Visitor Center of the Redwood National & State Parks. The mouth of Redwood Creek is a short walk north of the visitor center. Access to the north of the estuary: continue N. on Hwy 101, cross the Redwood Creek bridge, turn L on Hufford Rd, follow Hufford Rd and Fishing Access signs to single lane dirt road along north levee with parking lot at end. Bridge limit 12 tons. Primitive boat launch here behind locked gate. Dirt road access to south levee behind locked gate.

Land Access: Locked gate access to the beach at Visitor Center

On-Water Limitations: Primitive small boat launch at end of north side levee behind locked gate (contact Redwood National & State Parks). Access from end of Hufford Rd.

Facilities, Staging Areas, Command Posts, Available Equipment: The Park's visitor center & parking lot could be used to provide the best large scale staging area between Eureka & Crescent City. Phones and restrooms are available in the center, and fuel, a small grocery store can be found just north on HWY 101 in the town of Orick. Lodging is very limited. Redwood National & State Parks Southern Operations Center (SOC) could also be used for local staging.

Communications Problems: Remote, limited communications

Additional Operational Comments: For Redwood Creek flow gauge information see: https://waterdata.usqs.gov/monitoring-location/11482500/#parameterCode=00065&period=P7D

v. 2022.1 - July 2023



1-220-A Site Summary - Stone Lagoon 1-220-A

County: Humboldt ACP Division/Segment: HM - B - S02

NOAA Chart: 18600 **Map Book:** CA Road Atlas **Decimal Degrees:** 41.24375 -124.09448

Site Description:

Stone Lagoon is managed by State Parks as part of Humboldt Lagoons State Park. Coastal lagoon with freshwater marsh. Separated from the ocean by a fine- to medium-grained sand beach. Infrequently open to the ocean, the lagoon typically breaches at the southern end of the mile long coastal sand spit following large rain events in combination with heavy surf and becomes more brackish and tidally influenced until the sandbar closes. The lagoon provides habitat for salmonids and fish passages are common when the mouth is open. The spit is fine- to medium-grained sands, lagoon is brackish and freshwater marsh and wetlands with marsh vegetation fringing the interior.

Shorebirds, seabirds, waterfowl, loons, grebes. Marbled murrelet (FT,SE) forage offshore. Raptors include bald eagle (SE), peregrine falcon, osprey; all (01-12), golden eagle. California brown pelican (04-11). Western snowy plover (FT,SSC)(01-12) - nesting period (04-08): nests directly on sand within dunes and site includes FWS Critical Habitat - sand dunes between the ocean and lagoon. Marine mammals including harbor seals feed in surf and nearshore, river otters in lagoon. Anadromous salmonids include coho (FT,ST) and chinook (FT) salmon, steelhead (FT), and coastal cutthroat (SSC) trout: spawning runs (08-06) when lagoon breaches; juveniles/smolts (01-12). Tidewater goby (FE)(01-12), FWS Critical Habitat. Humboldt Bay owl's clover (CNPS List 1B.2) and pink sand-verbena (1B.1) on beach, deceiving sedge (1B.2) and lagoon sedge (2B.2) in lagoon's marsh habitat.

Resources at Risk:

ESI and Habitat: 3A Fine- to medium-grained sand beaches

10A Salt - and brackish-water marshes

10B Freshwater marshes

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Birds	common loon	FP, SSC	Year-round	
Birds	raptors		Year-round	
Fish	tidewater goby	FE, SSC	Year-round	
Fish	salmonids		Year-round	
Mammals	pinnipeds	FP	Year-round	
Plants	sensitive plant community		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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
0	/Supervisor Ranger (24hr)	NORCOM State Parks Dispatch	(916) 358-1300
Т	/	California State Parks North Coast District	(707) 445-6547
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201
Т	/	Yurok Tribal Office, Klamath	(707) 482-1350

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

1-220-A Site Summary - Stone Lagoon

1-220-A

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

It is unlikely that oil will ever reach this lagoon when the mouth is closed unless there is extremely high tides and surf. Response at the site under these conditions should probably not be attempted from anywhere near the sand spit where large waves could disrupt response activities. The primary concern is oil entering from the ocean and spreading across the lagoon with the tide which would pose cleanup problems and exposure to wildlife, fish, and vegetation in the lagoon. The intent is to control and collect oil near the berm entry point(s). A secondary concern is disturbance of western snowy plover on the sand spit by responders.

Hazard and Restrictions:

Current through the breach site can be dangerous when the lagoon is open to the ocean and the waves on the beach can be dangerous in high surf events.

Site Strategies: Site Validation Level: ||

Strategy: 1-220.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Conventional on-scene response is not possible at this site. Protect with off-site response measures only.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, go north on Hwy 101 37-miles. Hwy 101 skirts the east side of the lagoon and access points are visible just off the highway. A narrow coastal access road is available on the north end of the lagoon. Parking is available at the visitor center and at the end of the coastal access road. 4WD access to the location where the lagoon generally breaches is possible from the parking lot at the end of the coastal access road. Skiffs may be launched at the visitor center.

Land Access: Locked Gates

On-Water Limitations: Water depths are shallow in much of the lagoon. A boat launch ramp near the visitor center is located along the highway.

Facilities, Staging Areas, Command Posts, Available Equipment: A small parking area suitable for local staging exists down a narrow road at the north end of the lagoon. No facilities or utilities are available there.

Communications Problems: Remote, limited communications

Additional Operational Comments:



1-230-A Site Summary - Big Lagoon 1-230-A

County: Humboldt ACP Division/Segment: HM - C - S02

NOAA Chart: 18600 **Map Book:** CA Road Atlas **Decimal Degrees:** 41.17485 -124.11788

Site Description:

This site includes Big Lagoon from the shoreline to Hwy 101. The sand spit and surrounding forest is managed by State Parks as part of Humboldt Lagoons State Park. The lagoon itself is managed by CDFW as Big Lagoon Wildlife Area. The campgound and boat launch at the south end is Big Lagoon County Park. The lagoon is separated from the ocean by a two mile sand spit with vegetated dunes. The sand spit opens to the ocean seasonally at the north end following heavy winter winter rains and becomes more brackish and under tidal influence until the sandbar closes. The spit is fine- to medium-grained sands, lagoon is brackish and freshwater marsh and wetlands with marsh vegetation fringing the interior. The lagoon provides habitat for a diversity of wildlife and fish including salmonids and fish passages are common when the mouth is open.

Shorebirds, seabirds, waterfowl, loons, grebes. Marbled murrelet (FT,SE) forage offshore. Raptors include bald eagle (SE), peregrine falcon, osprey; all (01-12), golden eagle. California brown pelican (04-11). Western snowy plover (FT,SSC)(01-12) - nesting period (04-08): nests directly on sand within dunes and site includes FWS Critical Habitat - sand dunes between the ocean and lagoon. Marine mammals including harbor seals feed in surf and nearshore, river otters in lagoon. Anadromous salmonids include coho (FT,ST) and chinook (FT) salmon, steelhead (FT) and coastal cutthroat (SSC) trout: spawning runs (08-06) when lagoon breaches; juveniles/smolts (01-12). Green sturgeon (FT,SSC), Pacific lamprey (SSC), tidewater goby (FE)(01-12): FWS Critical Habitat. Foothill yellow-legged and northern red-legged frogs (both SSC) near interior marsh. Humboldt Bay owl's clover (CNPS List 1B.2), pink sand-verbena (1B.1) and other sensitive dune vegetation on beach, deceiving sedge (1B.2) and lagoon sedge (2B.2) in lagoon's interior marsh habitat.

Resources at Risk:

ESI and Habitat: 3A Fine- to medium-grained sand beaches

10A Salt - and brackish-water marshes

10B Freshwater marshes

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	marbled murrelet	FT, SE	Year-round	
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Sep
Birds	raptors		Year-round	
Fish	salmonids		Year-round	
Fish	tidewater goby	FE, SSC	Year-round	
Fish	eulachon	FT	Year-round	
Fish	Pacific lamprey	SSC	Year-round	
Plants	sensitive plant community		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:

Туре	Name/Title	Organization	Phone
С	/Office	Big Lagoon Rancheria	(707) 826-2079
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
0	/Supervisor Ranger (24hr)	NORCOM State Parks Dispatch	(916) 358-1300
Т	/	California Department of Fish & Wildlife, Eureka	(707) 445-6493
Т	/	California State Parks North Coast District	(707) 445-6547
Т	/	Humboldt County Parks	(707) 445-7651
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201
Т	/	Yurok Tribal Office, Klamath	(707) 482-1350

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

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

It is unlikely that oil will ever reach this lagoon when the mouth is closed unless there is extremely high tides and surf. Response at the site under these conditions should probably not be attempted from anywhere near the sand spit where large waves could disrupt response activities. The primary concern is oil entering from the ocean and spreading across the lagoon with the tide which would pose cleanup problems and exposure to wildlife, fish, and vegetation in the lagoon. The intent is to control and collect oil near the berm entry point(s). A secondary concern is disturbance of western snowy plover on the sand spit by responders.

Hazard and Restrictions:

Current through the breach site can be dangerous when the lagoon is open to the ocean and the waves on the beach can be dangerous in high surf events.

Site Strategies: Site Validation Level: ||

Strategy: 1-230.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Conventional on-scene response is not possible at this site. Protect with off-site response measures only.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, go north on Hwy 101 30-miles. Turn left onto Big Lagoon Park Road M.P. 108.250. Go 0.3 mile and turn right on Big Lagoon Park Rd. Follow the signs to the county park. Multiple access points are also available by foot from Hwy 101 on the east side of lagoon. Access to the north end of lagoon where breaching occurs is possible only by traversing the beach from south end (about 2 miles) or from Dry Lagoon parking lot at the north end.

Land Access: Locked gates, with ATV access w/o a key.

On-Water Limitations: There is a small boat ramp at Big Lagoon County Park on the south end of the lagoon.

Facilities, Staging Areas, Command Posts, Available Equipment: The parking area next to the boat ramp could be used to stage equipment for a medium sized event in the area. There are public restrooms and a campground in the park, but no fuel or food concessions on site. These supplies can be found south on Hwy 101 in Trinidad.

Communications Problems: Remote, limited communications

Additional Operational Comments: Consider booming Maple Creek at the Highway 101 bridge if oil threatens the upstream marsh.



1-235-A Site Summary - Sue-Meg State Park to Trinidad Head

1-235-A

County: Humboldt **ACP Division/Segment:** HM - C - S04 HM - D - S01 HM - D - S02 HM - D - S03 **NOAA Chart:** 18600 **Map Book:** CA Road Atlas **Decimal Degrees:** 41.09985 -124.16788

NOAA Chart: 18600 **Site Description:**

This steep and rugged coastline is managed in part by State Parks at Sue-Meg State Park (formerly Patrick's Point SP) and Trinidad State Beach, BLM at Trinidad Head and much is in private ownership. Offshore rocks are included in BLM's California Coastal National Monument. This is a very popular recreational and commercial fishing area for groundfish and salmon. Predominantly wave-cut platforms backed by gravel beaches. Pockets of fine- to medium-grained sand beaches. Exposed rock cliffs and many offshore rocks.

Large seabird colonies offshore (01-12), serve as rookeries (03-09); 2004 COMU Estimates: Green Rock-24,000; Flatiron Rock-30,000; Pilot Rock-1300; White Rock-2800; Pelagic and Brandt's cormorants ~2,000 (2002). Pigeon guillemots, Cassin's auklet (SSC), Western gull, black oystercatcher, fork-tailed storm petrel (SSC), rhinoceros auklet, and tufted puffin (SSC) also present, marbled murrelet (FT,SE) forage offshore. River otters, harbor seals, California sea lions throughout area. Juvenile rockfish nursery habitat. Anadromous coastal cutthroat trout (01-12) and steelhead may be present in coastal streams throughout area when streams flow to ocean with winter precipitation; although usually not in large numbers, salmonids including coho (FT,ST) and chinook (FT) salmon, steelhead (FT), and coastal cutthroat trout (SSC) often forage in the nearshore environment and can be impacted by oiling; groundfish (EFH).

Resources at Risk:

ESI and Habitat: 1A Exposed Rocky Shore

6A Gravel Beach

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

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	tufted puffin	FP, SSC	Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Birds	fork-tailed storm petrel	FP, SSC	Year-round	Mar-Sep
Birds	common loon	FP, SSC	Year-round	
Birds	raptors		Year-round	
Birds	Cassin's auklet	FP, SSC	Year-round	Mar-Sep
Fish	salmonids		Year-round	
Mammals	pinnipeds	FP	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			
С	/Coordinator	Native American Heritage Commission	(916) 373-3710			
С	/Coordinator	Northwest Information Center	(707) 588-8455			
Ε	/	Humboldt County Sheriff	(707) 445-7251			
0	/	Cal Poly Humboldt Marine Lab	(707) 826-3671			
Ο	/	City of Trinidad	(707) 677-0223			
0	/Supervisor Ranger (24hr)	NORCOM State Parks Dispatch	(916) 358-1300			
Т	/	Bureau of Land Management	(707) 825-2300			
Т	/	California State Parks North Coast District	(707) 445-6547			
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201			
Т	/	Trinidad Rancheria	(707) 677-0211			
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201			
Τ	/	Yurok Tribal Office, Klamath	(707) 482-1350			

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

1-235-A Site Summary - Sue-Meg State Park to Trinidad Head

1-235-A

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

Seawater intakes for the HSU Marine laboratory are in the area.

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Extreme current, high energy shoreline, offshore rocks. Beaches may be steep at times.

Site Strategies:

Site Validation Level: II

Strategy: 1-235.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Protect with off-site response measures only. This site is best protected by preventing the oil from arriving here, when possible. Off-site response options including dispersants should be considered. Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, go north on Hwy 101. Take Patricks Point Dr Exit 734 onto Patricks Point Drive. Parking and access available at several locations within park. Trinidad State Beach is south off Hwy 101: take the main Trinidad Exit 728. Turn west onto Main Street, then right onto Stagecoach Road, then left toward beach access. For Trinidad Head and south end of Trinidad State Beach: from Main Street turn left Trinity St then right onto Edwards Street downhill to the beach parking area at the end.

Land Access: Most beach areas are accessible by foot trail only.

On-Water Limitations: Offshore response only. There is a small lauch facility at Trinidad Pier and beach launch adjacent. Facilities, Staging Areas, Command Posts, Available Equipment: There are camping and day use areas inside of the park which could serve as staging areas for local beach response purposes.

Communications Problems:

1-235-A



1-240-A Site Summary - Trinidad Bay and McConnahas Mill Creek 1-240-A

County: Humboldt **ACP Division/Segment:** HM - D - S03

NOAA Chart: 18600 **Map Book:** CA Road Atlas **Decimal Degrees:** 41.05494 -124.13872

Site Description:

This site includes the steep and rugged coastline at Trinidad Head and the shoreline of the protected harbor to the south. Trinidad Pier and launch facility are managed by Trinidad Rancheria, Trinidad Head is managed by BLM. Offshore rocks are included in BLM's California Coastal National Monument. Private properties present as well. Minor tidal inlet at McConnahas Mill Creek. Offshore rocks, rocky headlands, fine- to medium-grained sand beaches, gravel beaches.

Seabird colonies throughout area (01-12), rocks serve as rookeries (03-09). See site 1-235-A for more species in area. California brown pelican (04-11), common loon (SSC), common murre, double-crested cormorant (01-12), fork-tailed storm-petrel (SSC), marbled murrelet (FT,SE), tufted puffin (SSC). River otters, harbor seals, California and Steller sea lions, porpoises. Anadromous salmonids coastal cutthroat trout and steelhead may be present and in coastal streams throughout area. Although usually not in large numbers, salmonids including coho (FT,ST) and chinook (FT) salmon, steelhead (FT), and coastal cutthroat trout (SSC) often forage in the nearshore environment and can be impacted by oiling. Longfin smelt (ST), nursery habitat for juvenile rockfish (01-12), surfperch spawning (04-06), surfsmelt and nightsmelt spawning in area; groundfish (EFH).

Resources at Risk:

ESI and Habitat: 1A Exposed Rocky Shore

3A Fine- to medium-grained sand beaches

5 Mixed sand and gravel beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	marbled murrelet	FT, SE	Year-round	
Birds	tufted puffin	FP, SSC	Year-round	Mar-Sep
Birds	fork-tailed storm petrel	FP, SSC	Year-round	Mar-Sep
Birds	common loon	FP, SSC	Year-round	
Birds	Cassin's auklet	FP, SSC	Year-round	Mar-Sep
Fish	salmonids		Year-round	
Fish	longfin smelt	ST	Year-round	
Mammals	pinnipeds	FP	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
0	/	Cal Poly Humboldt Marine Lab	(707) 826-3671
0	/	City of Trinidad	(707) 677-0223
Τ	/	Bureau of Land Management	(707) 825-2300
Τ	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Τ	/	Trinidad Rancheria	(707) 677-0211
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201
Т	/	Yurok Tribal Office, Klamath	(707) 482-1350

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

1-240-A Site Summary - Trinidad Bay and McConnahas Mill Creek

1-240-A

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

Seawater intakes for the HSU Marine laboratory are in the area.

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Scenic Drive may be closed or have slides and washouts either blocking or reducing the two lane road to one lane. Caution should be taken when driving this road at all times as some turns are blind.

Site Strategies: Site Validation Level: ||

Strategy: 1-240.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Conventional on-scene response is not possible at this site. Protect with off-site response measures only.

Table of Response Resources

Last Page Update

Logistics:

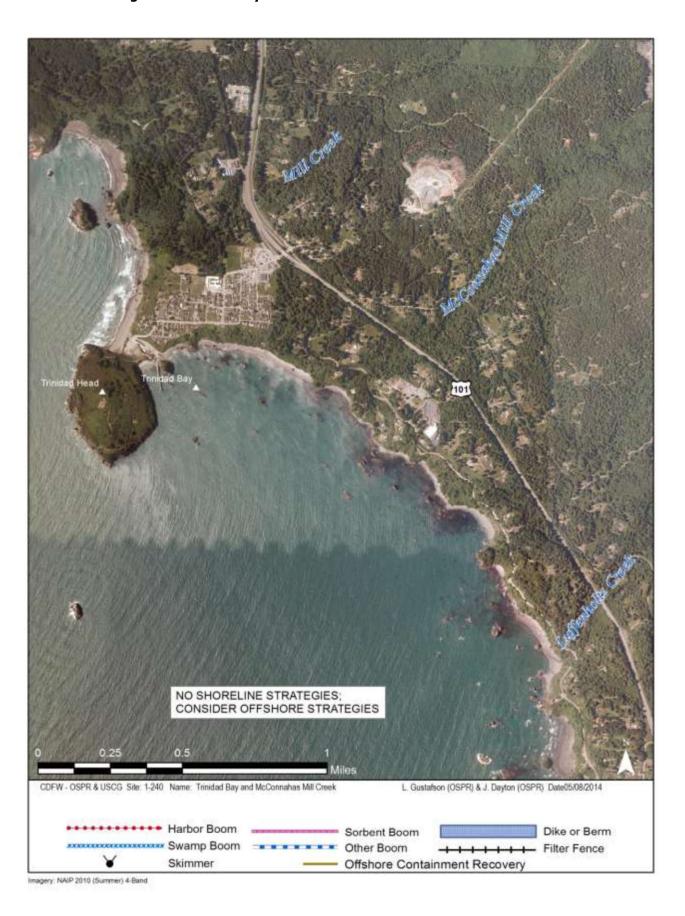
Directions: From Eureka, go north on Hwy 101. Take the Trinidad Exit 728 and turn left onto Main Street. Turn left again (Road next to Salty's) onto Scenic Drive. Various access points along this road from footpaths. Launching facilities and shoreline access are available at Trinidad Harbor. To reach the harbor, continue on Main Street and turn left onto Trinity Street then right onto Edwards Street and follow to end. The harbor is east of the parking area.

Land Access: Access to local beaches by ATV, or footpaths.

On-Water Limitations: Hoist available for boats, skiffs may be launched from the beach.

Facilities, Staging Areas, Command Posts, Available Equipment: The harbor has a marine railroad for launching vessel up to 5000 lbs. and up to 26' in length. There is also a small launch on the beach nearby. There is ample room for staging large amounts of equipment in the general harbor area. Food services, limited lodging, and fuel are available in the area. Water, public phones, bathrooms, and electricity may be available for emergency response use.

Communications Problems:



1-245-A Site Summary - Little River Estuary 1-245-A

County: Humboldt ACP Division/Segment: HM - E - S01

NOAA Chart: 18600 Map Book: CA Road Atlas Decimal Degrees: 41.01655 -124.10948

Site Description:

This area is managed by State Parks as Little River State Beach and the adjacent Moonstone Beach managed by Humboldt County Parks. Moonstone Beach is a popular public beach and surfing spot. Little River has a tidal inlet and marsh between the shoreline and Highway 101. It has a fine- to medium-grain sand beach with a large exposed tidal flat at lower tides. Western snowy plover are active in the area.

Seabirds near site include double-crested cormorant, rhinocerous auklet, fork-tailed storm-petral (SSC), tufted puffin (SSC). Shorebirds include western snowy plover (FT)(01-12): FWS Critical Habitat, nesting period (03-09). Nests directly on sand within dunes. Bank swallow (ST). Anadromous salmonids: coho (FT,ST) and chinook (FT) salmon, steelhead (FT), and coastal cutthroat (SSC) trout: spawning runs (08-06); juveniles/smolts (04-07). Pacific lamprey (SSC), surfperch (04-06). Western pond turtle (SSC) upstream in estuary. Sensitive plants in dunes include beach layia, pink sand verbena and Wolf's evening primrose (all CNPS 1B.1) and a marsh complex upstream in estuary.

Resources at Risk:

ESI and Habitat: 3A Fine- to medium-grained sand beaches

10A Salt - and brackish-water marshes

7 Exposed tidal flat

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Birds	bald eagle	FP, SE	Year-round	
Birds	common loon	FP, SSC	Year-round	
Fish	salmonids		Year-round	
Fish	Pacific lamprey	SSC	Year-round	
Plants	beach layia	FE, SE	Year-round	
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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Ε	/	Humboldt County Sheriff	(707) 445-7251
0	/Supervisor Ranger (24hr)	NORCOM State Parks Dispatch	(916) 358-1300
0	/	The Friends of the Dunes	(707) 444-1397
Т	/	California State Parks North Coast District	(707) 445-6547
Т	/	Humboldt County Parks	(707) 445-7651
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201
Т	/	Yurok Tribal Office, Klamath	(707) 482-1350

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

1-245-A Site Summary - Little River Estuary

1-245-A

Additional Site Summary Comments:

The access to this popular surf spot is directly against the booming response area. Western snowy plover utilize the beaches to the south of this site for nesting and foraging during the spring and summer. Contact State Parks for guidance prior to initiating response. The sandy beach from the river mouth south along Clam Beach is western snowy plover nesting habitat. Any responders working in this area should remain on the wet sand below the high tide line, (except at high tide) to minimize disruptions to plover nests and adults.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

Preventing oil from spreading into the upper end of the estuary on the flood tide is the primary goal of responding at this location. All response efforts will have to consider that this is the access point to one of the most popular surfing areas in Humboldt County and that western snowy plover may be present year round.

Hazard and Restrictions:

The mouth of the estuary has severe tidal currents that will make any booming efforts difficult if not impossible to do safely. Heavy winter flows may preclude response.

Site Strategies: Site Validation Level: ||

Strategy: 1-245.1 Objective: Exclusion of oil on an incoming tide during low river flows

Strategy: Exclude oil on an incoming tide during low river flows. Strand oil onto the southern spit using boom. Back up boom with oil sweep (SWP).

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Up
Boom	Harbor	700 feet		
Other Boom	Sweep	700 feet		
Anchor	Danforth	25 lb	4	
boat	Skiff		1	
Staff	Staff to Deploy		6	

Strategy: 1-245.2 Objective: Arrest incoming (heavy) oil with pom-pom snares

Strategy: Arrest incoming oil with pom-pom snares. Anchor strings of pom-poms across the entrance to capture incoming oil. Two or three strings should be sufficient.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Other Boom	Pom-pom	2100 feet		
Anchor	Danforth	25 lb	6	
boat	Skiff		1	
Staff	Staff to Deploy		5	
Staff	Staff to Tend		2	

Logistics:

Directions: From Eureka, go north on Hwy 101. Take Westhaven Drive Exit 726A, turn left under freeway and left again onto Scenic Drive, turn right onto Moonstone Beach Rd and follow downhill to beach parking area at end. The beach south of the river is accessible from Crannell Rd Exit 725.

Land Access: Easily accessed. Heavy equipment accessible

On-Water Limitations: Hand launching of skiffs may be possible

Facilities, Staging Areas, Command Posts, Available Equipment: The parking lot could serve as a staging area for local response equipment. There are no facilities or utilities for emergency response use, with exception of a dinner restaurant that may be open for business. Food and fuel are available a few miles north on Hwy 101 in Trinidad or a few miles south in McKinleyville.

Communications Problems:

Additional Operational Comments: For Little River flow gauge information see: https://waterdata.usgs.gov/monitoring-location/11481200/#parameterCode=00065&period=P7D

1-245-A



1-250-A Site Summary - Clam Beach 1-250-A

County: Humboldt ACP Division/Segment: HM - E - S01 HM - E - S02

NOAA Chart: 18600 **Map Book:** CA Road Atlas **Decimal Degrees:** 40.99985 -124.11788

Site Description:

This site begins at the mouth of the Little River and extends south to the mouth of the Mad River. Clam Beach is a popular public beach with a small campground managed by Humboldt County Parks. State Parks manages the north end as part of Little River State Beach. The beaches have fine- to medium-grained sand. Small tidal inlets at Strawberry and Patrick Creeks are present on the site.

Western snowy plovers (FT) may be pesent year-round. Nesting occurs from approximately March thought September. Contact State Parks and Humboldt County Parks for guidance prior to initiating response. Clam Beach is western snowy plover critical habitat above the high tide line. Nests are difficult to see and easy to step on. Responders should minimize traffic routes and try to limit activity to the area below the high tide line. Avoid areas enclosed by symbolic fencing or otherwise marked as nesting habitat.

Coastal cutthroat trout may be present in Strawberry and Patrick Creeks. These trout may be anadromous and present through beach area if creeks have enough flow. Although usually not in large numbers, salmonids including coho (FT,ST) and chinook (FT) salmon, steelhead (FT), and coastal cutthroat trout (SSC) often forage in the nearshore environment and can be impacted by oiling. Surfperch. Pacific razor clams (01-12) and Dungeness crabs utilize the inter- and subtidal zones. Clams burrow into the sand, crabs may bury themselves to the tops of the carapace. Northern red-legged frog (SSC) in freshwater wetland nearby. Sensitive plants in dunes include beach layia, pink sand verbena and Wolf's evening primrose (all CNPS 1B.1) and small freshwater wetland upstream from the beach in the coastal streams.

Resources at Risk:

ESI and Habitat: 3A Fine- to medium-grained sand beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	marbled murrelet	FT, SE	Year-round	
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Sep
Fish	chinook salmon - California coastal	FT	Year-round	Dec-Jul
Fish	coastal cutthroat trout	SSC	Year-round	
Fish	steelhead - Central/Northern California	FT	Year-round	Nov-Apr
Fish	coho salmon - north of Punta Gorda	FT, ST	Year-round	Nov-Apr
Plants	Menzies' wallflower	FE, SE	Year-round	
Plants	beach layia	FE, SE	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
0	/	The Friends of the Dunes	(707) 444-1397
Т	/	California State Parks North Coast District	(707) 445-6547
Т	/	Humboldt County Parks	(707) 445-7651
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

1-250-A Site Summary - Clam Beach

1-250-A

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

Western snowy plover may be present year-round.

Hazard and Restrictions:

Site Strategies: Site Validation Level: ||

Strategy: 1-250.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Conventional on-scene response is not possible at this site. Protect with off-site response measures only.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, go north on Hwy 101, Take N Central Ave Exit 723 to Clam Beach, turn left under overpass and then continue onto Clam Beach County Park Road. Multiple parking areas available on the west side of this road.

Land Access: Beach has drive on access through locked gates. 4WD and heavy equipment accessible.

On-Water Limitations: None

Facilities, Staging Areas, Command Posts, Available Equipment: The large beach parking lot could be used for staging equipment for local response purposes. Public restrooms, parking, and a small campground are the only other assets available to responders. No phones.

Communications Problems:



1-255-A Site Summary - Mad River Estuary 1-255-A

County: Humboldt ACP Division/Segment: HM - E - S02 HM - F - S01

NOAA Chart: 18600 **Map Book:** CA Road Atlas **Decimal Degrees:** 40.92785 -124.13468

Site Description:

Mad River Beach and Mad River County Park Boat Ramp are managed by Humboldt County Parks. Mad River estuary is a medium sized tidal inlet bounded on each side by fine- to medium-grained sand beaches with riprap along north and northeast shoreline facing the ocean to prevent shoreline erosion. The tidal influence extends upstream of the boat ramp in the County Park. The site also includes the inlet of Widow White Creek north of Murray Rd. The river outlet is dynamic and has migrated many miles from the exisiting outflow near the Clam Beach Vista Point.

Marine mammals, wading birds and shorebirds, waterfowl, and salmonids utilize the estuary for habitat. The river banks of the estuary are sensitive to oiling especially during the summer months when the mouth of the river is open to tidal exchange. Kingfishers (feeding and nesting), raptors including merlin, osprey and peregrine falcon; all (01-12). Bank swallow (ST), California brown pelican (04-11). Western snowy plover (FT)(01-12), FWS Critical Habitat, nesting period (03-09). Nests directly on sand within dunes. Harbor seals and sea lions feed in estuary, harbor seals haulout along the mouth of river. Anadromous salmonids: coho (FT,ST) and chinook (FT) salmon, steelhead (FT) and coastal cutthroat (SSC) trouts: spawning runs (08-06), juveniles/smolts (04-07), green sturgeon (FT,SSC), eulachon (FT,SSC), longfin smelt (ST), Pacific lamprey (SSC), redtail surfperch on outer beaches, juvenile Dungeness crab nursery. Northern red-legged frog (SSC) in interior marsh and sensitive vegetation on beach and nearby including beach layia and western lily (both FE,SE), and Humboldt Bay owl's-clover, pink sand-verbena, and Wolf's evening primrose (all CNPS 1B).

Resources at Risk:

ESI and Habitat: 3A Fine- to medium-grained sand beaches

3B Scarps and steeps slopes in sand

10A Salt - and brackish-water marshes

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Amphibians	Northern red-legged frog	SSC	Year-round	
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Sep
Birds	common loon	FP, SSC	Year-round	
Fish	salmonids		Year-round	
Fish	eulachon	FT	Year-round	
Fish	Pacific lamprey	SSC	Year-round	
Mammals	harbor seal	FP	Year-round	
Plants	beach layia	FE, SE	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
0	/	The Friends of the Dunes	(707) 444-1397
Т	/	Humboldt County Parks	(707) 445-7651
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

1-255-A Site Summary - Mad River Estuary

1-255-A

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

Preventing oil from spreading into the upper end of the estuary on the flood tide is the primary goal of responding at this location. Western snowy plover may be present year-round.

The location of the river mouth may shift from year to year. It may be necessary to adjust recommended site strategy to address conditions at time of response to protect the estuary. An overflight or site visit to determine the location of the mouth and river flow is recommended prior to deploying response personnel.

Hazard and Restrictions:

Mad River Road may have closures during heavy rain storms, high river flows, and/or high tide events due to flooding. Check with the county if necessary.

Site Strategies:

Site Validation Level: II

Strategy: 1-255.1 **Objective:** During low fresh water flows the Mad River estuary should be boomed to minimize the area of impact.

Strategy: Exclude oil using boom and strand incoming oil onto the south spit to minimize oil movement into the riparian areas of the south and eastern regions in this estuary.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Upda
Boom	Swamp	1200 feet		
Anchor	Danforth	25 lb	4	
boat	Skiff		1	
Staff	Staff to Deploy		6	

Strategy: 1-255.2 **Objective:** During low fresh water flows Widow White Creek's confluence should be boomed to minimize the impact area.

Strategy: Boom the outlet of Widow White creek where it joins the Mad River estuary.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	300 feet		-
Anchor	Danforth	25 lb	2	
boat	Skiff		1	
Staff	Staff to Deploy		6	
Staff	Staff to Tend		2	

Logistics:

Directions: From Eureka, go north on Hwy 101, take Giuntoli Ln James Rd exit 716B. Head west towards Janes Road. Turn right onto Heindon Road. Turn left onto Miller lane. Turn right onto Mad River Road and continue on this road to Mad River County Park at the end. There is a boat ramp at this location. Another unimproved parking area and 4WD access to the beach is just north of the county park area. Access to the north shore is difficult. Caltrans should be contacted to open hwy guard rails near M.P. 94.479 to access riprap area. Foot access is also available from Murray Rd, the Hammond Trail, Hiller Park and Clam Beach.

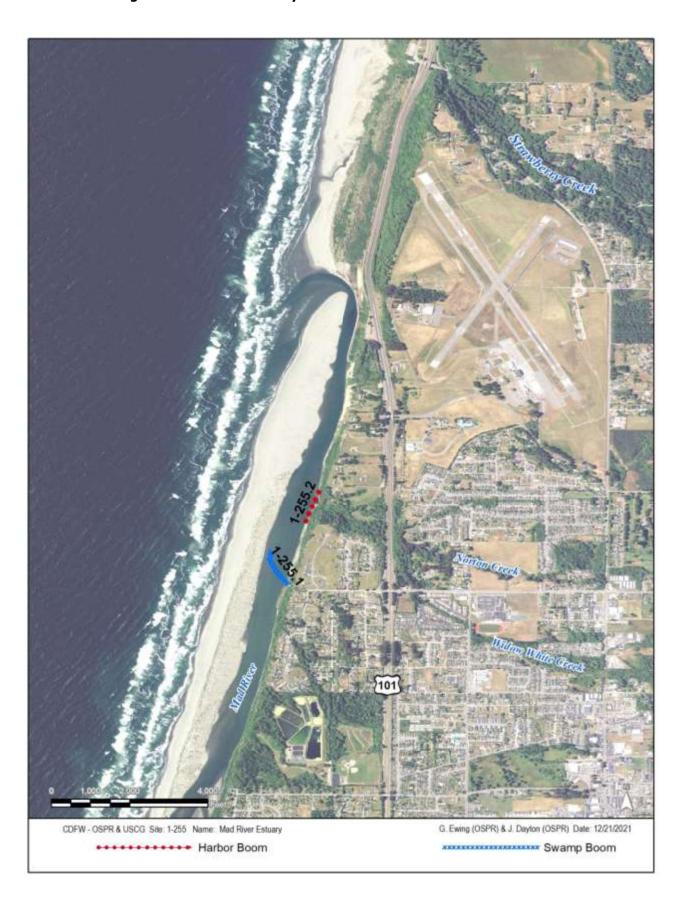
Land Access: Can use 4WD to mouth from Mad River Beach or Clam Beach.

On-Water Limitations: Small boat ramp at Mad River Beach County Park.

Facilities, Staging Areas, Command Posts, Available Equipment: The parking area near the boat ramp has restrooms and can serve as a staging area for equipment to be used in the general area. There are no concessions or utilities other than the restrooms at this site.

Communications Problems:

Additional Operational Comments: For Mad River flow gauge info see: https://waterdata.usgs.gov/monitoring-location/11481000/#parameterCode=00065&period=P7D



1-260-A Site Summary - Eel River Estuary 1-260-A

County: Humboldt **ACP Division/Segment:** HM - H - S02 HM - I - S01

NOAA Chart: 18622, 18620 **Map Book:** CA Road Atlas **Decimal Degrees:** 40.64155 -124.31227

Site Description:

This site includes the Eel River and adjacent marshes and sloughs from Fernbridge to the river mouth. Ownerships include private land, Crab Park managed by Humboldt County Parks at the end of Cannibal Island Rd, and the Eel River Wildlife Area and Cock Robin Island managed by CDFW. Total acreage of marshes exceed 700 acres in addition to riparian vegetation. This major estuary complex has abundant marshes, as well as exposed and sheltered tidal flats, with numerous sloughs opening into the estuary. The mouth of the Eel River will migrate seasonally in response to river flow and near shore current changes. The mouth of the Eel River can, over a brief period of time, migrate from north to south or south to north for over a mile during winter storms. No booming response is advisable during high winter flows.

Large areas of pickleweed marsh on the Eel River side of the coastal sand dunes are tidally influenced. Salt marshes grade into riparian and freshwater margins as waters become less salty. Shorebirds, seabirds, wading birds, waterfowl (01-12). California brown pelican (04-11), bald eagle (SE), peregrine falcon, osprey, merlin; all (01-12). Western snowy plover (FT)(01-12), FWS Critical Habitat-sand dunes on both north and south spits of Eel River, nesting period (03-09). Nests directly on sand within dunes. Harbor seals and California sea lions haulout near river mouth. Eelgrass in estuary. Anadromous salmonids: coho (FT,ST) and chinook (FT) salmon, steelhead (FT) and coastal cutthroat (SSC) trout: spawning runs (08-06); juveniles/smolts (02-08). Green sturgeon (FT,SSC), tidewater goby (FE), FWS Critical Habitat, longfin smelt (ST), Pacific lamprey (SSC).

Resources at Risk:

ESI and Habitat: 5 Mixed sand and gravel beaches 10A Salt - and brackish-water marshes 9A Sheltered tidal flats

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	marbled murrelet	FT, SE	Year-round	
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Sep
Birds	bald eagle	FP, SE	Year-round	
Birds	western yellow-billed cuckoo	FT, SE	Year-round	Mar-Sep
Fish	salmonids		Year-round	
Fish	longfin smelt	ST	Year-round	
Fish	Pacific lamprey	SSC	Year-round	
Fish	tidewater goby	FE, SSC	Year-round	
Mammals	pinnipeds	FP	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
С	/	The Wiyot Tribe	(707) 733-5055
Ε	/	Humboldt County Sheriff	(707) 445-7251
Τ	/	California Department of Fish & Wildlife, Eureka	(707) 445-6493
Т	/	Humboldt County Parks	(707) 445-7651
Τ	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

1-260-A Site Summary - Eel River Estuary

1-260-A

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Preventing oil from spreading into the upper end of the estuary on the flood tide is the primary goal of responding at this location.

No booming response is feasible when river discharge is high, a condition that is typical during winter months. Additionally, winter storms can occur here almost year round, so be aware of the recent and predicted weather patterns before deploying equipment in this dynamic estuary.

Hazard and Restrictions:

Crab Park, Cannibal Island Rd and other access roads may be flooded and closed during high water and runoff periods. 4WD and ATV access from beach.

Site Strategies: Site Validation Level: |||

Strategy: 1-260.1 **Objective:** Make an on-site evaluation before equipment call out or deployment.

Strategy: Perform a site evaluation or overflight to determine if conditions will allow any field response under prevailing conditions. Weather forecasts for floods, waves, winds, and tides must be considered before any deployment.

Table of Response Resources

Last Page Update

Strategy: 1-260.2 Objective: Primary strategy: Boom slough mouths and the upriver end of the estuary when conditions near the mouth precludes succesful booming.

Strategy: A. Boom the mouth of North Bay Slough north of the river mouth by booming at a diagonal from the tip of the north spit to collection near the large stump upstream on the Crab Park shore. (700 ft 8X8+boom, 4 25lb+ anchors)

B. Boom the main channel (two layers) at an angle to strand oil on the shore near the bridge across the Eel to Cock Robin Island. (3500 ft 8X8+ boom, 8 25lb+ anchors)

C. Exclude oil from Salt River and adjacent southern sloughs: exclusion boom at a diagonal or chevron. (400 ft boom, 6 25lb anchors). This strategy was adapted after a field deployment here 8/25/05.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Harbor	4600 feet		Strategy Updated:
Anchor	Danforth	25 lb	18	Last Test: 8/25/2005
boat	Boom Boat		1	
boat	Skiff		1	
Staff	Staff to Deploy		12	
Staff	Staff to Tend		6	
ATVs are useful at t	his site			

Strategy: 1-260.3 Objective: No booming necessary when there is high volume flood outflow.

Strategy:

Table of Response Resources

Last Page Update

1-260-A Site Strategy - Eel River Estuary

1-260-A

Strategy: 1-260.4 Objective: When oil is overwashing the beach berm, deploy short diversion segments to ground oil to back of berm

Strategy: Deploy six 100-ft segments of boom along the back of the berm to divert overwashing oil to shore during the flood tide. Select boom locations at best available locations and angles under prevailing conditions to collect oil. (6X6+ boom)

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	600 feet		
Anchor	Danforth	25 lb	12	

Strategy: 1-260.5 Objective: Hazing: keep sensitive species off haulout and roosting areas *Strategy:* Pursue hazing to discourage wildlife use of spit. Contact OWCN hazing staff and USFWS for further actions if necessary. Passive hazing is recommended.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
boat			1	

Logistics:

Directions: From Eureka go south on Hwy 101 for 11-miles to the Loleta Hookton Rd Exit 696. For access to the south end of the estuary, turn left on Eel River Rd, then right on Cannibal Island Rd and continue 5-miles to Crab Park. For access on the north end of the estuary, take the same Loleta Hookton Road Exit 696 and continue on west on Hookton Road which becomes Table Bluff Road until it reaches the beach. 4WD access to the mouth of the river is possible by heading south from an unimproved road behind dunes at the bottom of Table Bluff. It may also be possible to drive south along the waveslope.

Land Access: Trucks can access Crab Park and Cock Robin Island with small parking areas at each. 4WD, ATV and foot access on beach from Table Bluff County Park and Eel River Wildlife Area.

On-Water Limitations: Small boat launch off the beach. Shallow, with sand bars. Small boat ramp at Pedrazzini Park on Cock Robin Island Rd. Beach launch at Crab Park.

Facilities, Staging Areas, Command Posts, Available Equipment: No facilities at Crab Park or Pedrazzini Park. No services available. Ok for local response equipment.

Communications Problems:

 $\label{locational operational comments:} For Eel River flow gauge information see: $$ \underline{\text{https://waterdata.usgs.gov/monitoring-location/11479560/\#parameterCode=00065\&period=P7D} $$ $$ \underline{\text{https://waterdata.usgs.gov/monitoring-location/11479560/#parameterCode=00065\&period=P7D} $$ $$ \underline{\text{https://waterdata.usgs.gov/monitoring-parameterCode=00065\&period=P7D} $$$

1-260-A



1-265-A Site Summary - Centerville Beach 1-265-A

County: Humboldt ACP Division/Segment: HM - I - S01

NOAA Chart: 18620 Map Book: CA Road Atlas Decimal Degrees: 40.57345 -124.35007

Site Description:

This site includes the beach and 4.5-mile sand spit south of the mouth of the Eel River to Centerville Beach County Park. Most of the sand spit is in private ownership with the exception of Centerville Park Beach at the end of Centerville Road managed by Humboldt County Parks. BLM manages the coastline south of Centerville Beach. This beach is a popular day use area. Sandy beach with stable dunes.

Seabirds and shorebirds including western snowy plover (FT) present at this site year-round, FWS Critical Habitat, nesting period (03-09). Nests directly on sand within dunes. Harbor seals and California sea lions haulout near mouth of Eel River. Although usually not in large numbers, salmonids including coho (FT,ST) and chinook salmon (FT), steelhead (FT), and coastal cutthroat trout (SSC) often forage in the nearshore environment and can be impacted by oiling. Surfperch spawning (04-06), beach layia (SE,FE)(01-12).

Resources at Risk:

ESI and Habitat: 3A Fine- to medium-grained sand beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	Western snowy plover	FT, SSC	Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Fish	surfperch		Year-round	Apr-Jun
Fish	nightsmelt		Jan-Sep	
Fish	surf smelt		May-Oct	
Mammals	harbor seal	FP	Year-round	
Mammals	California sea lion	FP	Year-round	
Plants	beach layia	FE, SE	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	Humboldt County Parks	(707) 445-7651
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Τ	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

1-265-A Site Strategy - Centerville Beach

1-265-A

Concerns and Advice to Responders:

Western snowy plover (FT) present year round.

Hazard and Restrictions:

4WD and ATV access on beach. Centerville Road may be flooded and closed in winter.

Site Strategies: Site Validation Level: ||

Strategy: 1-265.1 **Objective:** No strategy, but possible access to Eel River estuary to the north.

Strategy: This site is best protected by preventing the oil from arriving here, when possible. Off-site response options including dispersants should be considered.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, go 13-miles south on Hwy 101 and take Fernbridge Ferndale Exit 692, go 0.5-miles, turn right on Hwy 211 and follow toward through Ferndale 4.7-miles, turn right onto Ocean/Centerville Rd and continue 5-miles to beach parking.

Land Access: Large truck accessible, drive on access. ATV or 4WD necessary.

On-Water Limitations: No boat launching facilities at this site. Closest launch is Pedrazzini Park near the Cock Robin Island bridge.

Facilities, Staging Areas, Command Posts, Available Equipment: The parking area is suitable for staging local response assets only.

Communications Problems:



1-268-A Site Summary - False Cape Rock 1-268-A

County: Humboldt ACP Division/Segment: HM - J - S02

NOAA Chart: 18620 Map Book: CA Road Atlas Decimal Degrees: 40.50995 -124.39647

Site Description:

These remote offshore rocks north of Cape Mendocino are managed by the BLM as part of the California Coastal National Monument. This is a very popular recreational and commercial fishing area for groundfish and salmon. Offshore rocks

Seabird rookeries: 2004 common murre estimate: 16700; 2002 estimates: Brandt's cormorant ~800; Western gull ~100; pelagic cormorant ~240; pigeon guillemot ~50. Marine mammal haulout areas; groundfish (EFH).

Resources at Risk:

ESI and Habitat: 1A Exposed Rocky Shore

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	Brandt's cormorant	FP	Year-round	Mar-Sep
Birds	common murre	FP	Year-round	Mar-Sep
Birds	western gull	FP	Year-round	Mar-Sep
Birds	pelagic cormorant	FP	Year-round	Mar-Sep
Birds	pigeon guillemot	FP	Year-round	Mar-Sep
Birds	tufted puffin	FP, SSC	Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Mammals	harbor seal	FP	Year-round	
Mammals	California sea lion	FP	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Ε	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Τ	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Extreme currents, high energy shoreline, offshore rocks

Site Strategies: Site Validation Level: ||

Strategy: 1-268.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Prevent spilled oil from floating to this site. Conventional on-scene response is not possible at this site. Protect with off-site response measures only.

Table of Response Resources

Last Page Update

Logistics:

Directions: No access.

Land Access:

On-Water Limitations:

Facilities, Staging Areas, Command Posts, Available Equipment: Communications Problems: Remote, limited communications

1-268-A

1-270-B Site Summary - Bear River 1-270-B

County: Humboldt ACP Division/Segment: HM - K - S01

NOAA Chart: 18623 Map Book: CA Road Atlas Decimal Degrees: 40.47655 -124.39007

Site Description:

This remote site includes the coastline and tidal estuary near the mouth of the Bear River. This site is private property. Offshore rocks in the area are managed by BLM as part of the California Coastal National Monument. Tidal flats occur throughout range of the site.

Shorebirds and seabirds present, marine mammals, anadromous salmonids in Bear River include chinook (FT) salmon, steelhead (FT): spawning runs (08-06), juveniles/smolts (02-08).

Resources at Risk:

ESI and Habitat: 4 Coarse-grained sand beaches

7 Exposed tidal flat

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	bird rookeries		Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Fish	chinook salmon - California coastal	FT	Year-round	Oct-Mar
Fish	steelhead - Central/Northern California	FT	Year-round	Aug-Jun
Fish	coho salmon - north of Punta Gorda	FT, ST	Year-round	Nov-Apr
Fish	Pacific lamprey	SSC	Year-round	
Mammals	pinnipeds	FP	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
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Extreme current, high energy shoreline, offshore rocks.

Site Strategies: Site Validation Level: ||

Strategy: 1-270.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Conventional on-scene response is not possible at this site. Protect with off-site response measures only.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, take Hwy 101 south and take Fernbridge/Ferndale Exit 692, continue on this road, turn right onto bridge on route 211 and follow Main St through Ferndale. Turn right on Ocean then left onto Mattole Road (2 lane road may be reduced to 1 lane road in spots) toward Capetown and Bear River. Access to this area is just off Mattole Road along coast, where Mattole Road crosses Bear River bridge. Private landowner values and defends his privacy.

Land Access: Access may be denied by landowner; Contact Humboldt Sheriff or BLM

On-Water Limitations: none

Facilities, Staging Areas, Command Posts, Available Equipment: none

Communications Problems: Remote, limited communications
Additional Operational Comments: Private property-limited access



1-273-A Site Summary - Cape Mendocino 1-273-A

County: Humboldt ACP Division/Segment: HM - K - S01

NOAA Chart: 18623 Map Book: CA Road Atlas Decimal Degrees: 40.44015 -124.40947

Site Description:

Offshore rocks in the area are managed by the BLM as part of the California Coastal National Monument. Shoreline is either in private ownership or managed by BLM's Arcata Field Office. This is a very popular recreational and commercial fishing area for groundfish and salmon. Site is associated with the following State Marine Protected Area(s): Sugarloaf Island Special Closure. Offshore rocks, gravel beaches, and open water.

Seabird rookeries (Sugarloaf Island). 2002 estimates: Western gull (\sim 260), pigeon guillemot (\sim 170), black oystercatcher, Brandt's (\sim 290) and pelagic (\sim 620) cormorants, tufted puffin (SSC) and double-crested cormorant (\sim 270), all are year-round. Steller sea lion pupping area (05-07) > 12,000 pups surveyed. Harbor seal pupping area (03-09) and haulouts (01-12); although usually not in large numbers, salmonids including coho (FT,ST) and chinook salmon (FT) and steelhead (FT) often forage in the nearshore environment and can be impacted by oiling; groundfish (EFH).

Resources at Risk:

ESI and Habitat: 1A Exposed Rocky Shore

6A Gravel Beach

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	marbled murrelet	FT, SE	Year-round	
Birds	tufted puffin	FP, SSC	Year-round	Mar-Sep
Birds	bird rookeries		Year-round	Mar-Sep
Mammals	Steller sea lion	FP	Year-round	May-Aug
Mammals	harbor seal	FP	Year-round	Mar-May
Mammals	California sea lion	FP	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
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

1-273-A

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Mattole Road is winding with several blind curves, proceed with caution. High energy shoreline, extreme currents, offshore rocks.

Site Strategies: Site Validation Level: ||

Strategy: 1-273.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Conventional on-scene response is not possible at this site. Protect with off-site response measures only.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, take Hwy 101 south and take Fernbridge/Ferndale Exit 692, continue on this road, turn right onto bridge on route 211 and follow Main St through Ferndale. Turn right on Ocean then left onto Mattole Road (2 lane road may be reduced to 1 lane road in spots) toward and past Capetown and Bear River. Foot access from Mattole Road near Singley Creek. Must obtain access permission from private landowner here at Ocean House Ranch.

Land Access: Tide may block egress from far side of cliff

On-Water Limitations: No launch in area

Facilities, Staging Areas, Command Posts, Available Equipment: None

Communications Problems: Remote, limited communications

Additional Operational Comments:

1-273-A



1-275-B Site Summary - Steamboat Rock 1-275-B

County: Humboldt ACP Division/Segment: HM - K - S02

NOAA Chart: 18623 Map Book: CA Road Atlas Decimal Degrees: 40.41534 -124.40367

Site Description:

These offshore rocks near Cape Mendocino are managed by the BLM as part of the California Coastal National Monument. This is a very popular recreational and commercial fishing area for groundfish and salmon. Site is associated with the following State Marine Protected Area(s): Steamboat Rock Special Closure and South Cape Mendocino SMR. Offshore rocks and open water.

Seabird rookeries include common murre (~9,300, 2004), Brandt's cormorant (~460, 2002). Marine mammals; groundfish (EFH).

Resources at Risk:

ESI and Habitat: 1A Exposed Rocky Shore

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	common murre	FP	Year-round	Mar-Sep
Birds	Brandt's cormorant	FP	Year-round	Mar-Sep
Birds	pigeon guillemot	FP	Year-round	Mar-Sep
Birds	western gull	FP	Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Mammals	pinnipeds	FP	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Extreme currents, high energy shoreline, offshore rocks

Site Strategies: Site Validation Level: ||

Strategy: 1-275.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* Conventional on-scene response is not possible at this site. Protect with off-site response measures only.

Table of Response Resources

Last Page Update

Logistics:

Directions: No access. Steamboat Rock is visible from Mattole Road near Singley Creek. From Eureka, take Hwy 101 south and take Fernbridge Ferndale Exit 692, continue on this road, turn right onto bridge on route 211 and follow Main St through Ferndale. Turn right on Ocean then left onto Mattole Road (2 lane road may be reduced to 1 lane road in spots) south toward and past Capetown and Bear River to vicinity of Singley Creek.

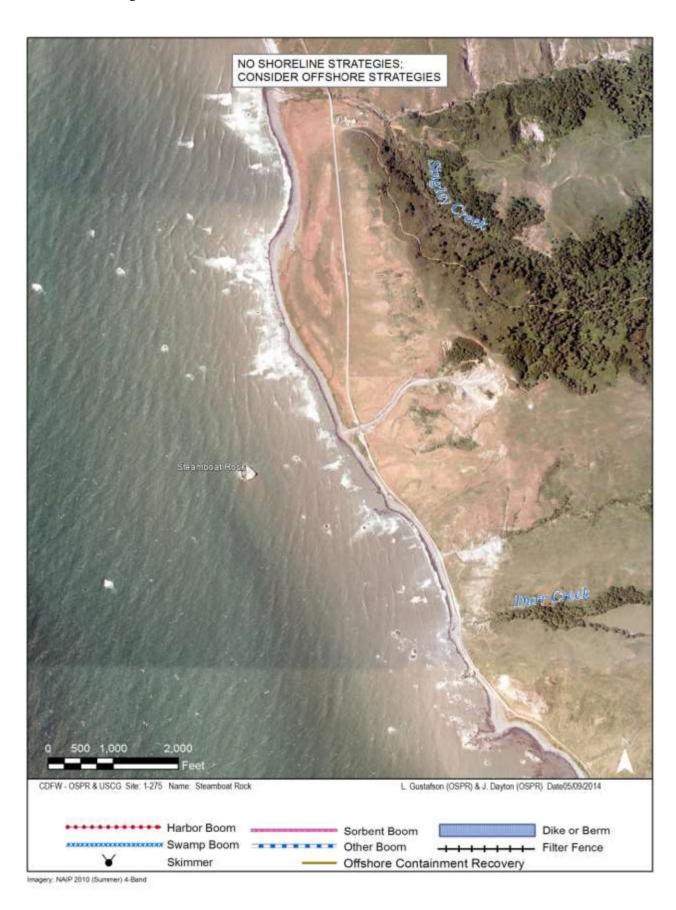
Land Access: None

On-Water Limitations: No launch in area

Facilities, Staging Areas, Command Posts, Available Equipment: None

Communications Problems: Remote, limited communications.

1-275-B



1-279-B Site Summary - Hair Seal Rock 1-279-B

County: Humboldt ACP Division/Segment: HM - K - S04

NOAA Chart: 18623 Map Book: CA Road Atlas Decimal Degrees: 40.32596 -124.35366

Site Description:

These remote offshore rocks south of Cape Mendocino are managed by the BLM as part of the California Coastal National Monument. Offshore rocks

Seabirds include Brandt's and pelagic cormorants, western gull, harbor seal haulout area, 350 observed. Groundfish (EFH).

Resources at Risk:

ESI and Habitat: 1A Exposed Rocky Shore

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	western gull	FP	Year-round	Mar-Sep
Birds	Brandt's cormorant	FP	Year-round	Mar-Sep
Birds	pelagic cormorant	FP	Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Mammals	harbor seal	FP	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Extreme current, high energy shoreline, offshore rocks

Site Strategies: Site Validation Level: ||

Strategy: 1-279.1 **Objective:** No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* This site is best protected by preventing the oil from arriving here, when possible. Off-site response options including dispersants should be considered.

Table of Response Resources

Last Page Update

Logistics:

Directions: No access. Land Access: None

On-Water Limitations: No launch in area

Facilities, Staging Areas, Command Posts, Available Equipment: None

Communications Problems: Remote, limited communications

Additional Operational Comments:



1-285-A Site Summary - Mattole River 1-285-A

County: Humboldt ACP Division/Segment: HM - K - S04 HM - L - S01

NOAA Chart: 18623 **Map Book:** CA Road Atlas **Decimal Degrees:** 40.29276 -124.35446

Site Description:

This site includes the Mattole River estuary or seasonal lagoon and the bordering marshes along the southern margin. Site is part of the King Range National Conservation Area managed by BLM and is associated with BLM's Rocks and Islands Wilderness. This site has a complex estuary that is open and closed (by sand berm) to tidal action by seasonal hydrological events. There are about 5-acres of alder and herbacious freshwater marshes along the southwest margin of the estuary, and a campground and picnic area at the end of the access road. This site is also the northern trailhead for BLM's Lost Coast Trail and can have high public use seasonally.

The Mattole River mouth changes seasonally according to prevailing hydrological events. The highly sensitive estuarine habitat should be protected from oiling when possible.

Shorebirds, seabirds, wading birds, waterfowl. California brown pelican (04-11), bald eagle (SE) and peregrine falcon; both (01-12). Marine mammals. Anadromous salmonids include coho (FT,ST) and chinook (FT) salmon, steelhead (FT): spawning runs (08-06), juveniles/smolts (02-08), Pacific lamprey (SSC), foothill yellow-legged frogs (SSC), beach layia (FE,SE).

Resources at Risk:

ESI and Habitat: 4 Coarse-grained sand beaches

7 Exposed tidal flat

6A Gravel Beach

10A Salt - and brackish-water marshes

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Amphibians	foothill yellow-legged frog	SE, SSC	Year-round	Apr-Jul
Birds	marbled murrelet	FT, SE	Year-round	
Fish	chinook salmon - California coastal	FT	Year-round	
Fish	coho salmon - north of Punta Gorda	FT, ST	Year-round	
Fish	steelhead - Central/Northern California	FT	Year-round	
Fish	Pacific lamprey	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	Bureau of Land Management, King Range	(707) 986-5400
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

1-285-A Site Summary - Mattole River

1-285-A

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

The south side is an alder and marsh wetland which would be extremely difficult to clean up. Keep oil out of wetland and deflect to bare sand or gravel areas where ecological impacts will be minimal. Because birds and other wildlife use the water surface and presence of listed fish the lagoon, minimize the spread of oil and confine by booming to near shorelines.

Hazard and Restrictions:

Site Strategies:

Site Validation Level: II

Strategy: 1-285.1 Objective: Primary: When mouth is open, threatening oiling with tidal inflow, exclusion-deflection booming to collection at southern corner of estuary.

Strategy: Deploy boom from the cliff headland on the north to the opening of the marshy channel at the southern corner. Angle the boom across the current to minimize entrainment of oil and maximize oil movement into a collection area at the margin. Use pom-poms or oil snare to retain and immobilize oil. Evaluate for mechanical collection needs.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	1000 feet		
Other Boom	Pom-pom	100 feet		
Anchor	Danforth	16+ lb	4	

Strategy: 1-285.2 **Objective:** Alternative: When mouth is open and there are winds exceeding 20 knots west, threatening oiling with tidal inflow, exclusion-deflection booming to collection along the north shoreline. **Strategy:** Deploy boom from the southern spit to the bar or any other vantage point on the north bank where oil can be landed. Retain oil with pom-poms until more effective measures can be installed. Vehicle access to the north bank may be difficult or impossible (to ford). Cascade 1000 ft sections of swamp boom or larger (3000 ft)

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	3000 feet		
Other Boom	Pom-pom	100 feet		
Anchor	Danforth	16+ lb		

Strategy: 1-285.3 **Objective:** When outflows are heavy, little oil can enter; deploy precautionary booming of small slough at southwest corner

Strategy: Boom the slough at southwest corner with 100 ft of swamp boom. Secure with stakes.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	100 feet		
Stakes				

1-285-A Site Strategy - Mattole River

1-285-A

Strategy: 1-285.4 **Objective:** When the berm is intact but surge is overwashing it, install boom on back side of berm and collect the oil.

Strategy: Stake a layer of swamp boom along the back side of any berm washover, positioning it so that oil can be collected at the southerly end. Use oilsnare to retain and immobilize oil.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Boom	Swamp	1000 feet		
Other Boom	Pom-pom	100 feet		
Stakes				

Strategy: 1-285.5 **Objective:** Alternative when berm is intact and oil is overwashing, berm and collect oil on back slope of berm using runnel.

Strategy: Using excavating equipment, build-up the berm using sediments on downslope and high areas. Runnel will collect any oil which overflows. Plastic may be necessary to line front face to minimize further overwash erosion.

Table of Response Resources

Equipment	Sub-Type	Size Unit	QTY Unit	Last Page Update
Skiploader			1	
Plastic sheeting		200 feet		

Logistics:

Directions: From Eureka, go south on Hwy 101, take Fernbridge Ferndale Exit 692, turn right onto bridge and follow Route 211 through Ferndale and follow signs to Petrolia, turn right on Ocean, then left onto Mattole Road (2 lane road may be reduced to 1 lane in spots). Follow Mattole Road through Petrolia for 30-miles, turn right onto Lighthouse Road and follow to end. This road parallels river to the mouth.

Land Access: Lock gate access, with easy access for all vehicles

On-Water Limitations: Shallows across beach launch at campground. Launch at ford to bar on north upstream.

Facilities, Staging Areas, Command Posts, Available Equipment: This area is suitable for local equipment staging. A campground with toilets at southwest corner, with non-potable(?) water available. No other services are available. The northern trail access for the 26-mile long Lost Coast Trail in the King Range National Conservation Area begins here.

Communications Problems: Remote, limited communications

Additional Operational Comments: This river mouth is highly dynamic and site evaluation will be necessary prior to equipment deployment. For Mattole River flow gauge information see: https://waterdata.usgs.gov/monitoring-location/11469000/#parameterCode=00065&period=P7D

1-285-A



1-290-B Site Summary - Cooskie Creek 1-290-B

County: Humboldt ACP Division/Segment: HM - L - S01

NOAA Chart: 18623 Map Book: CA Road Atlas Decimal Degrees: 40.21926 -124.31036

Site Description:

This remote site on the Lost Coast is within the King Range National Conservation Area managed by BLM. Cooskie Creek outlet forms a small estuary on the beach. There is high public use on the trail seasonally. Site is associated with the following State Marine Protected Area(s): Sea Lion Gulch SMR. Wave-cut platforms and mixed and gravel beach.

Seabirds and shorebirds present, harbor seal haulouts (01-12), steelhead (FT): spawning period (10-03), juveniles/smolts (02-05)

Resources at Risk:

ESI and Habitat: 6A Gravel Beach

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

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	marbled murrelet	FT, SE	Year-round	
Birds	seabirds		Year-round	
Birds	shorebirds		Jul-Apr	
Fish	steelhead - Central/Northern California	FT	Year-round	Oct-May
Mammals	harbor seal	FP	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
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
Ε	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	Bureau of Land Management, King Range	(707) 986-5400
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т	/	US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

Additional Site Summary Comments:

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

high energy shoreline

Site Strategies: Site Validation Level: ||

Strategy: 1-290.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* This site is best protected by preventing the oil from arriving here, when possible. Off-site response options including dispersants should be considered.

Table of Response Resources

Last Page Update

Logistics:

Directions: No access except from Lost Coast trail.

Land Access: foot only

On-Water Limitations: Closest launch is in Shelter Cove

Facilities, Staging Areas, Command Posts, Available Equipment: None

Communications Problems: Remote, limited communications

Additional Operational Comments: Lost Coast area cell phones may not work



1-294-A Site Summary - Shubrick Peak 1-294-A

County: Humboldt ACP Division/Segment: HM - L - S01

NOAA Chart: 18623 Map Book: CA Road Atlas Decimal Degrees: 40.15456 -124.18895

Site Description:

This remote site on the Lost Coast is within the King Range National Conservation Area managed by BLM and is associated with BLM's Rocks and Islands Wilderness. There is high public use on the trail seasonally. Small estuary formed at the outlet of Big Creek. Site is associated with the following State Marine Protected Area(s): Big Flat SMCA. Tidal flat and wave-cut platform

Seabirds and marine mammals present; although usually not in large numbers, salmonids including coho (FT,ST) and chinook salmon (FT) and steelhead (FT) often forage in the nearshore environment and can be impacted by oiling; groundfish (EFH); foothill yellow-legged frogs (SSC) in creek.

Resources at Risk:

ESI and Habitat: 6A Gravel Beach

5 Mixed sand and gravel beaches

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Amphibians	foothill yellow-legged frog	SE, SSC		
Birds	bird rookeries		Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Е	/	Humboldt County Sheriff	(707) 445-7251
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	Bureau of Land Management, Coastal Natl. Monum	(831) 582-2200
Т	/	Bureau of Land Management, King Range	(707) 986-5400
Т	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т		US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Extreme current, high energy shoreline, offshore rocks

Site Strategies: Site Validation Level: ||

Strategy: 1-294.1 Objective: No Onsite Options: Consider Offshore Containment/Recovery/ART *Strategy:* This site is best protected by preventing the oil from arriving here, when possible. Off-site response options including dispersants should be considered.

Table of Response Resources

Last Page Update

Logistics:

Directions: Access via jeep trail through BLM and private lands may be possible. Private landing strip at Big Flat.

Land Access:

On-Water Limitations: Closest launch is in Shelter Cove

Facilities, Staging Areas, Command Posts, Available Equipment: None

Communications Problems: Remote, limited communications

Additional Operational Comments: Lost Coast area cell phones may not work

1-294-A



1-298-B Site Summary - Shelter Cove and Cormorant Hotel 1-298-B

County: Humboldt ACP Division/Segment: HM - L - S02

NOAA Chart: 18620 **Map Book:** CA Road Atlas **Decimal Degrees:** 40.02667 -124.07704

Site Description:

Shelter Cove is an isolated and small community on the Southern Humboldt coast. Humboldt Bay Harbor District oversees the boat launch facility here for the Shelter Cove Fishing Preservation Incorporated to manage locally. Public lands surround the community and are managed by the BLM as part of the King Range National Conservation Area. Offshore rocks in the area are managed by BLM as part of the California Coastal National Monument and the associated Rocks and Islands Wilderness. This is a very popular recreational and commercial fishing area for groundfish and salmon. Rocky headlands, offshore rocks.

Shelter Cove is a small, unprotected harbor that is surrounded by high energy beaches and rocky cliffs. Minimal on-scene response during rare low sea state conditions only. The coastline and offshore rocks in the area provide potential habitat for seabird colonies and marine mammal haulouts. Seabird rookery: pelagic cormorant (as many as 280 observed); although usually not in large numbers, salmonids including coho (FT,ST) and chinook salmon (FT) and steelhead (FT) often forage in the nearshore environment and can be impacted by oiling; groundfish (EFH); sensitive plants including perennial goldfields, Whitney's farewell-to-spring (both CNPS 1B).

Resources at Risk:

ESI and Habitat: 2A Exposed wave-cut platforms in bedrock, mud, or clay

4 Coarse-grained sand beaches

6A Gravel Beach

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	bird rookeries		Year-round	Mar-Sep
Birds	marbled murrelet	FT, SE	Year-round	
Birds	pelagic cormorant	FP	Year-round	Mar-Sep
Birds	western gull	FP	Year-round	Mar-Sep
Mammals	pinnipeds	FP	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:

Туре	Name/Title	Organization	Phone
С	/Coordinator	Native American Heritage Commission	(916) 373-3710
С	/Coordinator	Northwest Information Center	(707) 588-8455
Ε	/	Shelter Cove Resort Improvement District	(707) 986-1400
Т	/	Bureau of Land Management	(707) 825-2300
Т	/	Bureau of Land Management, Coastal Natl. Monum	(831) 582-2200
Τ	/	Bureau of Land Management, King Range	(707) 986-5400
Τ	/	California Dept of Fish and Wildlife, Fort Bragg	(707) 964-9078
Τ	/	NOAA National Marine Fisheries Service-Arcata	(707) 822-7201
Т		US Fish and Wildlife Service-Arcata Field Office	(707) 822-7201

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

1-298-B Site Summary - Shelter Cove and Cormorant Hotel

1-298-B

Additional Site Summary Comments:

Breeding seabirds will use these rocks for nesting in the spring. Offshore rocks provide roosting and nesting habitat for birds and haulout locations for marine mammals. Care should be taken so that response activities do not flush wildlife from these areas. The rocks are sensitive to human intrusion year round, especially during nesting season (03-09) when the adults are on eggs and until the young have fledged from the nest. The offshore rocks have cultural significance for local tribes.

For further information about coastal access in this area, please refer to the California Coastal Commission's California Coastal Access Guide. For photos of the coastline in this area, please refer to the California Coastal Records Project (www.californiacoastline.org).

Cultural, Historical, and Archeological sites are known to exist in the area, however, the exact locations of these sites must be ascertained by contacting the Native American Heritage Commission at (916) 373-3710, the State Office of Historical Preservation (916) 445-7000, and/or the Northwest Information Center (707) 588-8455.

Concerns and Advice to Responders:

The rugged coastline will prevent onshore response over most of this area. Off-site measures including dispersants should be considered when a spill threatens to impact this area. Overflights should be careful to maintain flight path and altitude clearance distances that are large enough to prevent the flushing of birds and marine mammals from their nests, roosts, and haulouts on the offshore rocks in this area.

Hazard and Restrictions:

Extreme current, high energy shoreline, offshore rocks

Site Strategies: Site Validation Level: ||

Strategy: 1-298.1 **Objective:** No Onsite Options: Consider Offshore Containment/Recovery/ART **Strategy:** This site is best protected by preventing the oil from arriving here, when possible. Off-site response options including dispersants should be considered.

Table of Response Resources

Last Page Update

Logistics:

Directions: From Eureka, go south on Hwy 101. Take Redway Exit 639B at M.P. 11.653 and follow Redwood Dr into to Redway, turn right on Shelter Cove - Briceland Road. Continue on this road through Whitethorn Junction (large fork in the road). Do not turn. Continue on Shelter Cove Road into Shelter Cove. Follow the city road paralleling the coastline.

Land Access: Drive on access in Shelter Cove, ATV access at the Lost Coast Trail

On-Water Limitations: Beach boat launching available and larger boat launch at Shelter Cove Marina

Facilities, Staging Areas, Command Posts, Available Equipment: Staging for large local response equipment is available at Shelter Cove. Lodging, camping areas, water, phone, fuel, and food are all available in the local area. Additional staging is available nearby at Black Sands Beach. This beach is at the southern end of the Lost Coast Trail in the Kings Range National Conservation Area.

Communications Problems: Remote, limited communications



A summary of the response resources is listed by site and sub-strategy next.	

9810.2 Response Summary Tables

ummary	of ACP 1 GRA 1	Response Resources by	/ Site and Sub-Strat	egy	
te S	Site Name				
b- PREV	ENTION OBJECTIVE OR	CONDITION FOR DEPLOYMENT	- 8		
rategy	Equipment	Sub-Type	Size/Unit	QTY/Unit	
105	AND THE STATE OF T		Size/Offic	Q11/OIII	
	Offshore rocks near Pyr	8 18			
- No Onsit	e Options: Consider Offshore	Containment/Recovery/ART			
110	Consider Discour Federature				
	Smith River Estuary				
- Observe		assigning response equipment			
Duina ail	helicopter	anning tides		1	
- Brillg Oil	to shore for collection on inc	Danforth	25 lb	12	
	Anchor Boom	Harbor Boom	25 lb	12 1500 feet	
	boat	Boom Boat		1	
	boat	Skiff		2	
	Staff	Staff to Deploy		3	
	Staff	Staff to Deploy		2	
- Diversion		and minimize spread in the estuary on	incoming tides		
	Staff	Staff to Tend	· · · · · · · · · · · · · · · · · · ·	2	
	Boom	Swamp		6000 feet	
	Anchor	Danforth	25 lb	30	
	boat	Boom Boat		1	
	boat	Skiff		1	
	Staff	Staff to Deploy		3	
- Exclude o	oil from rocky shore on the n	orth side of the inlet.			
•••••	boat	Boom Boat		1	
	Boom	Swamp		1000 feet	
	Anchor	Danforth	25 lb	8	
	boat	Skiff		1	
	Staff	Staff to Tend		2	
	Staff	Staff to Deploy		3	
- Exclude o	oil from rocky shoreline using	g pompoms.	SUPERIOR STATE OF THE STATE OF		
	Other Boom	Pom-pom			
	Anchor	Danforth	25 lb	6	
	boat	Boom Boat		1	
	boat	Skiff		1	
	Staff	Staff to Tend		2	
	Staff	Staff to Deploy		3	
115	South Spit Smith River				
- No Onsit	e Options: Consider Offshore	Containment/Recovery/ART			
·125 I	Lake Tolowa				
		on an incoming tide when the mouth	is open to tidal exchange.		
***************************************	Anchor	Danforth	25 lb	10	
	Boom	Harbor	vii.₹*	1000 feet	
130	Southwest Seal Rock				
140 100 100		Containment/Recovery/ART			
-135 I	Point St. George				
	Point St. George e Options: Consider Offshore	Containment/Recovery/ART			
-140 (Castle Rock National W				

Sub-PREVENTION OBJECTIVE OR CONDITION FOR DEPLOYMENT Strategy Size/Unit 1-145 Elk Creek and Crescent City Harbor .1 - Exclude Oil Staff Staff to Deploy 4 Staff Staff to Tend 2 600 feet Boom Harbor anchor Danforth 25 lb 4 .2 - Other: See Strategy Box Boom Sorbent 600 feet Staff Staff to Deploy 4 Anchor Danforth 25 lb 4 boat **Boom Boat** Staff Staff to Deploy 300 feet Boom Harbor .3 - Exclude Oil Anchor Danforth 25 lb Staff Staff to Deploy 4 Harbor 600 feet Boom 2 Staff Staff to Tend .4 - Exclude Oil Staff Staff to Tend 2 Staff 4 Staff to Deploy Boom Sorbent 200 feet 1-150 **Battery Point** .1 - No Onsite Options: Consider Offshore Containment/Recovery/ART **Del Norte Coast Redwoods State Park** 1-155 .1 - No Onsite Options: Consider Offshore Containment/Recovery/ART 1-160 Scat Beach .1 - No Onsite Options: Consider Offshore Containment/Recovery/ART 1-165 **Last Chance Rock** .1 - No Onsite Options: Consider Offshore Containment/Recovery/ART Footsteps Rocks to Radar Station Rocks .1 - No Onsite Options: Consider Offshore Containment/Recovery/ART 1-175 Wilson Creek .1 - Pre-clean beach 1-180 Klamath River Estuary .1 - Exclusionary booming & oil collection on incoming tides with low river flows. Boom Swamp 2000 feet Staff Staff to Deploy 8 skimmer SFS 1 Anchor Danforth 40 lb 12 4 staff Staff to Tend 2 boat Boom Boat .2 - Evaluate the current river status helicopter 1-185 Flint Rock and White Rock .1 - No Onsite Options: Consider Offshore Containment/Recovery/ART

Site

Site Name

9810.3 Lists of Economic Resources Susceptible to Oiling

A summary of Human Health and Safety Sites and Economic Resources is listed by GRA. Refer to Section 9804 for more information.

Site Information Trinidad Marine Lab 570 Ewing St Trinidad CA 95570 Phone: 707-826-3456 Site Description: water intake Trinidad Harbor	Site Number & Location Site Number: 1-2-HM-100-D Operational Division: Site Number: 1-2-HM-105-D Operational Division:	Lat/Long & Priority Aquariums and Marine Labs D Lat/Long: 41.06 -124.15 Public Marinas and Harbors D Lat/Long: 41.06 -124.15
570 Ewing St Trinidad CA 95570 Phone: 707-826-3456 Site Description: water intake Trinidad Harbor	Operational Division: Site Number: 1-2-HM-105-D	Lat/Long: 41.06 -124.15 Public Marinas and Harbors I
Trinidad Harbor		
TILLON OFFE		
Trinidad CA 95570 Phone:		
Site Description:		
Luffenholtz Beach County Park 1639 Trinidad Scenic Dr Trinidad CA 95570 Phone: 707-677-2501	Site Number: 1-2-HM-110-D Operational Division:	Parks, Beaches, Recreational Areas D Lat/Long: 41.04 -124.12
Site Description:		
Humboldt Lagoons State Park 15336 Highway 101 Trinidad ca 95570 Phone: 707-677-3570	Site Number: 1-2-HM-115-D Operational Division:	Parks, Beaches, Recreational Areas D Lat/Long: 41.23 -124.1
Site Description:		
Sue- Meg State Park 4150 Patricks Point Dr Trinidad CA 95570	Site Number: 1-2-HM-120-D Operational Division:	Parks, Beaches, Recreational Areas D Lat/Long: 41.14 -124.16
Phone: 707-677-3570 Site Description:		
<u> </u>	Cita Nivershaw 1 2 LIM 125 D	Dawley Basahas Baswantianal Avesa B
Clam Beach County Park 110 Cleam Beach Road McKinleyville CA 95519 Phone: 707-488-2041	Site Number: 1-2-HM-125-D Operational Division:	Parks, Beaches, Recreational Areas D Lat/Long: 41.01 -124.11
Site Description: Little River State beach j	just north too.	
Centerville Beach County Park Centerville Rd Ferndale CA 95536 Phone: 707-445-7651	Site Number: 1-2-HM-130-D Operational Division:	Parks, Beaches, Recreational Areas D Lat/Long: 40.57 -124.35
Site Description:		
Kings Range National Conservation Area	Site Number: 1-2-HM-135-D	Parks, Beaches, Recreational Areas D
786 Shelter Cove Rd Whitethorn CA 95589	Operational Division:	Lat/Long: 40.05 -124.08
Phone: 707-986-5400	choc and camparounds	
Site Description: Includes numerous beac Shelter Cove Boat Launch	Site Number: 1-2-HM-140-D	Dublic Mariana and Harbara B
Here Cove Boat Launch 461 Machi Rd Whitethorn CA 95589 Phone: 707-986-7447	Operational Division:	Public Marinas and Harbors D Lat/Long: 40.02 -124.07