

Sector San Francisco– Area Contingency Plan (ACP)

Volume II: Section 9800

ACP 1- North Coast

2014-2019 Annual/Interim Updates to Geographic Response Strategies for Environmental Sensitive Sites

| Geographic Response Area (GRA) | Site Number | Site Name | Change Description |
|----------------------------------------|-------------|--------------------|-----------------------------------------------------------------|
| GRA 1 - Del Norte County | | | No Changes |
| GRA 2 - Humboldt County Coastal | | | No Changes |
| GRA 3 - Humboldt Bay | 1-310 | North Humboldt Bay | Revised collection strategy and location (1-310.2) |
| GRA 3 - Humboldt Bay | 1-324 | Arcata Bay Sloughs | Added Rocky Gulch sub-strategy to Arcata Bay Sloughs as 1-324.5 |
| GRA 3 - Humboldt Bay | 1-330 | Indian Island | Shifted 1-330.1 deflection SW due to change in 1-310 |
| GRA 3 - Humboldt Bay | 1-340 | Palco Marsh | Revised response strategies |
| GRA 3 - Humboldt Bay | 1-345 | Elk River & Mars | Revised response strategies 1-345.1 and 1-345.4 |
| GRA 4 - Mendocino County | | | No Changes |

1-310-A Site Summary - North Humboldt Bay**1-310-A****County:** Humboldt **ACP Division/Segment:** HM - G - S03 HM - G - S23**NOAA Chart:** 18622**Map Book:** CA Road Atlas**Decimal Degrees:** 40.80641 -124.18232**Site Description:**

The response site is in the Samoa Channel south of the HWY 255 bridge. The boom deployment is designed to stop the spread of oil into the shallow waters of Arcata Bay north of HWY 255 on the flood tide. The strong tidal currents in the bay can bring oil from the mouth of the bay to the sensitive sites in North Bay in one or two tidal cycles. Extensive marsh complexes, wetlands, estuaries, bird habitats, aquaculture. High bird use area year round. Waterfowl, shorebirds, gulls, pelicans, cormorants, wading birds, and raptors are all at least occasionally present, with seasonal variations in migratory species, but with high numbers present in the area on any average day. Raptors include bald eagle, northern harrier and peregrine falcon. Brant present Nov-Apr. Other waterfowl and waterbirds include common loon, redhead, herons and egrets. Harbor seals are the only marine mammals typically found at this site but there are river otters and CA sea lions nearby in the bay. Anadromous salmonids include coho (FT, ST) and chinook (FT) salmon, steelhead (FT) and coast cutthroat (SSC) trouts: spawning runs (08-06); juveniles/smolt (02-08). Green sturgeon (FT, SSC), groundfish (EFH), longfin smelt (ST), Pacific eulachon (FT) and dungeness crab. Extensive eelgrass beds. Oyster aquaculture: North Bay is home to large commercially successful oyster seed production and smaller grow out operation. Care should be taken to minimize impacts to these resources.

Resources at Risk:*ESI and Habitat:* 9A Sheltered tidal flats

8B Sheltered solid man-made structures

10A Salt - and brackish-water marshes

List of Resources at Risk:

| | Resource Name | Status | Presence | Sensitivity |
|--------|---------------------------|---------|------------|-------------|
| Birds | marbled murrelet | FT, SE | Year-round | |
| Fish | green sturgeon - Southern | FT, SSC | Year-round | |
| Fish | longfin smelt | ST | Year-round | Nov-Jan |
| Fish | tidewater goby | FE, SSC | Year-round | |
| Fish | Pacific lamprey | SSC | Year-round | |
| Fish | eulachon | FT | Year-round | Dec-May |
| Fish | salmonids | | Year-round | |
| Plants | Humboldt Bay owl's-clover | | Year-round | |

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

List of Key Contacts:

| Type | Name/Title | Organization | Phone |
|------|------------|--------------------------------------------------|----------------|
| C | / | Native American Heritage Commission | (916) 373-3710 |
| C | / | Northwest Information Center | (707) 588-8455 |
| C | / | Table Bluff Reservation Wiyot Tribe | (707) 733-5055 |
| E | / | Humboldt County Sheriff | (707) 445-7251 |
| O | / | Humboldt Bay Harbor District | (707) 443-0801 |
| T | / | NOAA National Marine Fisheries Service-Arcata | (707) 822-7201 |
| T | / | 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).

Concerns and Advice to Responders:

This strategy should be implemented ASAP; oil will rapidly move towards Arcata Bay on a flood tide from most points in Humboldt Bay north of the jetty. Oiling of north bay could be difficult to clean up and cause long term damage to important habitats. Avoid anchor impacts to eelgrass beds.

Hazard and Restrictions:

Submerged cables near the response site are noted on diagram. Access to this site is best on the water as the islands have restricted access and are off limits to response traffic. Most of the remaining shoreline consists of wide and often shallow mud flats that are soft, deep, and difficult to walk upon and unstable to work on. Swift currents in Samoa Channel will complicate conventional response. Boom with two tension cables is advised. Vessel traffic may complicate response. Redwood Dock is deteriorating and may pose safety hazards, minimize equipment and personnel on the dock.

Site Strategies:

Strategy: 1-310.1 Objective: Other: See Strategy Box

Strategy: Use self propelled skimmers to begin oil recovery within North Bay.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|----------|------|------|-----|------|------------------|
| skimmer | SPS | | | 1 | | |
| Staff | | | | 3 | | |

Strategy: 1-310.2 Objective: Other: See Strategy Box

Strategy: Direct oil with cascaded deflection boom towards Redwood Dock for collection in front of the dock with a swift water skimmer. Use 400ft sections of boom (or less) to from the center channel to deflect oil to a floating skimmer at the Redwood Dock. Use one 600ft length to create the collection pocket in front of the dock. Connect the skimmer to a vacuum truck on shore with approximately 500ft of hose for recovery. Create the collection pocket prior to the cascades so recovery is immediate. Consider additional 400ft cascades and implement 1-330.1 deflection if needed to improve recovery.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|--------------------|-----------|------|-----|------|--------------------------------------------------------------------|
| Boom | Swamp | 2000 feet | | | | <i>Strategy Updated:</i> 12/13/2019 <i>Last Test:</i> 10/9/2019 |
| Anchor | Danforth | 22 lb | | 12 | | |
| boat | Boom Boat or Skiff | | | 2 | | |
| skimmer | SPS | | | 1 | | |
| Staff | | | | 8 | | |
| Vac truck | | | | 1 | | |
| Hose | | 500 feet | | | | |

Logistics:

Directions: Humboldt Bay is adjacent to Highway 101, near the cities of Arcata and Eureka. Highway 255 passes over it on the north end. The response area for this site include the Samoa Channel between the town of Samoa and Indian Island, south of the Highway 255 bridge.

Land Access: Accessible from Samoa at Redwood Marine Terminal. Do not access Indian Island without permission from Wiyot Tribe.

On-Water Limitations: The channels are deep, while the shoreline is mudflats. There are numerous public boat ramps around the bay, with the nearest being directly under the east end of the Highway 255 Bridge in Eureka or the City of Eureka's launch at the marina.

Facilities, Staging Areas, Command Posts, Available Equipment: Public docks and boat launching facilities are available around the bay and the OSROs have on the water response resources pre-staged in the area.

Communications Problems:

Additional Operational Comments: Bring a life vest and rain jacket, year round. Do not access Indian Island without permission or escort from Wiyot Tribe.



1-324-A Site Summary - Arcata Bay Sloughs**1-324-A****County :** Humboldt **ACP Division/Segment :** HM - G - S07 HM - G - S08**NOAA Chart :** 18622**Map Book :** CA Road Atlas**Decimal Degrees** 40.8538 -124.0937**Site Description:**

This site includes the tidal estuaries of five small coastal streams that enter Arcata Bay. Ownership and management includes City of Arcata, California Department of Fish and Wildlife, and Humboldt Bay National Wildlife Refuge. High public use area at Arcata Marsh. Site is shallow; and most of it will be exposed mudflats at lower tides. Strong tidal movements and shallow mudflats will make spill control very challenging in this habitat. High bird use area year round. Extensive eel grass beds are the subject of much public interest and concern. Brant use these areas for foraging Nov-Apr. Harbor seals and river otters may be present year round. Anadromous salmonids spawn upstream Sept-Apr. Green sturgeon may be present in North Bay channels June-Oct.

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

9A Sheltered tidal flats

List of Resources at Risk:

| | Resource Name | Status | Presence |
|--------|-----------------------------------------|--------|------------|
| Birds | waterfowl | | Year-round |
| Birds | shorebirds | | Year-round |
| Birds | wading birds | | Year-round |
| Birds | black brant | | Nov-Apr |
| Fish | coho salmon - north of Punta Gorda | FT, ST | Year-round |
| Fish | chinook salmon - California coastal | FT | Year-round |
| Fish | steelhead - Central/Northern California | FT | Year-round |
| Fish | coastal cutthroat trout | | Year-round |
| Fish | tidewater goby | FE | Year-round |
| Fish | Pacific lamprey | | Year-round |
| Fish | green sturgeon | | June-Oct |
| Fish | longfin smelt | | Year-round |
| Fish | Pacific herring | | Year-round |
| Plants | eelgrass | | Year-round |

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| C | / | Northwest Historical Resources Information Center | (707) 588-8455 |
| C | / | Table Bluff Reservation Wiyot Tribe | (707) 733-5055 |
| O | / | Humboldt Bay Harbor District | (707) 443-0801 |
| T | / | CA Dept of Fish and Wildlife Eureka Field Office | (707) 445-6493 |
| T | / | City of Arcata | (707) 822-5951 |
| T | / | Humboldt Bay NWR Complex | (707) 733-5406 |

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).

Concerns and Advice to Responders:

Oiling of slough and marsh complex could cause long term damage to important habitats. Avoid anchoring in eelgrass beds.

Hazard and Restrictions:

Much of the bay is shallow with abraded channels at low tide. Extensive oyster culture near the Samoa Channel should be avoided by boat traffic. Old tidegate, exposed metal edges, and submerged rip-rap with rebar hazards at McDaniel Slough.

Site Strategies:

Strategy: 1-324.1 Objective: Exclude oil from entering surrounding sloughs, especially Jacoby Creek
Strategy: Exclusion boom the mouth of the creek.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|--------------------------|----------|------|------|-----|------|---------------------------------------------------------|
| Boom | Harbor | | | 500 | feet | <i>Strategy Updated: 5/24/2018</i> <i>Last Test:</i> |
| Boom | Sorbent | | | 100 | feet | |
| Stakes, Shovels, Hammers | | | | | | |
| Staff | | | | 6 | | |

Strategy: 1-324.2 Objective: Exclude oil from entering surrounding sloughs, especially Gannon Slough
Strategy: Exclusion boom the mouth of the slough.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|--------------------------|----------|------|------|-----|------|---------------------------------------------------------|
| Boom | Harbor | | | 500 | feet | <i>Strategy Updated: 5/24/2018</i> <i>Last Test:</i> |
| Boom | Sorbent | | | 100 | feet | |
| Stakes, Shovels, Hammers | | | | | | |
| Staff | | | | 6 | | |

Strategy: 1-324.3 Objective: Exclude oil from entering surrounding sloughs, especially Butcher slough.
Strategy: Exclusion boom the mouth of the slough.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|--------------------------|----------|------|------|-----|------|---------------------------------------------------------|
| Boom | Harbor | | | 300 | feet | <i>Strategy Updated: 5/24/2018</i> <i>Last Test:</i> |
| Boom | Sorbent | | | 100 | feet | |
| Stakes, Shovels, Hammers | | | | | | |
| Staff | | | | 6 | | |

Strategy: 1-324.4 Objective: Exclude oil from entering surrounding sloughs, especially McDaniel slough.
Strategy: Exclusion boom the mouth of the slough.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|--------------------------|----------|------|------|-----|------|-------------------------------------------------------------------|
| Boom | Harbor | | | 300 | feet | <i>Strategy Updated: 5/24/2018</i> <i>Last Test: 9/24/2014</i> |
| Boom | Sorbent | | | 50 | feet | |
| Stakes, Shovels, Hammers | | | | | | |
| Staff | | | | 6 | | |

Strategy: 1-324.5 Objective: Exclude oil from entering Rocky Gulch.

Strategy: Exclusion boom the mouth of the slough from Bracut Industrial Park.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|----------|------|------|-----|------|-----------------------------|
| Boom | Swamp | | | 300 | feet | Strategy Updated: 5/24/2018 |
| Boom | Sorbent | | | 100 | feet | Last Test: 10/17/2017 |
| T-Posts | | | | | | |
| Staff | | | | 4 | | |

Logistics:

Directions: Arcata Bay is at the northern end of Humboldt Bay, and adjacent to Highway 101, near the cities of Arcata and Eureka. Highway 255 passes over it on the south end of Arcata Bay. Jacoby Creek and Gannon sloughs can be accessed from Highway 101 between Bayside Cutoff and South G Streets. Butcher Slough and McDaniel sloughs can be accessed from the Arcata Marsh at the south end of I Street in Arcata. Butcher Slough can also be accessed from South G Street. Rocky Gulch can be accessed from Bracut Industrial Park.

Land Access: Vehicles can drive near sloughs, foot or shallow draft vessels required.

On-Water Limitations: Shallow mudflats, small launch at Arcata Marsh, and hand launch at Rocky Gulch

Facilities, Staging Areas, Command Posts, Available Equipment: Parking areas at Arcata Marsh may be appropriate.

Communications Problems:

Additional Operational Comments: Shallow sloughs, extensive mudflats. Depth limitations may complicate vessel access and boom deployment (minimum 3' tide needed). Contact City of Arcata to facilitate access.



Imagery: NAIP 2012 (Summer) 4-Band

1-330-A Site Summary - Indian Island**1-330-A****County:** Humboldt **ACP Division/Segment:** HM - G - S23**NOAA Chart:** 18622**Map Book:** CA Road Atlas**Decimal Degrees:** 40.81571 -124.16812**Site Description:**

Indian Island is adjacent to Woodley Island in North Humboldt Bay. Ownership and management includes the Wiyot Tribe, City of Eureka and a handfull of private parcels. Indian Island is a low elevation island that has large wetlands that can be submerged at higher tides. The protection strategies are designed to exclude oil from the interior wetlands by diversion and exclusionary booming. Largest Island in Humboldt Bay, it is a sacred site for the Wiyot Tribe. Strong tidal currents in the Samoa channel transport most of the water in and out of Arcata Bay. This is a popular habitat for wildlife year round. Excluding oil from this site is of primary concern. The site has significant historical and cultural value that must also be protected. Extensive marsh system and wetlands are vulnerable to oiling. The entire island is a cultural resource for the Wiyot and the City of Eureka. Natural resources include waterfowl, shorebirds, wading birds, waterbirds, harbor seals, green sturgeon (FT,SSC), groundfish (EFH), dungeness crab, oyster aquaculture in area, extensive eelgrass beds.

Resources at Risk:*ESI and Habitat:* 9A Sheltered tidal flats

9B Vegetated low banks

10A Salt - and brackish-water marshes

List of Resources at Risk:

| | Resource Name | Status | Presence | Sensitivity |
|--------|---------------------------|---------|------------|-------------|
| Birds | marbled murrelet | FT, SE | Year-round | |
| Fish | green sturgeon - Southern | FT, SSC | Year-round | |
| Fish | longfin smelt | ST | Year-round | |
| Fish | tidewater goby | FE, SSC | Year-round | |
| Fish | Pacific lamprey | SSC | Year-round | |
| Fish | eulachon | FT | Year-round | |
| Fish | salmonids | | Year-round | |
| Plants | Humboldt Bay owl's-clover | | Year-round | |

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| C | / | Native American Heritage Commission | (916) 373-3710 |
| C | / | Northwest Information Center | (707) 588-8455 |
| C | / | Table Bluff Reservation Wiyot Tribe | (707) 733-5055 |
| E | / | City of Eureka | (707) 441-4203 |
| O | / | Humboldt Bay Harbor District | (707) 443-0801 |
| T | / | NOAA National Marine Fisheries Service-Arcata | (707) 822-7201 |
| T | / | 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).

Concerns and Advice to Responders:

Oiling of sloughs and marsh complex could cause long term damage to important habitats. Avoid anchoring in eelgrass beds.

Hazard and Restrictions:

Be aware and avoid submerged cables identified on diagram. Indian island is a sacred site. Do not enter without permission and supervision of the Wiyot Tribe. Shallow water at low tide, swift currents, extensive mudflats.

Site Strategies:

Strategy: 1-330.1 Objective: Divert Oil

Strategy: Add a short leg of boom from the west shore (anchor point) of the island to deflect oil away from Indian Island and towards strategy 1-310 for collection on the west side of the Samoa Channel at Redwood Dock. Consider adding additional 400-ft cascades of swamp boom if necessary to improve deflection toward 1-310 collection site across the channel..

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|--------------------|----------|------|-----|------|------------------|
| Boom | Swamp | 500 feet | | | | |
| boat | Boom Boat or Skiff | | | 1 | | |
| Staff | | | | 2 | | |
| Anchor | Danforth | 22 lb | | 2 | | |

Logistics:

Directions: Indian island is only accessible by boat. Do not walk on the Island.

Land Access: No land access

On-Water Limitations: The island is accessible by boat, and depth is variable. There are docks on the east side, but permission to access the island should be obtained before landing there.

Facilities, Staging Areas, Command Posts, Available Equipment: This is not a location for a staging area or a field post.

Communications Problems:

Additional Operational Comments: Shallow sloughs, extensive mudflats. Depth limitations may complicate vessel access.



1-340-A Site Summary - Palco Marsh**1-340-A****County :** Humboldt **ACP Division/Segment :** HM - G - S12**NOAA Chart :** 18622**Map Book :** CA Road Atlas**Decimal Degrees** 40.7909 -124.1833**Site Description:**

Palco Marsh is a wetland mitigation site behind and adjacent to the Bayshore Mall and west of Hwy 101. The City of Eureka is the land owner and manager. The site includes freshwater wetlands and salt marsh that is hydrokinetically connected to Humboldt Bay providing tidal influence through a water control structure. The flows into the marsh are muted by the connecting culvert system. Adjoining the marsh and located on the bay are eelgrass beds and exposed tidal flats. The marsh provides important coastal wetland habitat for wildlife in Eureka and adjacent to Humboldt Bay and is a high bird use area year round. High public use area with Hikshari Trail crossing the west edge of the marsh. Brant use these areas for foraging Nov-Apr. Harbor seals are present nearby in the bay year round. Pacific herring spawn on eelgrass beds Nov-March.

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

9A Sheltered tidal flats

List of Resources at Risk:

| | Resource Name | Status | Presence |
|---------|-----------------|--------|------------|
| Birds | wading birds | | Year-round |
| Birds | shorebirds | | Year-round |
| Birds | waterfowl | | Year-round |
| Birds | black brant | | Nov-Apr |
| Fish | tidewater goby | FE | Year-round |
| Fish | Pacific herring | | Year-round |
| Mammals | harbor seal | FP | Year-round |
| Plants | eelgrass | | Year-round |

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| C | / | Table Bluff Reservation Wiyot Tribe | (707) 733-5055 |
| E | / | City of Eureka | (707) 441-4203 |
| E | / | Eureka Police Department | (707) 441-4044 |
| O | /Terminal Manager | Chevron Marine Terminal | (707) 444-7850 |
| O | / | Humboldt Bay Harbor District | (707) 443-0801 |

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).

Concerns and Advice to Responders:

Oiling of sloughs and marsh complex could cause long term damage to important habitats.

Hazard and Restrictions:

Be aware of homeless encampments in the marsh.

Site Strategies:

Strategy: 1-340.1 Objective: Prevent oil from entering the marsh

Strategy: Deploy exclusion boom from south of the tidegate structure to the north across the channel to the point to protect tidegate, channel and marsh.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|----------|--------|------|-----|------|-------------------------------------------------------------------|
| Boom | Swamp | | | 300 | feet | <i>Strategy Updated: 5/29/2018</i> <i>Last Test: 3/14/2017</i> |
| Boom | Sorbent | | | 40 | feet | |
| Anchor | Danforth | 25 lbs | | 1 | | |
| T-Posts | | | | | | |
| Staff | | | | 3 | | |

Logistics:

Directions: From U.S. Hwy 101 southbound in Eureka (South Broadway St), take Del Norte St. (M.P. 77.250) west and continue to the foot of Del Norte Street. Gated access located at the point where the railroad tracks cross Del Norte Street. The marsh is visible at this point. Gated access is also possible from the foot of Vigo Street or Bayshore Way (SB U.S. Hwy 101 M.P.s 76.750 and 76.560).

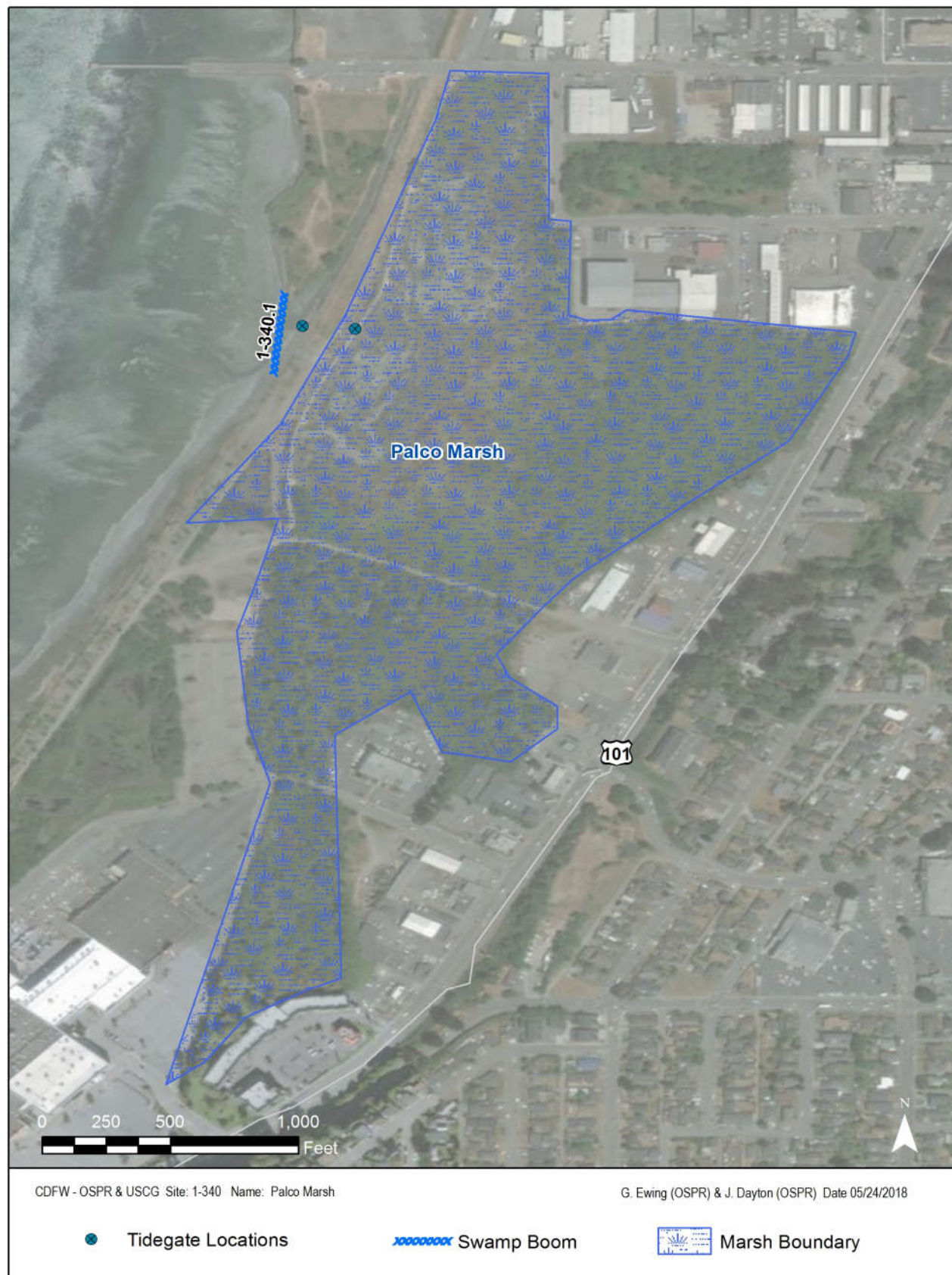
Land Access: Vehicle access possible from Hikshari trail; locked gates can be opened by the City of Eureka to facilitate access.

On-Water Limitations: No access by water. Too shallow

Facilities, Staging Areas, Command Posts, Available Equipment: OSRO's have staging at their facilities in Eureka.

Communications Problems:

Additional Operational Comments: Contact City of Eureka for access and assistance if a response here is necessary.



1-345-A Site Summary - Elk River & Marsh**1-345-A****County :** Humboldt **ACP Division/Segment :** HM - G - S12 HM - G - S13**NOAA Chart :** 18622**Map Book :** CA Road Atlas**Decimal Degrees** 40.7714 -124.1973**Site Description:**

This site extends from the mouth of the Elk River on Humboldt Bay and includes the tidal marsh complex upstream. This site is within the City of Eureka and is also known as the Elk River Wildlife Sanctuary managed by the city. High public use area as Eureka's Hikshari trail lies adjacent to the estuary. Tidal influence extends well upstream of the Highway 101 bridge. The inlet consists of sheltered tidal flats with eelgrass beds. Elk River spit is fine to medium grain sand. The Elk river estuary has extensive wetlands and saltmarsh that would be difficult to clean-up if oiled. High bird use area year round. Brant use the area for foraging Nov-Apr. Anadromous salmonids spawn upstream Sept-April. Pacific herring spawn on eelgrass beds Nov-March.

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

9A Sheltered tidal flats

List of Resources at Risk:

| | Resource Name | Status | Presence |
|---------|-----------------------------------------|--------|------------|
| Birds | wading birds | | Year-round |
| Birds | shorebirds | | Year-round |
| Birds | waterfowl | | Year-round |
| Birds | black brant | | Nov-Apr |
| Fish | coho salmon - north of Punta Gorda | FT, ST | Year-round |
| Fish | chinook salmon - California coastal | FT | Year-round |
| Fish | steelhead - Central/Northern California | FT | Year-round |
| Fish | coastal cutthroat trout | | Year-round |
| Fish | longfin smelt | | Year-round |
| Fish | tidewater goby | FE | Year-round |
| Fish | Pacific lamprey | | Year-round |
| Fish | Pacific herring | | Year-round |
| Mammals | harbor seal | FP | Year-round |
| Mammals | North American river otter | | Year-round |
| Plants | beach layia | FE, SE | Year-round |
| Plants | eelgrass | | Year-round |
| Plants | Humboldt Bay wallflower | FE, SE | Year-round |

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| O | / | Humboldt Bay Harbor District | (707) 443-0801 |
| T | / | CA Dept of Fish and Wildlife Eureka Field Office | (707) 445-6493 |

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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).

Concerns and Advice to Responders:

Oiling of sloughs and marsh complex could cause long term damage to important habitats. Avoid anchoring in eelgrass beds.

Hazard and Restrictions:

There is extensive shoaling in this area, and a significant number of potentially submerged pilings from an old trestle in the mouth of the river. Homeless camps in vicinity.

Site Strategies:

Strategy: 1-345.1 Objective: Shut key-locked tide gates on Pound Road to prevent tidal exchange.

Strategy: Keys are available at either the Chevron Terminal in Eureka or from the City of Eureka Public Works Office. This strategy is only applicable if oil has already entered the river and is upstream of the mouth and/or if primary booming strategies cannot be safely deployed.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|---------------------|----------|------|------|-----|------|-----------------------------|
| Key or Bolt Cutters | | | | 1 | | Strategy Updated: 5/30/2018 |
| Staff | | | | 2 | | Last Test: |

Strategy: 1-345.2 Objective: Boom the mouth of Elk River to exclude oil.

Strategy: Exclusion boom the river mouth and collect oil if possible.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|----------|-----------|------|-----|------|-----------------------------|
| Boom | Harbor | 1400 feet | | | | Strategy Updated: 5/30/2018 |
| Boom | Sorbent | 300 feet | | | | Last Test: 3/18/2014 |
| Anchor | Danforth | 25 lb | | 5 | | |
| Boat | Skiff | | | 1 | | |
| Staff | | | | 4 | | |

Strategy: 1-345.3 Objective: Collect oil when enough is present to skim.

Strategy: Use a skimmer to collect oil from off the water into collection.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|----------|------|------|-----|------|-----------------------------|
| Skimmer | SSS/SPS | | | 1 | | Strategy Updated: 5/30/2018 |
| Staff | | | | 2 | | Last Test: |

Strategy: 1-345.4 Objective: Boom the mouth of Elk River to exclude oil.

Strategy: Connect harbor boom from south end of Chevron Pier to north end of Elk River sand spit. Connect swamp boom from east shore of bay to south end of Chevron Pier to complete exclusion of estuary. This would be an alternative to strategy #2 at this site and is intended to replace that strategy as the primary deployment for this site. The original strategy will remain as an alternative that could be used when or if this strategy is not feasible, or as a second layer of protection.

Table of Response Resources

| Equipment | Sub-Type | Size | Unit | QTY | Unit | Last Page Update |
|-----------|-----------|-------|------|------|------|-----------------------------|
| Boom | Harbor | | | 2000 | feet | Strategy Updated: 5/30/2018 |
| Boom | Swamp | | | 800 | feet | Last Test: 3/23/2016 |
| Anchor | Danforth | 25 lb | | 9 | | |
| Boat | Boom boat | | | 1 | | |
| Boat | Skiff | | | 1 | | |
| Staff | | | | 5 | | |

Logistics:

Directions: There is access to the river mouth from the foot of Truesdale Street, just south of the Bayshore Mall. There is secondary access just upstream at the foot of Hilfiker Lane. From southbound U.S. Hwy 101 (South Broadway Street) in Eureka, turn right at the "Coastal Access" sign at Hilfiker Lane (M.P. 75.740) and continue to the end of the street.

Land Access: Accessible to all vehicle types including heavy equipment. Contact City of Eureka to facilitate access from Coastal Trail.

On-Water Limitations: The water depth is variable, probably submerged pilings. Access is possible from Humboldt Bay with shallow draft vessels recommended for this response location.

Facilities, Staging Areas, Command Posts, Available Equipment: There are small parking lots near the foots of Truesdale and Hilfiker streets where local response equipment and supplies could be staged for a response at this site.

Communications Problems:

Additional Operational Comments: Shallow sloughs, extensive mudflats. Depth limitations may complicate vessel access. Easier to deploy boom at higher tides (3'+). Boom can be launched from shore from Hikshari Trail vicinity; contact City of Eureka for access.



Imagery: NAIP 2012 (Summer) 4-Band