# Map & Photo Legend

EX-02a viewed from the northwest.

EX-02c viewed from the north.

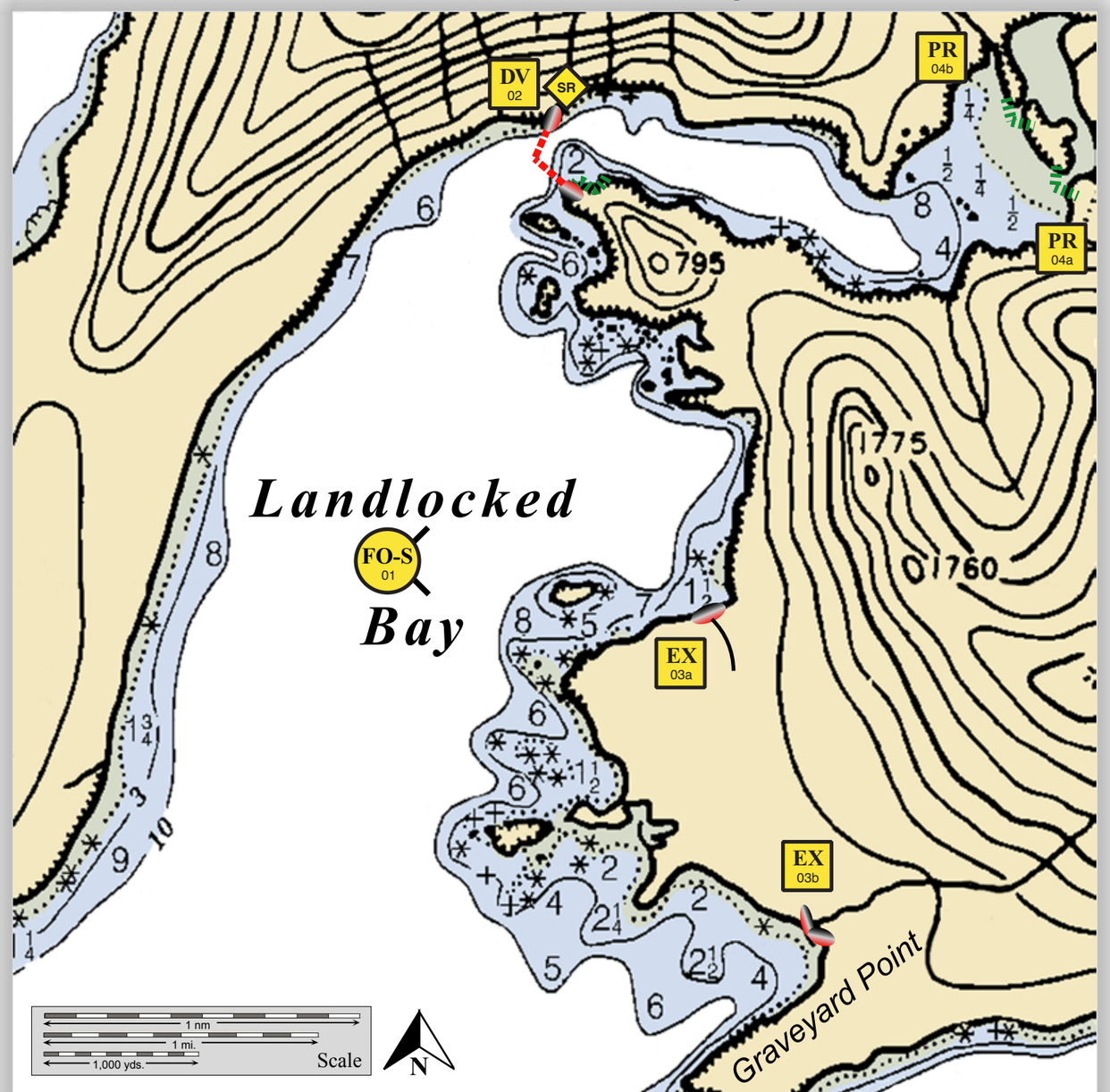
EX-02b viewed from the northwest.

- FO-S Free-oil Recovery
- EX Exclusion Booming
- PR Passive Recovery
- Protected-water Boom
- Tidal-seal Boom
- Snare or Sorbent Boom

# Geographic Response Strategies for Northeast Prince William Sound Subarea

## Landlocked Bay, PWS-NE31

Center of map at 60˚ 49.9' N Lat., 146˚ 34.2' W Lon.




This is not intended for navigational use.

April 6, 2011

*DRAFT This tactic map is a working draft being used to develop a Geographic Response Strategy at this location. The tactics represented here have not been approved by the Subarea Committee and should not be considered final. If you have questions or comments please contact us by email at contact@nukaresearch.com.*

**NUKA Research & Planning Group, LLC.**

| ID | Location and Description | Response Strategy | Implementation | Response Resources | Staging Area | Site Access | Resources Protected (months) | Special Considerations |
|---|---|---|---|---|---|---|---|---|
| PWS NE-31-01<br>FO-S | **Landlocked Bay**<br>Nearshore waters in the general area of:<br>Lat. 60º 49.09 N<br>Lon. 146º35.88 W | **Free-oil Recovery**<br>Maximize free-oil recovery in the offshore & nearshore environment of Landlocked Bay depending on spill location and trajectory. | Deploy free-oil recovery strike teams upwind and up current of Landlocked Bay.<br>Use aerial surveillance to locate incoming slicks. | Deploy multiple free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas. | Valdez Harbor | Via marine waters<br>Chart 16708-1 | Same as NE-31-02 | Vessel master should have local knowledge.<br>Use extreme caution, shoal waters with numerous reefs and rocks. |
| PWS NE-31-02<br>DV | **Galena Bay**<br>Lat. 60º 51.22 N<br>Lon. 146º34.42 W | **Divert and Collect**<br>Divert oil to a shore side collection area in Landlocked Bay. | Deploy anchors and boom with skiffs (class 6).<br>Place 100 ft. sections of tidal-seal boom on each shore. Complete with 1200 ft. protected-water boom in chevron pattern at the proper angle to divert the majority of incoming oil to the north shore side collection sites. If necessary place passive recovery on the south.<br>Set up collection site and tend throughout the tide. If oil is not collecting in significant amounts, use sorbent materials to collect the oil. | **Deployment**<br>**Equipment**<br>1200 ft. protected-water boom<br>200 ft. tidal-seal boom<br>7 ea. anchor systems<br>4 ea. anchor stakes<br>1 ea. shore-side collection unit<br>**Vessels**<br>1 ea. class 3/4<br>1 ea. class 6<br>**Personnel/Shift**<br>5 ea. vessel crew<br>2 ea. response techs<br>**Tending**<br>**Vessels**<br>1 ea. class 3/4<br>1 ea. class 6<br>**Personnel/Shift**<br>3 ea. vessel crew<br>2 ea. response techs | Vessel platform | Via marine waters<br>Chart 16708-1 | Fish- intertidal spawning- salmon (May-Sept.), herring spawning (April-May)<br>Birds-waterfowl concentration,<br>Marine mammals- seals<br>Human use- commercial fishing, high recreation use, subsistence.<br>Habitat- marsh, sheltered tidal flats | Vessel master should have local knowledge.<br>Site surveyed: 9/02/10.<br>Tested: not yet |
| PWS NE-31-03<br>EX | **Landlocked Bay**<br>a. Lat. 60º 49.93 N Lon. 146º33.47 W<br>b. Lat. 60º 48.99 N Lon. 146º32.81 W | **Exclusion**<br>Exclude oil from impacting the identified stream and intertidal area in Landlocked Bay. | Deploy anchors and boom with skiffs (class 6) at high tide.<br>For (a) place two (2) 120 ft. sections of tidal-seal boom on each shore. Complete the exclusion with 1200 ft. of protected-water boom in a chevron formation at the identified location.<br>For (b) & (c) place 200 ft. sections of tidal-seal across the stream mouths.<br>Tend throughout the tide. | **Deployment**<br>**Equipment**<br>400 ft. tidal-seal boom<br>4 ea. small anchor systems<br>8 ea. anchor stakes<br>**Vessels/Personnel/Shift**<br>Same as NE-31-02<br>**Tending**<br>**Vessels/Personnel/Shift**<br>Same as NE-31-02 | Vessel platform | Via marine waters<br>Chart 16708-1 | Same as NE-31-02 | Vessel master should have local knowledge.<br>Title 41 permitting required from ADNR.<br>Tested: not yet |
| PWS NE-31-04<br>PR | **Landlocked Bay**<br>a. Lat. 60º 51.14 N Lon. 146º31.31 W<br>b. Lat. 60º 51.32 N Lon. 146º31.61 W | **Passive Recovery**<br>Place passive recovery across the channels of the streams in the back of Landlocked Bay. | On a flooding tide, use skiffs (class 6) and place and anchor two (2) 200 ft. of snare line or sorbent boom across the streams that enter Landlocked Bay.<br>Replace as necessary to maximize the recovery. | **Deployment**<br>**Equipment**<br>400 ft. snare line or sorbent boom<br>2 ea. small anchor systems<br>8 ea. anchor stakes<br>**Vessels/Personnel/Shift**<br>Same as NE-31-02<br>**Tending**<br>**Vessels/Personnel/Shift**<br>Same as NE-31-02 | Vessel platform | Via marine waters<br>Chart 16708-1 | Same as NE-31-02 | Use snare line for persistent oils and sorbent boom for non-persistent oils.<br>Title 41 permitting required from ADNR.<br>Tested: not yet |



*NOTE: Sensitive resource information can be found on other maps which can be accessed through the sensitive area section of the PWS Sub-Area Contingency Plan: http://dec.alaska.gov/spar/perp/plans/scp_pws.htm.*