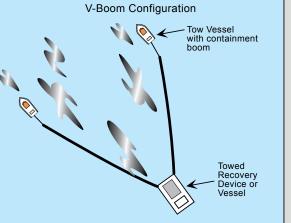
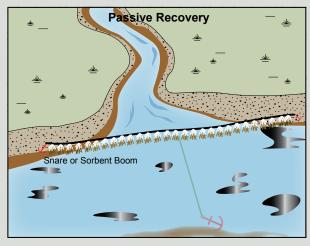


Actual deployment should be adjusted for local conditions.

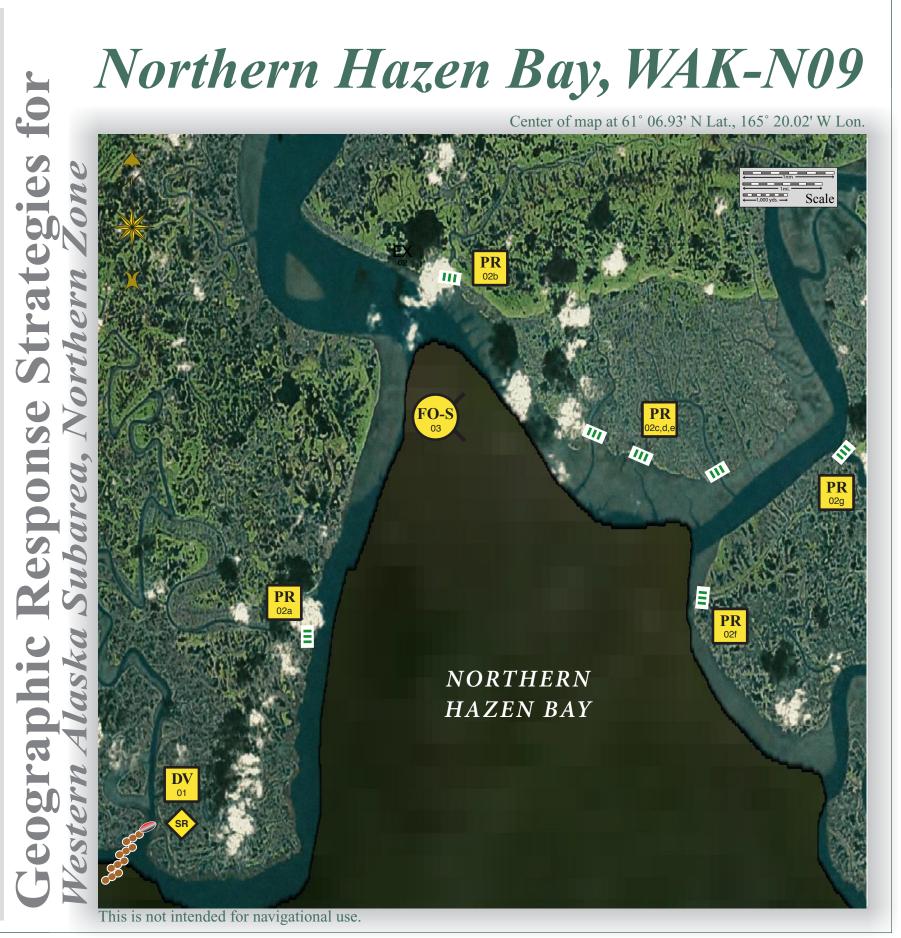


An example of the *Diversion Booming Tactic*. An example of the *Free-oil Recovery Tactic*. Actual deployment should be adjusted for local conditions.



An example of the *Passive Recovery Tactic*. Actual deployment should be adjusted for local conditions.





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.

## Western Alaska Subarea Geographic Response Strategies

ID	Location and Description	Response Strategy	Implementation	Response Resources	Staging Area	Site Access	Resources Protected (months)	Special Considerations
N-09-01	Northern Hazen Bay Tutakoke River Lat. 61° 05.23'N Lon. 165°26.52'W	Divert and Collect Divert oil to shore side collection location on the shore of the identified streams and sloughs in Northern Hazen Bay.	Deploy anchors and boom with skiffs (class 6). Cascade 1200 ft. of fast-water boom in 300 ft sections at the proper angle to divert incoming oil to the collection site. Complete the array with a 60-foot section of tidal seal boom on shore. Set up shore-side recovery and tend throughout the tide.	Deployment   Equipment   1200 ft. fast-water boom   60 ft. tidal seal boom   22 ea. anchor systems   8 ea. anchor systems   8 ea. anchor stakes   2 ea. shore-side recovery systems   Vessels   1 ea. class 3   2 ea. class 6   Personnel/Shift   7 ea. vessel crew/general techs   2 ea. response techs   Tending   Vessels   1 ea. class 3   1 ea. class 6   Personnel/Shift   5 ea. vessel crew/general techs   1 ea. class 6   Personnel/Shift   5 ea. vessel crew/general techs   1 ea. class 6   Personnel/Shift   5 ea. vessel crew/general techs   1 ea. skilled tech	Hooper Bay	Via marine waters Chart 16606	Fish- intertidal spawning- salmon (June-Sept.), sheefish, white fish Birds-waterfowl and shorebird concentration Marine mammals- seals Habitat- exposed tidal flats, peat shoreline, marsh, Human use-subsistence	Vessel master should have local knowledge. Title 41 permitting required from ADNR. Use appropriate measures as outlined in the STAR manual to protect the shoreline. THREATENED OR ENDANGERED SPECIES/ HABITAT POSSIBLE. Discuss with DOI prior to on-site operations. Surveyed: not yet Tested: not yet
N-09-02	Northern Hazen Bay     a.   Lat. 61° 7.28'N Lon. 165°22.48'W     b.   Lat. 61°10.88'N Lon. 165°18.04'W     Arrays C,D E in the area of Lat. 61°09.33'N Lon. 165°12.22'W     f.   Lat. 61°09.05'N Lon. 165°07.22'W     g   Lat. 61°07.59'N Lon. 165°11.00'W	<b>Passive Recovery</b> Survey the area prior to deployment. Place passive recovery across entrances to the identified sloughs and other major cuts in the back in Northern Hazen Bay.	Place and anchor snare line or sorbent boom across the channels of streams/sloughs in Northern Hazen Bay.   Replace as necessary to maximize the recovery. <u>Boom Lengths:</u> a. 600 ft.   b. 400 ft.   c. 500 ft.   d. 500 ft.   g. 600 ft.   g. 600 ft.	DeploymentEquipment3300 ft. snare line or sorbent boom12 ea. small anchor systems20 ea. anchor stakes(Adjust equipment to reflect survey findings)Vessels/Personnel/ShiftSame as N-09-01Tending Vessels/Personnel/ShiftSame as N-09-01	Vessel Platform	Via marine waters Chart 16606	Same as N-09-01	Vessel master should have local knowledge.
N-09-03	Northern Hazen Bay Nearshore waters in the general area of: Lat. 61° 06.93'N Lon. 165°20.02'W	<b>Free-oil Recovery</b> Maximize free-oil recovery in the offshore & nearshore environment of Northern Hazen Bay depending on spill location and trajectory.	Deploy free-oil recovery strike teams upwind and up current of the Northern Hazen Bay. 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.	Hooper Bay	Via marine waters Chart 16606	Same as N-09-01	Vessel master should have local knowledge. Use extreme caution, shallow waters with shifting channels and bars.

NOTE: Sensitive resource information can be found on other maps which can be accessed through the sensitive area section of the Western Alaska Subarea Contingency Plan: http://dec.alaska.gov/spar/perp/plans/scp\_wak.htm.