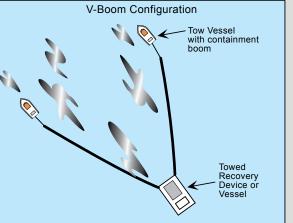
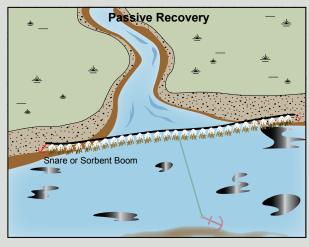


Actual deployment should be adjusted for local conditions.

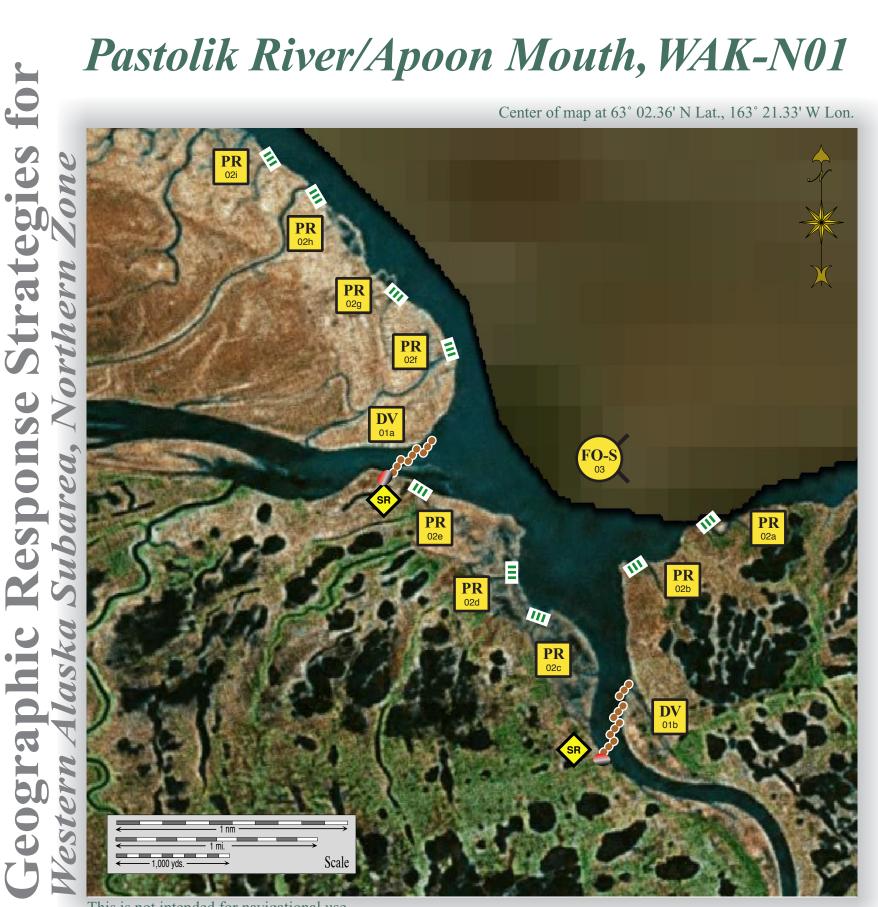


An example of the *Diversion Booming Tactic*. An example of the *Free-oil Recovery Tactic*. Actual deployment should be adjusted for local conditions.



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





This is not intended for navigational use.

Aerial photography of this area is unavailable at this time, but may be included as it becomes available.

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-01-01	Pastolik River a. Lat. 63° 02.48'N Lon. 163°22.83'W Apoon Mouth b. Lat. 63° 01.11'N Lon. 163°20.49'W	Divert and Collect Divert oil to shore side collection location on the shore of the Pastolik River & Apoon Mouth.	Deploy anchors and boom with skiffs (class 6). Cascade each array in 300 ft sections of fast-water boom at the proper angle to divert incoming oil to the collection site. Complete the arrays with 60-ft sections of tidal seal boom. Set up shore-side recovery and tend throughout the tide. Boom Lengths: a. 900 ft b. 1200 ft.	Deployment Equipment 2100 ft. fast-water boom 120 ft. tidal seal boom 14 ea. anchor systems 8 ea. anchor systems 8 ea. anchor stakes 2 ea. shore-side recovery systems Vessels 3 ea. class 6 Personnel/Shift 6 ea. vessel crew/general techs 4 ea. response techs Tending Vessels 2 ea. class 6 Personnel/Shift 4 ea. vessel crew/general techs 2 ea. skilled tech	Kotlik	Via marine waters Chart 16240-1	Fish- intertidal spawning- salmon (June-Sept.), arctic char, 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. Use appropriate measures as outlined in the STAR manual to protect the shoreline. Title 41 permitting required from ADNR. THREATENED OR ENDANGERED SPECIES/ HABITAT POSSIBLE. Discuss with DOI prior to on-site operations. Surveyed: not yet Tested: not yet
N-01-02	Pastolik River & Apoon Mouth Main Channels: a. Lat. 63° 02.18'N Lon. 163°19.25'W b. Lat. 63° 01.97'N Lon. 163°20.01'W c. Lat. 63° 01.69'N Lon. 163°20.99'W d. Lat. 63° 01.94'N Lon. 163°21.27'W	Passive Recovery Survey and identify the additional drainages into the tundra prior to deployment. Place passive recovery across the channels of the streams and drainages in the area near Pastolik River & Apoon Mouth.	Place and anchor 100 ft. sections of snare line or sorbent boom across the channels of streams in Pastolik River & Apoon Mouth. Replace as necessary to maximize the recovery.	Deployment Equipment 900 ft. snare line or sorbent boom 9 ea. small anchor systems 18 ea. anchor stakes (Adjust equipment to reflect survey findings) Vessels/Personnel/Shift Same as N-01-01 Tending Vessels/Personnel/Shift Same as N-01-01	Kotlik	Via marine waters Chart 16240-1	Same as N-01-01	Vessel master should have local knowledge.
N-01-03	Pastolik River & Apoon Mouth Nearshore waters in the general area of: Lat. 63° 02.36'N Lon. 163°21.33'W	Free-oil Recovery Maximize free-oil recovery in the offshore & nearshore environment of Pastolik River & Apoon Mouth depending on spill location and trajectory.	Deploy free-oil recovery strike teams upwind and up current of the Pastolik River & Apoon Mouth. 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.	Kotlik	Via marine waters Chart 16240-1	Same as N-01-01	Vessel master should have local knowledge. Use extreme caution, shallow waters with shifting channels and bars.