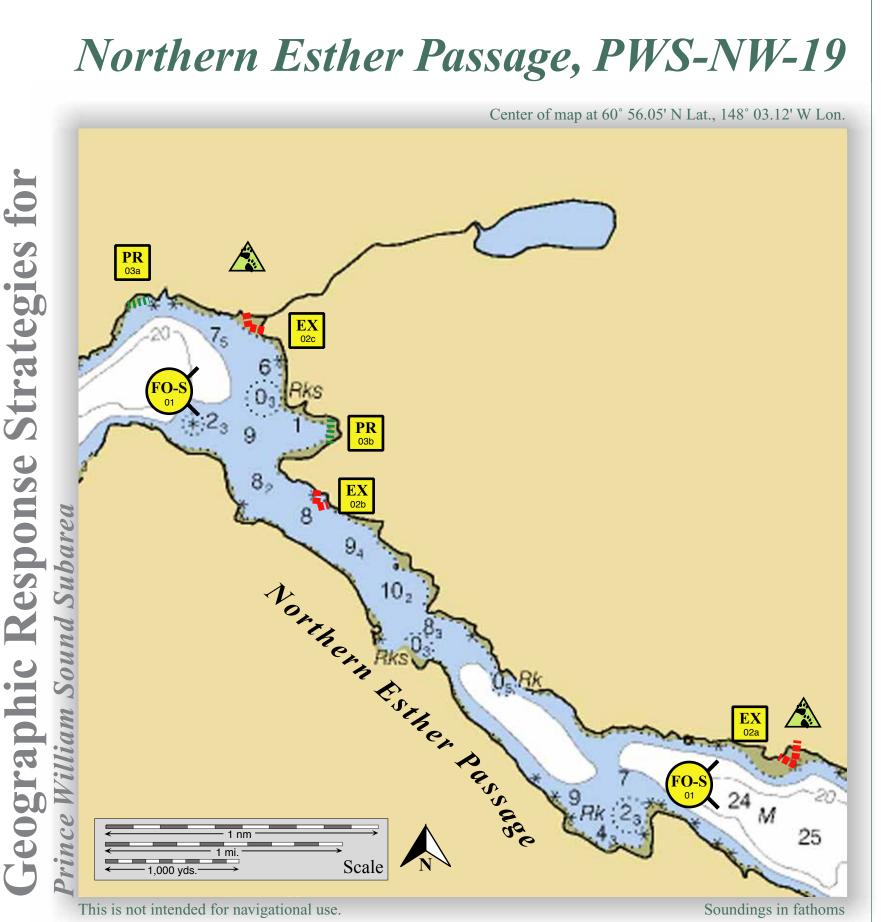


## Northern Esther Passage viewed from the northwest.



NUKA Research & Planning Group, LLC.

ID	Location and Description	Response Strategy	Implementation	Response Resources	Staging Area	Site Access	Resources Protected (months)	Special Considerations
PWS NW-19-01	Northern Esther Passage Nearshore waters in the general area of: Lat. 60°56.05'N Lon. 148°03.12'W	<b>Free-oil Recovery</b> Maximize free-oil recovery in the offshore & nearshore environment of Northern Esther Passage depending on spill location and trajectory.	Deploy free-oil recovery strike teams upwind and up current of Northern Esther Passage. 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.	Whittier	Via marine waters Chart 16711-1	Same as NW-19-02	Vessel master should have local knowledge. Use extreme caution, shoal waters with numerous reefs and rocks.
PWS NW-19-02 EX	Northern Esther Passage a. Lat. 60°54.83'N Lon. 147°58.87'W b. Lat. 60°55.57'N Lon. 148°01.64'W c. Lat. 60°56.08'N Lon. 148°02.01'W	Exclusion Exclude oil from impacting the salmon streams and intertidal area in Northern Esther Passage.	Deploy anchors and boom with skiffs (class 6) at high tide. For (a)(b)&(c) place protected- water boom across the intertidal area and stream mouths in an apex formation. Array (a) is exposed to SE winds and seas and will have to be reduced if weather dictates. Tend throughout the tide. <u>Boom Lengths:</u> a. 500 ft. b. 200 ft. c. 300 ft.	Deployment   Equipment   1000 ft. protected-water boom   5 ea. anchor systems   12 ea. anchor systems   12 ea. anchor systems   12 ea. anchor stakes   Vessels   1 ea. class 3   1 ea. class 6   Personnel/Shift   5 ea. vessel crew/general techs   Tending   Vessels   1 ea. class 3   1 ea. class 6   Personnel/Shift   3 ea. vessel crew/general techs	Vessel platform	Via marine waters Chart 16711-1	Fish- intertidal spawning- salmon (May-Sept.) Birds-waterfowl concentration Marine mammals- otters, seals Habitat- sheltered rocky shoreline	Vessel master should have local knowledge. Site surveyed 6/06/09 by PWS Tactics Committee Title 16 Fish Habitat Permit required from ADF&G. A population of bears is present during salmon runs. A bear guard is required. Tested: not yet
PWS NW-19-03 PR	Northern Esther Passage     a.   Lat. 60°56.15'N     Lon. 148°02.58'W     b.   Lat. 60°55.74'N     Lon. 148°01.56'W	<b>Passive Recovery</b> Place passive recovery across the mouth of the designated salmon streams and intertidal areas.	Approach the identified streams and intertidal areas on rising tide. Place and anchor snare or sorbent boom across the mouths of the designated salmon streams and intertidal areas. Replace as necessary to maximize the recovery. <u>Boom Lenghts:</u> a. 300 ft. b. 100 ft.	Deployment Equipment 400 ft. snare or sorbent boom 2 ea. anchor systems 8 ea. anchor stakes Vessels/Personnel/Shift Same as NW-19-02 Tending Vessels/Personnel/Shift Same as NW-19-02	Vessel platform	Marine Chart 16711-1	Same as NW-19-02	Use snare boom for persistent oils and sorbent boom for non- persistent oils. Title 16 Fish Habitat Permit required from ADF&G.