

[DRAFT] FINDING OF NO SIGNIFICANT IMPACT
FOR
Maritime Environmental Data Sampling System
Washington State, USA

Introduction: The Science and Technology Directorate (S&T), a research and development Component within the U.S. Department of Homeland Security (DHS), conducts basic and applied research, development, demonstration, testing, and evaluation activities relevant to the DHS mission. S&T prepared an Environmental Assessment (EA) in accordance with the National Environmental Policy Act of 1969, 42 United States Code [USC] §§ 4321 et seq. (NEPA), the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), other relevant federal and state laws and regulations, and the Department's own policies and practices on implementing NEPA to evaluate the potential impacts resulting from the Proposed Action and this Finding of No Significant Impact (FONSI) documents the reasons why the Proposed Action does not have a significant effect on human health and/or the environment.

Purpose and Need: The *purpose* of the Proposed Action is to test the sensor technology to increase Marine Domain Awareness. This requires deployment and operation of an underwater cable and includes potential recovery, abandonment in place, or continued operations, in submerged waters.

The Proposed Action is *needed* to assess capability and performance of the cable system to evaluate applicability for the utilization within the rest of the United States. Without the implementation of the Proposed Action, DHS S&T would not be able to assess the performance of the system to meet mission needs for maritime environmental monitoring capabilities.

Alternatives: An alternatives analysis was prepared to develop and evaluate potential solutions to fulfill the expanding mission needs. The alternatives analysis identified three alternative cable routes that would address the capability gap and then assessed each alternative based on its effectiveness for operation, cost, schedule, and risk. These alternatives and a no action alternative were addressed in the EA.

1. [Proposed Action] Alternative Route 1
2. Alternative Route 2
3. Alternative Route 3
4. No Action Alternative

Proposed Action: The Proposed Action evaluated in this EA are activities relating to the deployment, operation, and recovery, or continuation of operations of a submerged cable in the waters of the Strait of Georgia and Semiahmoo Bay in Washington State, near the Northern border with Canada. For the purposes of this analysis, tasks to facilitate the Proposed Action have been grouped into three primary components: cable installation, cable operation, and cable recovery. No on-land disturbance, facility construction, or demolition is included in the Proposed

Action. This route would run across the Strait of Georgia and have a shoreside landing site at a location where there is access to existing infrastructure and conduit to an existing building that is government owned where equipment would be housed.

Other Alternatives Considered: Alternative Route 2 would zig-zag across the Strait of Georgia from southeast to northwest. Alternative Route 2 has low operational efficiency because it would require land disturbance to install a conduit or culvert at the shoreside landing site and would result in additional environmental disruptions. Alternative Route 3 would run across the Strait of Georgia. Alternative Route 3 would require land disturbance to install a conduit or culvert at the shoreside landing site and construction of a temporary, powered, and climate-controlled infrastructure (trailer or shed) to house project equipment at the shoreside landing site. Therefore, Alternative Routes 2 and 3 would not meet the Proposed Action's purpose and need.

No-Action Alternative: The No-Action alternative does not meet the purpose and need for the Proposed Action, but was carried forward for analysis, as required by CEQ regulations. The No-Action Alternative would maintain the existing conditions of the marine environment in its current state, and there would be no change in disturbance of submerged vegetative cover, soils, wildlife habitat, or water quality. However, under the No-Action Alternative, DHS S&T would be unable to fill existing capability gaps and meet critical mission needs to ensure effective, efficient, and secure operations across all DHS missions.

Environmental Effects: The EA documents that the Proposed Action would result in *no direct, indirect, or cumulative, significant environmental impacts*.

The Proposed Action has no mechanism to impact the following environmental resources: Land Use; Visual Aesthetics; Geology, Topography, and Soils; Water Resources (Floodplains, Coastal Zone Management, Groundwater and Wetlands); Socioeconomics; Public Health and Safety; Infrastructure; and Hazardous and Toxic Materials and Waste. The seven environmental resources for which impacts are analyzed in greater detail are Air Quality and Climate Change; Noise; Cultural and Historic Resources; Water Resources (Surface Water); Biological Resources; Environmental Justice; and Recreation.

Air Quality and Climate Change - During installation, a motor vessel would be used to lay the cable, with a smaller boat (zodiac type) anticipated to be used for laying the shore landing segment of the cable and for access to the mudflat off the shoreside landing area. The motor vessel is a less than 23 m (75 ft) research vessel, equipped with two 350 horsepower diesel engines. The duration of the cable laying activities is estimated to be 2 to 6 days, including vessel mobilization, shore landing, cable installation, confirmation of operation, and vessel demobilization. If the cable is recovered, activities would be similar to installation.

The Proposed Action would not result in a change in the attainment status with the NAAQS and emissions would not exceed regulatory thresholds for criteria air pollutants however the Proposed Action would have *short-term negligible adverse impacts* on air quality and climate change during cable installation and potential recovery; therefore, both the short-term or long-term impacts on air quality and climate change are expected to be *less-than-significant*.

Noise – Noise generated by the Proposed Action would be limited to cable laying or recovery activities. The cable would not emit any noise during operation. The level and duration of noise from cable recovery, if applicable, are anticipated to be similar to cable laying. Use of the cable laying vessel for the Proposed Action would be temporary in duration (approximately 2 to 6 days) and similar to noise generated by existing vessel traffic.

Noise levels are not anticipated to exceed National Institute for Occupational Safety and Health limits for workers involved with implementation of the Proposed Action. Given the temporary nature of cable laying and recovery activities, and low levels of noise that it would generate relative to other ambient sources, *short term, negligible adverse impacts* are anticipated from cable laying and potential recovery activities, and although there is potential for continued operation or sections to be abandoned in place, *no long-term impacts* to the overall noise environment are anticipated.

Cultural and Historic Resources - The Proposed Action Area of Potential Effect (APE) is archaeologically and historically important, and it continues to be a place of cultural and religious importance to the Lummi Nation and other Salish Tribes. The area has natural and cultural resources that were, and continue to be, traditional use items important in cultural practices today. There are three eligible or potentially eligible historic properties within the Proposed Action APE. A separate NHPA Section 106 report and consultation effort is ongoing for the Proposed Action. DHS S&T is consulting with the Washington State Department of Archaeology and Historic Preservation State Historic Preservation Officer and consulting tribes as part of this process. For the purposes of NEPA, DHS will implement Best Management Practices (BMP) described below to ensure there are no significant effects to cultural resources. Therefore, the Proposed Action would have *less than significant to no impact* on any cultural resource or historic property within the Proposed Action area.

Water Resources - Impacts on surface water would be constrained to cable burial and recovery activities. Turbidity may be increased during cable installation or recovery due to the displacement of marine sediments by the burial sled or by the action of unburying the cable. Re-suspension of potential contaminants within disturbed sediments also may occur, although there are no known sources of contamination along the preferred route. Because of the relatively short timeframe allocated for cable installation (2 to 6 days total) and the shallow burial depth, suspension of sediments from installation or recovery would be temporary and minor in nature.

The potential for an accidental spill or leak from vessels is negligible as the vessels would be undergoing normal operation for up to 6 days, and would be refueled, as needed, in accordance with standard protocols at marine refueling stations. The potential for marine hazardous toxic materials and waste (HTMW) releases would be further minimized through applicable regulations and BMPs, including requiring vessels to be equipped with spill containment and spill response kits, having a Vessel Response Plan consistent with the provisions of 33 CFR Part 155, and controlling the discharge of operational wastes.

Components of cable installation, shoreside landing and cable laying, and recovery create the possibility of temporary suspended sediment, or turbidity.

The Proposed Action would result in *short-term negligible adverse impacts* from turbidity during cable laying and recovery activities. S&T will comply with all regulations and permits; no impacts are anticipated to surface waters during cable operation or if portions of the cable are abandoned in place.

Biological Resources - Direct impacts from the Proposed Action are limited to cable installation and recovery activities only, as no impacts are expected while the cable is in place. Direct impacts related to the Proposed Action that could potentially affect listed species include a temporary increase in turbidity from cable laying and temporary disturbance from vessel operation. Cable placement on the seafloor through potential sensitive habitats (e.g., eelgrass) and cable burial along the proposed cable route would result in a temporary and localized increase in turbidity. Additionally, cable laying vessel operations would temporarily (for approximately 2 to 6 days) increase presence and noise levels. The Proposed Action would not involve land disturbance and would not affect terrestrial vegetation wildlife or habitats, or nesting birds.

Operations to shallow bury the cable along the seafloor would be conducted in a manner to minimize sedimentation. In addition, the small footprint of the cable would minimize the disturbed area and ensure an abundance of nearby unaffected habitat. Both components of cable installation, shoreside landing and cable laying, create the possibility of temporary suspended sediment, or turbidity. However, these increases in turbidity are expected to dissipate within seconds or minutes after placement due to the dynamic currents and tides within the Proposed Action area. Because turbidity would be increased for only a short period of time, across a very narrow path, and would dissipate quickly, this *may affect, but is not likely to adversely affect* ESA-listed species in the area near cable installation. DHS S&T is consulting with U.S. Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA) under Section 7 of the ESA for its may affect determination. In addition, a Biological Assessment was prepared to further analyze the impact of the Proposed Action on Biological Resources.

The cable laying operation would not increase vessel traffic in the area or pose any significant additional risk to marine species, including meaningfully altering any migration routes of ESA-listed species for foraging or resting. Due to the currents within the Proposed Action area and background ambient water noise, the subsequent sound pressure levels are not expected to result in impacts to ESA-listed species. Tribal, recreational, and commercial fishery seasons have been considered and cable laying and recovery activities will occur outside relevant open fishing seasons.

During cable installation and recovery activities, the Proposed Action would have a *direct, short-term, negligible, adverse impact* on ESA-Listed Species, *direct, short-term, negligible, adverse impacts* to Critical Habitat, *direct, short-term, negligible, adverse impacts* to Essential Fish Habitat and would have *direct, short-term, minor, adverse impacts* to Seagrass Habitat.

Socioeconomics and Environmental Justice - The Proposed Action area is not considered an Environmental Justice community of concern or disadvantaged, nor does it meet any burden thresholds or socioeconomic thresholds. As the Proposed Action area is located within various Tribes' usual and accustomed fishing areas, Tribal consultations are ongoing. At this time, impacts are anticipated to be *less-than-significant to no impact* on an EJ community of concern. Once tribal consultations have been completed, a final impact determination will be made.

Recreation - Temporary access restrictions would be placed on recreational boating, fishing, and diving in the immediate area surrounding active cable laying or removal activities as needed. Within the vicinity of cable-laying activities, a suitable buffer zone around the cable-laying operations would be enforced for up to six days during which this activity is anticipated to occur. However, this impact would be negligible in the context of Puget Sound as other vessel traffic would be expected to easily avoid or maneuver around the buffer zone. The quality of recreational resources may slightly decrease, primarily due to potential noise disturbance; however, it would return to existing conditions following the completion of cable installation or recovery activities. Any limitation or restrictions to recreational activities would not exceed six days in duration; therefore, there would be *short-term, negligible adverse impacts* to recreational activities during cable laying and recovery operations, and *no long-term or ongoing impacts*.

Best Management Practices: A series of BMPs would be applied during the installation, operation, and decommissioning of the Proposed Action. These BMPs serve as mitigation measures to minimize the risk of harm to resources for the Proposed Action. All workers associated with The Project, irrespective of their employment arrangement or affiliation (e.g., employee, contractor), would be fully briefed on these BMPs and the requirement to adhere to them for the duration of their involvement in this project. The BMPs that would be implemented include the following.

Cultural and Historical Resources

1. Revised the Proposed Action Area of Potential Effect (APE) to avoid any potential impacts to existing cultural resources that are within 1 mile of the APE (completed).
2. Established a buffer around known historic properties to avoid and minimize direct and indirect effects as much as reasonably possible (completed).
3. Implement any avoidance, minimization, or mitigation measures identified through Section 106 consultation pursuant to 36 CFR 800.6, should there be an adverse effect to historic properties determined through consultation.
4. Implement archaeological monitoring during the shoreside landing installation in case inadvertent discoveries of cultural material are uncovered. Workers will be directed to watch for cultural materials (e.g., stone tools, pier remnants, etc.) during work activities.
5. If any cultural materials are encountered, work in the vicinity of the discovery would pause until an archaeologist (if not present) has been notified, the significance of the find assessed, appropriate consulting parties notified, and, if necessary, arrangements made for mitigation of the discovery.
6. The Inadvertent Discovery Plan would dictate who would be contacted in the event that cultural material and/or human remains are encountered in the field (Plan prepared).

Biological Resources

Vessel Operations

1. The cable laying vessel speed would be limited to 9 knots or less during transit. Note, the vessel has a maximum speed of 10 knots.
2. During cable laying operations, vessel speed would be reduced further to less than 3 knots.
3. To the extent it is practicable and safe, vessel operators would operate their vessel thrusters (both main drive and dynamic positioning) at the minimum power necessary to accomplish the work.
4. The only source of hazardous materials would be petroleum-based fuel and lubricating oil used in the operation of the cable ship during cable-laying activities. The cable laying ship would have proper spill response materials and follow protocols for petroleum product spills or leaks.
5. Project-associated staff would properly secure all ropes, nets, and other materials that could blow or wash overboard.
6. Project-associated staff would cut all materials that form closed loops (e.g., plastic packing bands, rubber bands, and all other loops) prior to proper disposal in a closed and secured trash bin. All trash would be immediately placed in trash bins and trash bins would be properly secured with locked or secured lids that cannot blow open, preventing trash from entering the environment, thus reducing the risk of entanglement if waste enters marine waters.

Cable Laying Operations

1. Placement of the cable would minimize impacts by avoiding protected areas and other ecologically important, valuable, and sensitive areas (e.g., avoidance of rocky outcrops, eelgrass beds, and macroalgae, per the marine survey) whenever possible.
2. The cable would be lowered to the seafloor in a slow and controlled manner and methods to bury the cable on the seafloor would be conducted in a manner to minimize sediment disturbance.
3. Where the cable laying operations occur within sensitive habitats, a team of divers would carefully guide the cable through. No cutting of eelgrass or kelp would occur.
4. Known anchorages would be avoided along the cable route.

Cable Operations

1. When the cable is recovered, some portions may be left in place to reduce disturbance to sensitive habitats (e.g., eelgrasses).
2. Personnel on the cable laying vessel would be instructed to observe wildlife. The following actions should be taken if marine mammals are sighted:
3. Vessels should maintain a minimum distance of approximately 100.6 m (330 ft.) from the sighting location, when feasible.
4. Vessels would not be permitted to cross directly in front of or intersect the path of any sighted marine mammals.

5. If a large marine mammal (e.g., a whale) passes along the ship, the vessel operator would maintain a steady heading and constant speed that is not faster than the sighted individual's speed.
6. If sighted marine mammals demonstrate defensive or disturbed actions, the vessel would slow or be taken out of gear until the animal calms and/or moves a safe distance away from the vessel.
7. If an ESA-listed pinniped comes within approximately 100.6 m (330 ft) of the vessel during cable installation, onboard personnel may modify vessel operations until the animal moves safely out of the area and remains unobserved for 30 minutes.
8. If an ESA-listed whale comes within approximately 2.15 m (7.067 ft) of the vessel during cable installation, onboard personnel may modify vessel operations until the animal moves safely out of the area and remains unobserved for 30 minutes.
9. In the highly unlikely event of a vessel strike with a marine mammal, the vessel operator would follow the project's incident reporting procedures.

Cumulative Impact: The impacts on the environment that would result from the incremental impact of the Proposed Action, when added to other past, present, and reasonably foreseeable future actions have been considered. No significant direct or indirect effects were identified. Proposed activities would be short-term and less than significant. Given the type and duration of the Proposed Action activities, and based on the information presented in the EA, the Proposed Action would not result in significant cumulative effects when considered with other recent past, ongoing, or reasonably foreseeable future actions.

Finding: Based upon the analyses for the EA and the BMPs to be implemented, the Proposed Action would not have a significant effect on the environment. Therefore, no further analysis or documentation (i.e., an Environmental Impact Statement) is warranted. However, project planning and design are ongoing. Should the final design ultimately include details that are outside the scope analyzed in this EA additional analysis may be required. DHS S&T, in implementing this decision, would employ all best management practices and mitigation measures analyzed in this EA to minimize the potential for adverse impacts on the human and natural environments.

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