Finding of No Significant Impact

NANA Region Middle Mile Fiber Optic FAST-41 Project (EAXX-006-60-3D-1754935958)

Lead Federal Agency

U.S. Department of Commerce:
National Telecommunications and Information Administration

Cooperating Agencies

U.S. Department of Interior:
- Bureau of Land Management
- U.S. Fish and Wildlife Service
- National Park Service

U.S. Department of Defense:
- U.S. Army Corps of Engineers

U.S. Department of Commerce:
- National Oceanic and Atmospheric Administration

National Telecommunications and Information Administration
1401 Constitution Ave., NW Washington, DC 20230

FINDING OF NO SIGNIFICANT IMPACT

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

TRIBAL BROADBAND CONNECTIVITY PROGRAM

NANA REGION MIDDLE MILE FIBER OPTIC PROJECT (EAXX-006-60-3D-1754935958)

OVERVIEW

This document serves as the Finding of No Significant Impact (FONSI) for the following Proposed Action (also referred to as the Proposed Project or Project) awarded by the National Telecommunications and Information Administration (NTIA). NTIA and cooperating agencies including the Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), the National Park Service (NPS) (non-signatory), U.S. Army Corps of Engineers (USACE), and National Oceanic and Atmospheric Administration (NOAA) (non-signatory), have completed the sufficiency review of the recipient's Environmental Assessment (EA) and have determined that the Project will not have a significant impact on the environment. This FONSI contains information related to the review.

Recipient Name:	NANA Regional Corporation (NANA)
Grant Project Name:	NANA Region Middle Mile Fiber Optic Project
Grant Award No.:	NT23TBC0290014
Unique NEPA ID No.:	EAXX-006-60-3D-1754935958
Program Location:	Northwest Arctic Borough (NAB), Alaska

PROGRAM SUMMARY

The NTIA awarded a grant for the NANA Project, through the Tribal Broadband Connectivity Grant Program (TBCP), as authorized by the Consolidated Appropriations Act, 2021, Division N, Title IX, Section 905(c), Public Law 116-260, 134 Stat. 1182 (Dec. 27, 2020) (Act). TBCP provides new federal funding for grants to eligible entities to expand access to and adoption of: (i) broadband service on Tribal Land; or (ii) for programs that promote the use of broadband to access remote learning, telework, or telehealth resources during the COVID-19 pandemic. The Project is proposed to occur in

the NAB of Alaska. This project will also further the goals of Executive Order 13821, Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America, by expanding access to reliable, affordable internet service in rural Alaska.

U.S. Department of Interior (DOI) agencies received an Application for Transportation, Utility Systems, Telecommunication and Facilities on Federal Lands and Property (SF 299) on March 28, 2025. After receiving supplemental information, BLM accepted the application as complete on July 14, 2025, and USFWS accepted the application as complete July 25, 2025.

The Project would provide broadband internet to eight rural Alaska Native communities in the Northwest Arctic Borough (NAB), Alaska, including Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Noatak, and Shungnak by deployment of fiber optic cable (FOC). Furthermore, the Proposed Project would provide additional broadband infrastructure to Noorvik and Selawik, located in the Northwest Arctic Borough.

NTIA completed scoping for issues on August 19, 2025, and also completed a Draft EA for this Project in October 2025. It was available for public comment from October 15, 2025, through November 14, 2025. Comments included substantive comments that were summarized in Appendix P of the Final EA.

The EA addresses measures to protect and preserve significant natural, environmental, and historical resources along and within the Project rights of way (ROW). Mitigation and conservation measures, along with inadvertent discovery plans, will minimize impacts to both known and unknown natural and cultural resources.

The 670 miles of the Project crosses multiple Tribal, federal, and state lands in Alaska. As a result, the BLM, USFWS, USACE, NOAA, and NPS were invited and agreed to become Cooperating Agencies. This process solicited agency input through the National Environmental Policy Act (NEPA) Interagency review conducted in the summer and fall of 2025. The environmental review and permitting actions received coverage under Title 41 of the Fixing America's Surface Transportation Act (FAST-41). Based on a review of the analysis in the EA, the NTIA, BLM, USFWS, NPS, USACE, and NOAA have determined that the Project, implemented as described in Alternative 2 of the EA, and incorporating best management practices (BMPs) and protective measures found in Appendix C, D1, D2, D3, E1, E2, E3, E4, E5, K, L, and O in the EA, will not result in any significant environmental impacts. Therefore, the preparation of an Environmental Impact Statement (EIS) is not required. The basis for this determination is described in this FONSI.

Additional information and copies of the EA and FONSI are available to all interested persons and the public through the NTIA website (https://broadbandusa.ntia.gov/funding-programs/documentation-and-reporting) and the following contact:

Amanda Pereira

Environmental Program Officer
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U.S. Department of Commerce Room 4874
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PROJECT PURPOSE AND NEED

The purpose of the Project is to consider authorizations for infrastructure development that would provide broadband high-speed internet to the communities of Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Noatak, and Shungnak, and additional infrastructure in Noorvik and Selawik.

In the case of NTIA, the need for this action is established by NTIA's responsibility under the TBCP Notice of Funding Opportunity (NOFO) to make funding available to tribal entities to provide qualifying broadband service to unserved areas[1] and its obligations under NEPA with regard to its own NEPA procedures as well as the NEPA requirements of the jurisdictional federal agency land this project would cross. In the case of the BLM, the need established by the BLM's responsibility is under Title V of the Federal Land Policy and Management Act (FLPMA) of October 21, 1976 (90 Stat. 2776; 43 United States Code [USC] 1761), as amended, to respond to requests for ROWs across public lands. In the case of the USFWS, the need is to respond to applications for transportation and utility systems (TUS) in and across, and access into conservation system units under Title XI of the Alaska National Interest Lands Conservation Act (ANILCA) (16 USC §§3161-3173) and the National Wildlife Refuge System Administration Act as amended by the National Wildlife Refuge System Improvement Act (16 USC 3101, 664, 668dd and 668ee and 43 USC 666).

In the case of the USACE, the need is to make a permitting decision under Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act in response to NANA's Department of the Army permit application.

DECISION TO BE MADE

The decision to be made by NTIA is to authorize the release of funds to deploy the Proposed Action.

The decision to be made by BLM and USFWS is whether to authorize grants and if so, under what terms and conditions, for the installation and construction of a FOC network and associated structures, long-term operations of the network, maintenance and repairs of the network, and decommissioning of the Project. The BLM and USFWS are required to evaluate the potential effects on the natural and cultural resources of the proposed action and alternatives.

[1] TBCP NOFO 1, Section 2 (j) defines "qualifying broadband service" as service with "— (i) a download speed of not less than 25 megabits per second; (ii) an upload speed of not less than 3 megabits per second; and (iii) a latency sufficient to support real time, interactive applications. For purposes of this program, NTIA will interpret the 25/3 standard to mean the ability to provide 25 Mbps downstream and 3 Mbps upstream simultaneously to every household in the eligible service area. NTIA will interpret latency to mean 95 percent or more of all peak period measurements of network round trip latency (i.e., the total round-trip latency between the customer premises and the closest designated Internet core peering interconnection point) are at or below 100 milliseconds."

REGULATORY AUTHORITIES AND LAND USE PLAN CONFORMANCE

As the lead federal agency, NTIA is responsible for evaluating the Project under NEPA. This document is written in compliance with *Guidance on NTIA National Environmental Policy Act Compliance,* 43 CFR § 46, and *U.S. Department of the Interior Handbook of National Environmental Policy Act Implementing Procedures* (516 DM 1).

The BLM's decisions on granting ROWs are guided by the underlying authority derived from Title V, of the FLPMA (90 Stat. 2776; 43 USC 1761), as amended, and in accordance with regulations found in 43 CFR § 2800. Any BLM action must also be in conformance with the local Land Use Plan. The proposed action is in conformance with the 2008 Kobuk Seward Peninsula Approved Resource Management Plan/ Record of Decision (ARMP/ROD), and the applicable goals, objectives, or management decisions as included below.

H. Lands, H-1 Goals (page A-RMP-18)

1. *Meet public needs for use authorizations such as ROWs, leases, and permits while minimizing adverse impacts to other resource values.*
2. *Retain public lands with high resource values in public ownership.*
3. *Adjust land ownership to consolidate public land holdings, acquire lands with high public resource values, and meet public and community needs.*

H. Lands, H-2-a: Management Actions (Land Use Authorizations) (page A-RMP-19)

6. Rights-of-way

- *Rights-of-way (ROWs) will be located near other ROWs or on already disturbed areas to the extent practical.*
- *Communication site ROWs shall be co-located when feasible.*

The USFWS authorizes requests for ROWs in accordance with the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 USC 3101, 664, 668dd and 668ee and 43 USC 666) and Title XI of ANILCA (16 USC 3161 *et seq*.); and ensures conformance with applicable Comprehensive Conservation Plans.

The Project would affect lands designated under the Selawik National Wildlife Refuge Revised Comprehensive Conservation Plan (2011) (CCP) for Minimal Management. Authorization of a TUS on Selawik National Wildlife Refuge requires the CCP to be amended or revised from Minimal Management to Moderate or Intensive Management and ensure the goals and objectives within the CCP remain achievable to support the purposes of the Refuge.

PROJECT DESCRIPTION

The Project aims to establish a reliable, scalable, and future-proof fiber-based broadband network connecting communities in the NAB to provide affordable high-speed and low-latency internet services to thousands of individuals. This critical telecommunications infrastructure will address long-standing connectivity challenges in the region; it is also designed to serve the region's communities for decades to come.

The Project consists of the installation of approximately 676 - 695 miles of 0.472 in. diameter armored FOC designed specifically for Arctic conditions. This cable contains 24 strands of optical fiber and will connect all communities in the NAB to high-speed broadband internet. The FOC route will incorporate a combination of terrestrial ground-laid, subsea, trenched, directionally bored, and aerial cable placement methodologies. The majority of the network will consist of ground-laid fiber (GLF) installed during winter months to minimize impacts to subsistence as well as the sensitive tundra environment.

The Project will incorporate a 60-foot ROW (30-foot on either side of the cable). Most disturbances are anticipated to occur within a 30-foot corridor (15-foot on either side of the cable), and in some cases be limited to 15 feet wide (the width of the installation equipment).

Construction will occur within ROWs of lands managed by the State of Alaska, BLM, USFWS, NANA, Kikiktagruk Inupiat Corporation (KIC) and local governments.

ANALYSIS OF ALTERNATIVES

NTIA, BLM, USFWS, NPS, USACE, and NOAA conducted an analysis of alternatives for implementing the Project to meet the purpose and need, including a review of the “no action” alternative, where applicable. The following summarizes the alternatives analyzed in the EA.

ALTERNATIVE 1

Alternative 1 connects the communities of the NAB. Two loops provide resiliency and redundancy, and connect the communities of Kotzebue, Noorvik, Selawik, Ambler, Kobuk, Shungnak, Noatak, Kivalina, Buckland, Deering, and Kiana.

This alignment features a crossing of Hotham Inlet (near Kotzebue), and a single corridor through most of the Selawik National Wildlife Refuge (NWR) to the loop that connects the Upper Kobuk communities.

Alternative 1's proposed pathway has a ROW of 60 feet (30 feet on either side of the line), encompassing 4,277 acres. This requires 676 miles of cable (some of which is double laid and co-located in the same ROW). Most anticipated potential disturbance occurs within 15 feet on either side of the line, for a 30 feet total width.

Summary of alignment across BLM managed lands:

- ROW of 60 feet (30 feet on either side of a line), totaling 1,046.10 acres of above-ground infrastructure.

Summary of alignment across USFWS managed lands:

- ROW of 60 feet (30 feet on either side of a line, totaling 637.73 acres of above-ground infrastructure.

ALTERNATIVE 2

Alternative 2 is a variation of Alternative 1, with changes in the eastern part of the alignment. This alternative eliminates the single cable loop connecting Ambler-Kobuk-Shungnak; and replaces it with a double run cable located within a common corridor, running north to Ambler, and then east to Shungnak and Kobuk.

When compared to Alternative 1, this alignment increases the total number of waterbody crossings (where the former single cable crossing now is a double crossing) but eliminates an aerial and three HDD crossings (along the southern portion of the loop that is not proposed for construction). The elimination of the southern portion of the loop also saves 33.4 miles of construction.

Alternative 2's proposed pathway has a ROW of 60 feet (30 feet on either side of the line), encompassing 4,032 acres. This requires 695 miles of cable (some of which is double laid and co-

located in the same ROW). Most anticipated potential disturbance occurs within 15 feet on either side of the line, for a 30 feet total width.

Summary of alignment across BLM managed lands:

- ROW of 60 feet (30 feet on either side of a line), totaling 984.40 acres of above-ground infrastructure.

Summary of alignment across USFWS managed lands:

- ROW of 60 feet (30 feet on either side of a line), totaling 567.93 acres of above-ground infrastructure.

NO ACTION ALTERNATIVE

The No Action Alternative represents conditions as they currently exist. Under the No Action Alternative, the network would not be built, and neither BLM nor the USFWS would issue ROW authorizations. The USFWS would not need to change the Selawik NWR CCP. Existing gaps in broadband availability would persist. The No Action Alternative would not meet the purpose and need of the proposed action. This alternative was described and analyzed as the baseline for evaluating impacts.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD

Alternatives may be considered but not carried forward for detailed analysis under NEPA if it would not be technically or economically feasible or if it would not meet the purpose and need. These alternatives are described in Appendix F of the Draft EA. They include alternative technologies (*i.e.*, microwave tower and satellite services) and alternative alignments. These were eliminated from consideration because they did not meet the purpose and need because of quality-of-service requirements, or technical or economic feasibility.

FINDINGS AND CONCLUSIONS

The EA analyzed existing conditions and environmental consequences of the preferred alternative, other alternatives, and the no action alternative for potential impacts in the major resource areas of Noise, Hazardous Materials and Spills, Geology and Soils/Permafrost, Water Resources, Wetlands and Vegetation, Fish and Fish Habitat, Birds, Terrestrial Mammals, Marine Mammals,

Threatened/Endangered Species, Cultural/Historic Resources, Visual Resources, Land Use, Socioeconomics, Subsistence, and Recreation. The analysis evaluated both short- and long-term, as well as beneficial and adverse effects. The results of the analysis are summarized in the table below:

Resource Area	Alternative 1	Alternative 2	No Action Alternative
Noise	No Significant Impact	No Significant Impact	No Impact
Hazardous Materials and Spills	No Significant Impact	No Significant Impact	No Impact
Geology and Soils/Permafrost	No Significant Impact	No Significant Impact	No Impact
Water Resources	No Significant Impact	No Significant Impact	No Impact
Wetlands and Vegetation	No Significant Impact	No Significant Impact	No Impact
Fish and Fish Habitat	No Significant Impact with BMPs and conservation measures incorporated	No Significant Impact with BMPs and conservation measures incorporated	No Impact
Birds	No Significant Impact	No Significant Impact	No Impact
Terrestrial Mammals	No Significant Impact	No Significant Impact	No Impact
Marine Mammals	No Significant Impact	No Significant Impact	No Impact
Threatened/Endangered Species	No Significant Impact	No Significant Impact	No Impact
Cultural/Historic Resources	No Significant Impact with BMPs and conservation measures incorporated	No Significant Impact with BMPs and conservation measures incorporated	No Impact
Visual Resources	No Significant Impact	Not Significant Impact	No Impact
Land Use	No Significant Impact	No Significant Impact	No Impact
Socioeconomics	No Significant Impact	No Significant Impact	No Significant Impact
Subsistence	No Significant Impact	No Significant Impact	No Impact
Recreation	No Significant Impact	No Significant Impact	No Impact

The sections that follow provide a brief description for those resource areas indicated in the table above and, where applicable, provide a summary of the results of required consultation with the appropriate agency or agencies.

NOISE

The Project would be anticipated to produce noise primarily during the construction phase for Alternatives 1 and 2. Limited noise, except for that produced through the potential route/cable inspections and repairs, is anticipated for the operations and maintenance phase. Adverse noise generated during construction activities would be transient and temporary, due to the anticipated rapid pace of cable placement. Since project construction noise would be transient, short-term (during construction of up to 2 winter seasons and 2 summer seasons), and primarily performed at distances greater than 1 mile from population centers, the project would produce no significant long-term (defined in the EA as >10 years) noise-related impacts. The routine operation would not generate any noise. Aerial lines are not expected to cause a significant noise in the wind. Noise may be generated during routine and emergency maintenance activities from both helicopter and overland vehicle activity, if required.

Maintenance activities would occur intermittently and for short durations (~1-3 days per year); thus, no significant noise-related impacts would be realized for Project operation.

No significant or long-term (>10 years) impacts associated with noise are anticipated with Alternatives 1 and 2. Under the No Action Alternative, no construction would take place, and no noise impacts would occur because no new sources of noise would be introduced into the project area.

No adverse effects to public health and safety are anticipated. The anticipated rapid progress of the construction activities would minimize potential sustained noise levels in any area. Noise generated during construction activities would be transient and temporary. Construction noise would be indistinguishable from the EPA standard for indoor activity at 2.3 miles, and such activity will only be during construction (EA Section 3.1.1.2.2). Since project construction noise would be transient, short-term, and primarily performed at distances greater than 1 mile from population centers, the project would produce no significant noise-related impacts.

HAZARDOUS MATERIALS AND SPILLS

There are sites in the vicinity of Alternative 1 and Alternative 2 that have the potential to lead to inadvertent discovery of contaminated soil. Construction would require the use of some hazardous materials including fuel, lubricating oil, and other constituents. A contaminated soil management plan shall be prepared for review and approval by DEC under 18 AAC 75.325(i), providing instructions on how to identify, segregate, and address contamination discovered during construction.

Normal operations are passive and do not require hazardous materials. The FOC transmits data through light signals that travel along thin strands of glass or plastic and does not generate any radiation or heat.

During maintenance or repair activities the use of hazardous materials would be necessary, including fuel, lubricating oil, and other constituents. These activities would be completed under BMPs to address the storage, handling, and cleanup of potential spills. As a result, no significant impacts are expected during operations.

No significant or long-term (>10 years) impacts associated with hazardous materials and spills are anticipated for either Alternative 1 or Alternative 2.

No adverse effects to public health and safety are anticipated. Effects to people are not expected due to the preparation of a contaminated soil management plan, Hazardous Waste Plan (Appendix E3), Frac out Plan (Appendix E4), Spill Response Plan (Appendix E5) and mitigation measures to prevent impacts (i.e. fueling activities must be conducted >100 feet away from surface waters). During maintenance or repair activities the use of hazardous materials would be necessary, including fuel, lubricating oil, and other constituents. These activities would be completed under BMPs (Appendix E3) to address the storage, handling, and cleanup of potential spills.

Under the No Action Alternative, no construction, operation, or maintenance would occur; therefore, there would be no impacts associated with hazardous materials and spills because no such substances would be introduced into the project area.

GEOLOGY AND SOILS

The construction methodologies have been chosen to avoid impacts to soils. Anchors, poles, and splices may disturb the local vegetation and soils, but their limited size is not anticipated to result in impacts to soils. Limited trenching is proposed near communities and for some stream crossings; proposed trenching activities would be planned seasonally to avoid or minimize impacts. Changes to the soil surface organic layer can result in thawing of underlying permafrost. Limited, localized thawing of permafrost could occur, which would result in a long-term (>10 years) minor impact. Impacts associated with Alternatives 1 and 2 would be reduced by conducting winter overland travel only when soils are frozen and sufficient snow cover exists to prevent snow compaction and loss or damage to vegetation. In addition, adherence to the identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2).

The routine operation of the FOC is passive, since the cable remains undisturbed in the soils, and therefore would not generate any changes in soils or impacts to permafrost.

During maintenance activities, some disturbance of soil may occur, although generally much smaller in scale. Maintenance activities would occur intermittently, only as needed, but the amount of activity is undetermined and would be limited to the location of cable damage.

No adverse effects to public health and safety are anticipated. There may be localized thawing of permafrost along these sections, which would be a long-term minor impact. These are not anticipated to cause impacts to public health and safety.

No significant or long-term (>10 years) impacts associated with geology and soils are anticipated for either Alternative 1 or Alternative 2.

Under the No Action Alternative, no construction would take place; therefore, there would be no impact to geology and soils because there would be no ground disturbance.

WATER RESOURCES

Waterbody and streambank crossings have the potential to be impacted by construction through increased sedimentation, habitat disruption, altered hydrology, introduction of invasive plant species, and pollution introduction for both Alternatives 1 and 2. Hydrologic connectivity would be maintained through all watercourse crossing methods. FOC crossing methods primarily involve ground-lay of FOC across the riverbed in smaller streams.

Ground-lay fiber installation may involve some temporary ground disturbing activities at streambanks with steep cutbanks that could contribute to erosion and sedimentation. Revegetation and monitoring would help prevent long-term (>10 years) impacts to stream banks and water quality.

Ice may become compacted in waterways during construction activity from the weight of the vehicles crossing rivers and lakes. However, in most cases, each waterbody would only be crossed one time, so this minimal impact is not expected to impact water quality, scour, or hydrologic connectivity.

HDD is generally used to avoid impacts to waterbodies. Risk is mitigated through careful planning, proper design and execution, and a well-defined contingency plan. There is potential for short-term (<10 years) impacts due to bank destabilization from construction crews and equipment crossing streambanks to access the land. Drilling operations would comply with site-specific erosion and

sediment control plans and include 24/7 monitoring to ensure the integrity of the drill path and avoid inadvertent returns of drilling fluid to the river.

Aerial crossings are not expected to impact waterbodies because the ground infrastructure (*e.g.*, support poles and guy wires) would be placed outside of a sufficient buffer to protect riparian zones and minimize disturbance to waterbodies.

Crossings of Section 10 waters are proposed at the Noatak River, Buckland River, Kobuk River, Kivalina Lagoon, Selawik River, and Hotham Inlet. All crossings are proposed as either HDD, attachment to an established bridge, or marine plow/excavation. As a result, no changes are anticipated to navigation for Section 10 waters.

Potential impacts to coastal zones may occur where FOC trenching is proposed, which can disrupt sediment transport and coastal hydrology, and increase turbidity due to erosion and increase the risk of hazardous chemical spills. BMPs would be implemented throughout the operation to protect the aquatic environment, minimize bank erosion, and avoid creating drainage paths. No significant impacts are anticipated to waterbodies from either Alternative 1 or 2.

Ongoing operation of the FOC network would not have any impact on surface or groundwater quality or quantity because the network is passive, generating no heat, radiation, or emissions.

Occasional maintenance activities may be required to repair breaks in the cable. These repairs would be conducted in a similar manner to those described for construction. Cable breaks would most likely be accessed by aerial or winter off-road travel. These are expected to be limited in duration and intensity and have no significant impact on waterbodies.

Adherence to the identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E3, E4, E5).

No significant or long-term (>10 years) impacts associated with water resources are anticipated for either Alternative 1 or 2.

No adverse effects to public health and safety are anticipated. For HDD crossings, frac-out risk is mitigated through careful planning, proper design and execution, and a well-defined contingency plan (Appendix E). Aerial crossings have been designed to be high enough to facilitate the passage of traffic along waterways. No impacts are anticipated for the water rights, temporary water use authorizations, and/or Reservations of Water because water use is not a component of this project.

Under the No Action Alternative, no construction, operation, or maintenance activities would occur; therefore, there would be no impacts to water resources because there would be no disturbance of water resources or potential to create sedimentation, turbidity, or other impacts.

WETLANDS AND VEGETATION

Vegetation types present in the majority of the project area have low resilience to winter tundra travel due to the presence of tussocks, trees, evergreen shrubs, or polygonal ground. Impacts associated with Alternatives 1 and 2 would result primarily from winter tundra travel; additional impacts of more limited scale but greater intensity would occur from vegetation clearing and summer trenching activities near target communities. Impacts are expected to be long-term (>10 years), due to the low resilience of vegetation types present, and not significant.

There would be no wetland impacts related to fill placement because those activities would not occur during deployment, operations, or maintenance. However, there would be some disturbance to wetlands and marine Waters of the United States (WOTUS) as a result of trenching, HDD pads, installation of aerial poles, and marine activities. Less than one acre of wetlands is expected to be disturbed under Alternatives 1 and 2, and impacts to wetlands are expected to be long-term (>10 years) but not significant. In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. The proposed project's impacts to vegetation and wetlands would result primarily from winter tundra travel associated with construction activities. No changes are expected from how fire behaves in the area or how fire is managed, and fire suppression is not anticipated to be required along the ROW. The potential for introduction of nonnative and invasive species is expected to be low, since most project work would be conducted during the winter.

Under the No Action Alternative, there would be no construction, operation, or maintenance activities; therefore, there are no impacts to vegetation or wetlands because there would be no ground disturbance or modification of those resources.

FISH AND FISH HABITAT

The planned winter construction timing and construction techniques would reduce or minimize many of the effects to fish and fish habitat. Direct habitat loss from the placement of the FOC across fish bearing waterbodies is likely to occur; however, the nominal size of the cable would result in minimal impact at water crossings. HDD crossings would require water withdrawals from local

waterbodies. Summer barge activity and equipment activity has the potential to impact fish and fish habitat and result in temporary disturbance and displacement, but the activity would occur for only a short time (~1 week per site) and no lasting impacts to fish are anticipated. Constructing the subsea crossing would result in temporary noise impacts from the cable laying vessel and temporary, and localized sedimentation and increased turbidity from the operation of the cable plow. These disturbances would be short-term (<2 weeks), and fish would be expected to temporarily move to other nearby areas of similar habitat.

An Essential Fish Habitat (EFH) Assessment was submitted on August 11, 2025, to initiate consultation with the National Marine Fisheries Service (NMFS) under Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The assessment determined that the proposed action may adversely affect EFH, but that those effects would be minimal and temporary in nature. The assessment described mitigation measures and BMPs that would be implemented. On August 15, 2025, NMFS concurred with the assessment and stated that no conservation recommendations were necessary. Impacts from Alternative 1 would be long-term (>10 years) and negligible to minor, and therefore not significant with BMPs incorporated. Alternative 2 eliminates the southern portion of the eastern loop and replaces it with co-located cable. This results in fewer acres of impact, but slightly more ground-lay stream crossings, one less aerial stream crossing, and three fewer HDD stream crossings. Impacts from Alternative 2 are also expected to be long-term (>10 years) and negligible to minor, and therefore not significant with BMPs incorporated.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. Fuel spills or other hazardous substance releases would be mitigated by implementing project BMPs and mitigation measures (Appendix D1, E3, E4, E5).

Under the No Action Alternative, no construction, operation, or maintenance activities would take place; therefore, there would be no impacts to fish and fish habitat because there would be no ground disturbance nor disturbance of water resources.

BIRDS

The Project's environmental impacts on birds would vary based on construction timing and bird presence. However, the overall intensity of impacts to birds is expected to be low to medium, as impacts would be localized and not at the population level, and therefore not significant. Timing

and methods of construction would be planned to reduce impacts to migratory birds wherever possible. Construction activities may result in temporary habitat alteration from winter travel and vegetation clearing. Impacts are expected to be limited in duration and intensity.

Winter travel over bird habitats would create varying impacts depending on localized snow cover depths and vegetation type, with some habitats (e.g., deciduous shrubs) recovering rapidly while others (e.g., evergreen shrubs and tussocks) taking longer. This habitat loss to birds is expected to be low to medium, as impacts would be localized and not at the population level, and therefore not significant.

Vessel traffic associated with laying the FOC across Hotham Inlet and Kugruk Estuary may elicit avoidance responses from seabirds, loons, and waterbirds feeding in marine waters during summer months. Bird exposure to vessel traffic associated with the Project would be limited to approximately 4 to 12 days (depending on the action alternative) and impacts are expected to be not significant.

Aerial overflights of the FOC alignment during summer have the potential to elicit avoidance reactions from birds. The extent of aerial overflight impacts on birds would depend primarily on the frequency of overflights and landings in the same area, as a single overflight or landing would be a limited exposure. Further impacts related to direct mortality and nest abandonment as a result of construction activities are not expected during winter months, and mortality due to nest failure during summer months is possible but expected to be localized and of limited extent. Overall, impacts to birds from Alternative 1 are expected to be long-term (>10 years) but not significant. Alternative 2 impacts fewer acres of moderate to high value bird habitat; impacts are also expected to be long-term (>10 years) and not significant

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. Fuel spills or other hazardous substance releases would be mitigated by implementing project BMPs and mitigation measures (Appendix D1, E3, E4, E5).

Under the No Action Alternative, there would be no construction, operation, or maintenance of the network; therefore, there would be no impacts to birds because there would be no noise generated, no vegetation clearing, and no ground disturbance.

TERRESTRIAL MAMMALS

The Project's environmental impacts on terrestrial mammals would largely be related to the human activity required to deploy the FOC along the project route during winter construction. This would include the temporary use of tracked vehicles and trailers, helicopters, and airplanes.

Any direct disturbance as a response to Project vehicles or human activity associated with FOC deployment would result in localized and temporary displacement as well as some energetic impacts to most species present during winter. Caribou of the WAH currently have little exposure to human infrastructure or vehicles other than encountering hunters on snowmobiles or boats, and, as a result, they may have stronger reactions to human activity.

Aerial flights used for summer overflights of the FOC would result in localized and temporary disturbance to large mammals present in the area during summer. Some additional impacts to herbivores could result from snow compaction and vegetation clearing along the project route, but these impacts would be localized and would only affect a small fraction of the available foraging habitat. Snow compaction from project vehicles could result in direct mortality of small mammals denning along the route as well as limiting their movements and access to habitat under the snow.

No significant impacts are expected to terrestrial mammals as a result of either Alternative 1 or 2.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. Fuel spills or other hazardous substance releases would be mitigated by implementing project BMPs and mitigation measures (Appendix D1, E3, E4, E5).

Under the No Action Alternative, there would be no construction, operation, or maintenance of the broadband network; therefore, there would be no effect to terrestrial mammals because there would be no ground disturbance or generation of noise or vibration.

MARINE MAMMALS

The primary impacts to marine mammals in the project area are temporary disturbance and displacement during the marine FOC deployment conducted during the summer. The primary source of potential disturbance to marine mammals from the Project would be anthropogenic noise from vessels associated with the Project during cable laying operations. The potential for vessel strikes

to whales is negligible due to the small number of proposed crossings, slow transit speeds, and low likelihood of whales occurring in the project area.

Subsea cable trenching would result in temporarily increased suspended sediment in the water. This would also result in the burial and/or disturbance of the benthic habitat and benthic invertebrates. Given the small scale and extent of both the work proposed and resources affected, effects would be minor and restricted to the area around the activity. A small spill of fuel or other contaminants could occur from the vessels constructing the subsea crossing; however, such spills are anticipated to be localized and temporary. Overall, impacts to marine mammals from Alternatives 1 and 2 would not be significant.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. Fuel spills or other hazardous substance releases would be mitigated by implementing project BMPs and mitigation measures (Appendix D1, E3, E4, E5).

Under the No Action Alternative, there would be no construction, operation, and maintenance of the broadband network; therefore, no impacts would occur to marine mammals because there would be no work done in or near the marine environment.

THREATENED/ENDANGERED SPECIES

There are a total of five marine mammals and two avian species that are threatened and endangered species (TES) and may occur in the project area. Potential impacts to listed species could include habitat loss or temporary alteration, or species disturbance or displacement as a result of construction activities and noise, and potential spills of materials used in construction activities. On July 25, 2025, NANA, as a designated non-federal representative, initiated consultation under Section 7 of the Endangered Species Act with the submission of a Biological Assessment (BA) to the USFWS and the NMFS, with supplementary information provided, on August 6, 2025. The BA addressed effects associated with both alternatives. The BA determined that, for species under the jurisdiction of the USFWS, the Project may affect and is not likely to adversely affect polar bears, polar bear critical habitat, Steller's eiders, and spectacled eiders and would not adversely modify critical habitat for listed eiders. The BA further determined that, for species under the jurisdiction of the NMFS, the Project may affect, but is not likely to adversely affect bowhead whales, bearded seals, and ringed seals, and would have no effect on humpback whales, and the Project would not

adversely modify humpback whale, ringed seal, or bearded seal critical habitat. The USFWS and NMFS concurred on September 18, 2025 and November 6, 2025, respectively.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. Fuel spills or other hazardous substance releases would be mitigated by implementing project BMPs and mitigation measures (Appendix D1, E3, E4, E5).

Under the No Action Alternative, there would be no construction, operation, or maintenance of the broadband network; therefore, there would be no effect on listed species or designated critical habitat because no ground disturbance, noise, vibration, or other effects would occur.

CULTURAL/HISTORIC RESOURCES

Under both alternatives, impacts from the Project on cultural resources are most likely to occur during the construction phase of the Project. Direct impacts to cultural resources as a result of ground disturbance are considered permanent impacts. Disturbance of cultural resources is possible for both ground lay areas and those where trenching or HDD are proposed, affecting both shallowly buried and more deeply buried sites. Other, less likely impacts could include artifact displacement via machinery, change of the physical features in the resource's setting (*e.g.*, visual impacts), or change in access to traditional use sites by land users. Operational impacts are expected to be minor and would be limited to unforeseen damage such as trampling or displacement of surface artifacts during any repair activities that may need to occur.

Project areas were surveyed where moderate or high potential for sites to exist were present, and all previously identified sites were revisited. A total of six Alaska Heritage Resource Survey sites are located within the APE for Alternatives 1 and 2. Avoidance is proposed for all individually documented sites. Impacts to the Cape Krusenstern National Historic Landmark (NHL) are not anticipated as no sites were identified within the area of potential effect that crosses the NHL, and the route avoids the Cape Krusenstern National Monument. Based on the cultural resources surveys and initial consultations with stakeholders, no potential adverse impacts on documented specific cultural resource sites would be expected in areas where agencies have determined that adequate investigation has occurred prior to installation and where appropriate avoidance, minimization, or mitigation measures are implemented. Consultation under Section 106 of the National Historic Preservation Act (NHPA) was initiated on June 25, 2025, and the field survey report was provided to the SHPO, cooperating agencies, and participating agencies on October 24, 2025. Consultation

concluded on November 26, 2025, with concurrence from all parties of NTIA's determination that Alternatives 1 and 2 would have no adverse effect on historic properties.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. Fuel spills or other hazardous substance releases would be mitigated by implementing project BMPs and mitigation measures (Appendix D1, E3, E4, E5).

Under the No Action Alternative, there would be no construction, operation, or maintenance of the Proposed Project; therefore, there would be no effect to cultural resources because there would be no ground disturbance, no installation of aerial fiber, and no potential to encounter cultural resources.

VISUAL RESOURCES

All the alternatives cross BLM lands managed under Visual Resource Management Class III and Class IV. These allow moderate or high levels of changes to the visual characteristic landscape, respectively. The alternatives do not propose changes to the visual landscape that rise to moderate or major impacts. Vegetation clearing will create a linear change of habitat across the Proposed Project. This will provide a long-term change in visual resources, as visual evidence of the installed telecommunication infrastructure.

When crossing some large rivers, the cable will be suspended 20-ft. above the water on wooden poles. These crossings will be visible and would constitute a change to the visual character of the surrounding landscape that would not be significant.

Cable anchors, splice points, and concrete beach manholes are placed to facilitate Project construction. Associated visual impacts are expected to not be significant due to the low-profile nature of these devices and structures. HDD borings and subsea crossings will be buried and have no visual impacts.

As part of the authorization process for a USFWS ROW, the CCP would be amended to change the management category in the affected area from Minimal to Moderate Management. In Moderate Management, the natural landscape is the dominant feature although signs of human activities may be visible.

Both construction and maintenance activities would result in temporary changes to the visual character of the immediate project area due to the presence of people, equipment, and materials. These changes would be transient and temporary; therefore, there would be no significant effects as a result of Alternative 1.

Alternative 2 has a smaller footprint than Alternative 1, and one fewer aerial crossing. There would be no significant impacts as a result of Alternative 2.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. Fuel spills or other hazardous substance releases would be mitigated by implementing project BMPs and mitigation measures (Appendix D1, E3, E4, E5).

Under the No Action Alternative, there would be no construction, operation, and maintenance of the broadband network; therefore, there would be no effect on visual resources because there would be no installation of fiber, equipment, or structures.

LAND USE

Alternative 1 crosses USFWS, BLM, DOD, DNR, DOT&PF, NANA, KIC, local government, utility ROW, and waterways. Alternatives 1 and 2 would result in an amendment or revision to the Selawik National Wildlife Refuge Comprehensive Conservation Plan to allow the issuance of a permit for a 60’ wide ROW across Selawik National Wildlife Refuge for the construction, operation and maintenance, and decommissioning of a fiber optic network. Under Alternative 1, the ROW for Selawik National Wildlife Refuge would be 86 miles long, encompassing 637.73 acres. Under Alternative 2, the ROW for the Refuge would be 76 miles long, encompassing 567.93 acres. Development on BLM lands requires ROW authorization. Alternative 1 would have 1,046.10 acres on BLM lands, and Alternative 2 would have a ROW of 984.40 acres, because the southern part of the alignment includes BLM lands. The Proposed Project would be in conformance with the Kobuk-Seward Peninsula ARMP/ROD.

Native allotments are avoided in all of the alternatives.

Impacts from Alternative 1 and 2 would be long-term and not significant.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

No adverse effects to public health and safety are anticipated. Fuel spills or other hazardous substance releases would be mitigated by implementing project BMPs and mitigation measures (Appendix D1, E3, E4, E5). Rights-of-way would be obtained for construction on DOT&PF lands. RS2477, 17(b) easements, trails, and Wild and Scenic Rivers are not anticipated to have significant impacts.

Under the No Action Alternative, there would be no construction, operation, and maintenance of the broadband network; therefore, there would be no effects to land use because no activities would take place to modify land uses. The Selawik National Wildlife Refuge Comprehensive Conservation Plan would not be amended or revised.

SOCIOECONOMICS & EFFECTS ON THE QUALITY OF LIFE OF THE AMERICAN PEOPLE

Both Alternatives 1 and 2 are expected to have beneficial impacts to the region. Positive impacts to the American people would include improved access to telehealth/telemedicine services, more remote work and other economic development opportunities, remote learning opportunities, improved access to government and emergency services, preservation and sharing of indigenous culture, improved social cohesion and community connections, and improved population retention.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

Beneficial effects to public health and safety are anticipated, including those discussed in the previous paragraph. Adverse effects to public health and safety could take place, including cybersecurity/privacy concerns, changes in adult/youth engagement, lack of trained personnel, societal changes, impacts to businesses, cost of hardware/software, and work/school productivity. Overall, the effects are anticipated to be beneficial.

Beneficial effects to the quality of life of the American people, include improved access to telehealth/telemedicine services, more remote work and other economic development opportunities, remote learning opportunities, improved access to government and emergency services, preservation and sharing of indigenous culture, improved social cohesion and community connections, and improved population retention. Adverse effects to public health and safety could take place, including cybersecurity/privacy concerns, changes in adult/youth engagement, lack of trained personnel, societal changes, impacts to businesses, cost of hardware/software, and work/school productivity. Overall, the effects are anticipated to be beneficial.

Under the No Action Alternative, there would be no construction, operation, and maintenance of the broadband network; therefore, existing gaps in service and coverage would continue. Existing insufficiencies in upload and download speeds, latency, and other key performance indicators would persist, and the region would continue to lack essential infrastructure. Impacts from the No Action Alternative would not be significant.

SUBSISTENCE

The Proposed Project has the potential to cause impacts primarily to subsistence user access and resource availability. Impacts would be greatest during the construction phase of the Proposed Project due to increased human activity, noise, and physical obstructions, which could impact both user access and subsistence resource availability. Under Alternative 1, subsistence users could experience temporary reductions in access around construction zones or along the ROW. These impacts would be most likely to occur for residents traveling overland by snowmachine in winter to conduct subsistence activities such as hunting, as a majority of construction activity would occur in winter. During summer construction activities, particularly along the Noatak and Kobuk rivers, subsistence users traveling along riverways by boat could experience temporary impacts to access if construction crews and equipment, including barges and tugboats, are active. While the Proposed Project may cause a minor reduction (less than 0.003 percent of total Refuge land area) in habitat for certain resources, the change in habitat availability would be unlikely to affect wildlife survival and production or to affect overall abundance. Impacts from Alternative 1 would be temporary and not significant.

Impacts from Alternative 2 to subsistence user access, resource availability, and resource abundance, would be similar to those discussed under Alternative 1, but with a slight decrease in use area overlaps near Ambler, Kobuk, and Shungnak. There could be minor interference or conflicts to subsistence activities posed by this alternative, but these impacts would be temporary and not significant.

Increased internet access common to both alternatives could impact participation in subsistence activities in multiple ways, including decreased participation in such activities, but also increased communication about subsistence harvest and activities.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

Adverse effects to public health and safety could take place. These include reasonable, temporary reductions in access around construction zones or along the ROW. While unlikely, it is possible that

snowmachines could snag on the FOCs if they are not properly secured or fully flat. The applicant anticipates that the FOC would settle into the tundra and be subsumed by the surrounding vegetation over time. Overhead lines on smaller river crossings would be high enough to allow for boat access. HDD is being used for select large river crossings, to minimize the potential impacts.

Under the No Action Alternative, there would be no construction, operation, and maintenance of the broadband network; therefore, there would be no impacts to subsistence because no activities would interfere with access to or availability of subsistence resources.

RECREATION

Improved internet access could change how individuals spend their free time, increasing screen time and participation in activities like gaming and social networking. This can be at the expense of other activities, including participation in outdoor recreation. Alternatively, social media can be used as a tool to share information and encourage recreation outdoors.

Construction overlaps with hunting seasons. Impacts are expected to be of short duration (during construction of up to 2 winter seasons and 2 summer seasons) and minor magnitude, as the construction team will only be in a particular spot. Construction activity may provide a temporary impact on recreation in the immediate area of the activity but are of short duration (during construction of up to 2 winter seasons and 2 summer seasons) and minor magnitude. Vegetation clearing and installed infrastructure would provide long-term impacts (>10 years) of minor magnitude. Impacts to recreation from Alternatives 1 and 2 would not be significant.

In addition, adherence to identified BMPs, and conservation measures will further minimize impacts (Appendix D1, D2, D3, E1, E2, E3, E4, E5).

Adverse effects to public health and safety could take place. While unlikely, it is possible that snowmachines could snag on the FOCs if they are not properly secured or fully flat. The applicant anticipates that the FOC would settle into the tundra and be subsumed by the surrounding vegetation over time. Cable anchors, splice points, aerial crossing poles, aerial crossing anchors, and the cable will be on the surface and visible to recreation users. These are anticipated to not have significant impacts to public health and safety.

Under the No Action Alternative, there would be no construction, operation, and maintenance of the broadband network; therefore, there would be no impacts to recreation because there would be no obstacles to recreational access.

PUBLIC COMMENT

NTIA, BLM, USFWS, USACE, and NOAA conducted a public comment period for the EA. Public notice was placed in the Arctic Sounder, a local newspaper of general circulation. The notice of the proposal and EA was also posted on NTIA's website for national exposure. The notice described the Proposed Project and comment process and provided guidance on where to view the document and federal points of contact. The comment period began on October 15, 2025, and concluded on November 14, 2025.

Comments were received from:

- State of Alaska Department of Natural Resources
- Native Village of Kotzebue
- OTZ Telephone Cooperative, Inc.
- Western Arctic Caribou Herd Working Group
- Two private citizens

Comments are included in Appendix P of the final EA, along with a comment/response matrix.

DECISION

NTIA, BLM, USFWS, USACE, and NOAA conclude that constructing and operating the Proposed Project as defined by Alternative 2, identified BMPs, and conservation measures, will not require additional mitigation. A separate mitigation plan is not required for the Proposed Project. The analyses indicate that the Proposed Action is not a major federal action that will significantly affect the quality of the human environment. The above-referenced agencies have determined that preparation of an EIS is not required.

Issued on December , 2025, by:

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The BLM Anchorage Field Office verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 CFR Part 46 and Part 516 of the Department Manual. The BLM concurs that this FONSI will not have significant impact on the human environment on BLM-managed lands. In a separate document, the BLM will write its own Decision Record for the right-of-way permits stemming from this FONSI.

Issued on December , 2025, by:

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