Appendix O – Consultation

Appendix O1 – Scoping Meeting Maps

Appendix O2 – Broadband Community Meeting Questions

Appendix O3 – Energy Steering Committee Presentation

Appendix O4 – Letter to Tribal and City Leaders

Appendix O5 – Letter to Allotment Owners

Appendix O6 – EA Scoping Letter

Appendix O7 – Scoping Comment: WACH

Appendix O8 – Scoping Comment: Trustees of Alaska

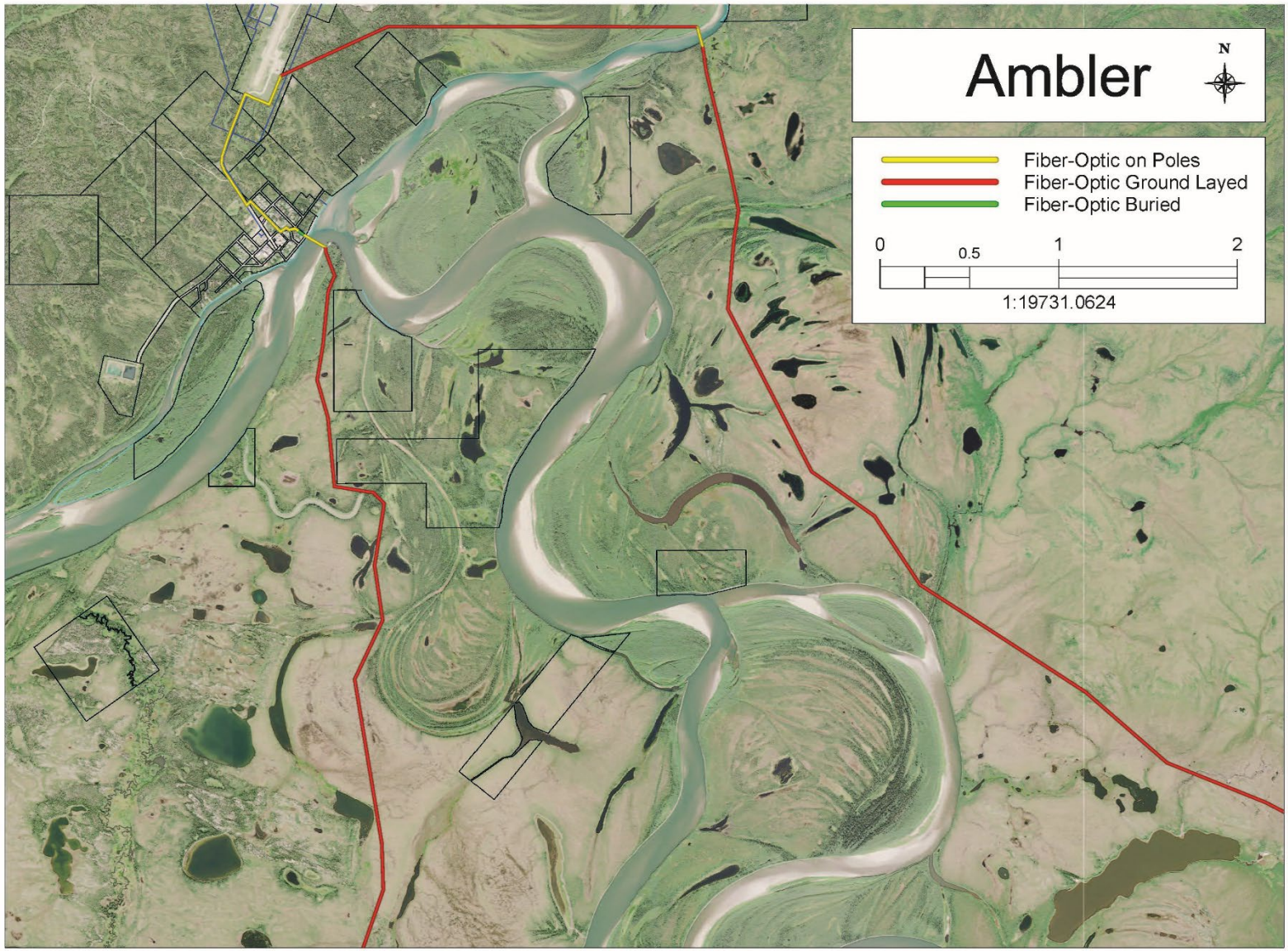
Appendix O9 – Scoping Comment: DNR

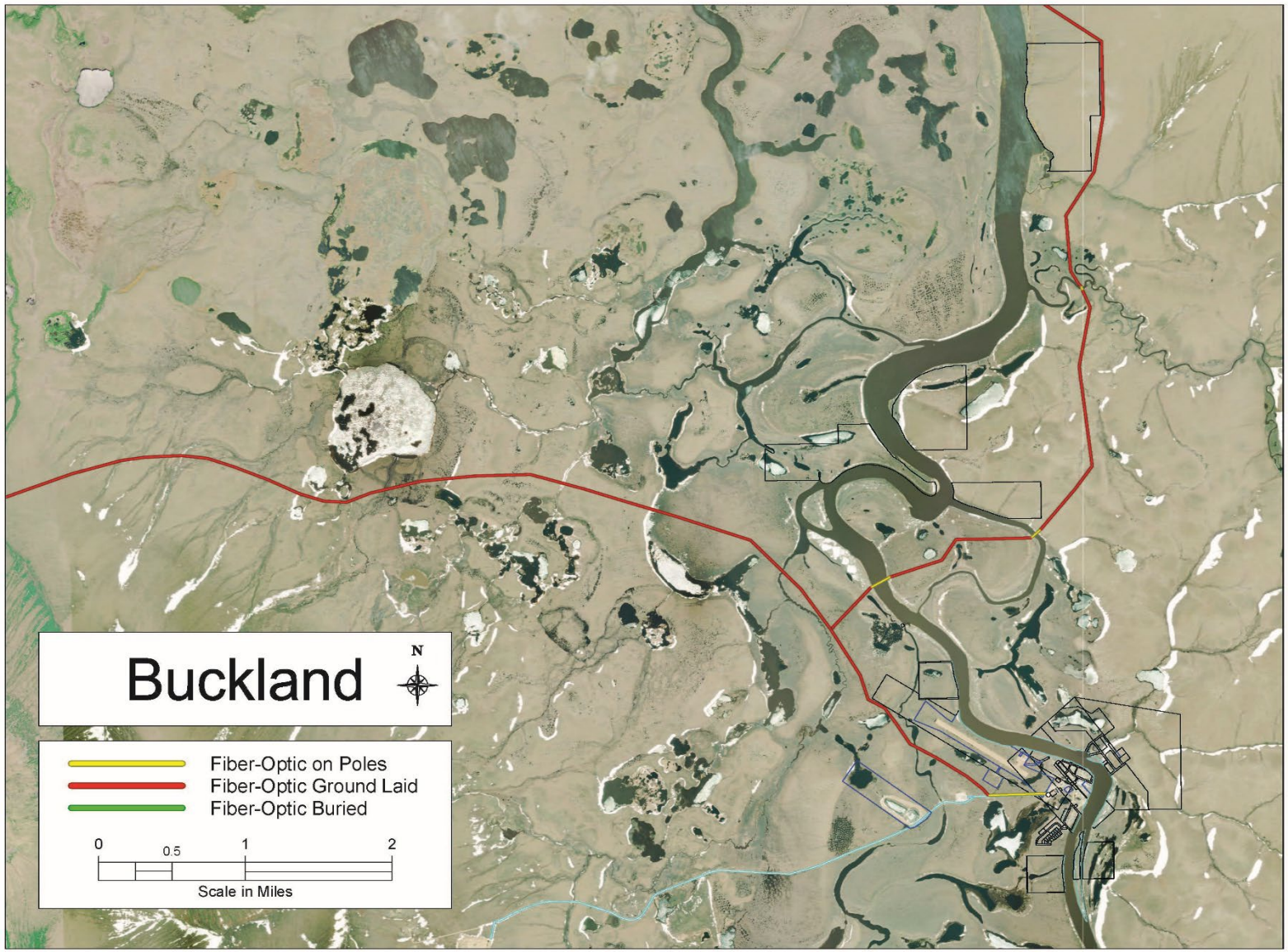
Appendix O10 – Website Snapshot

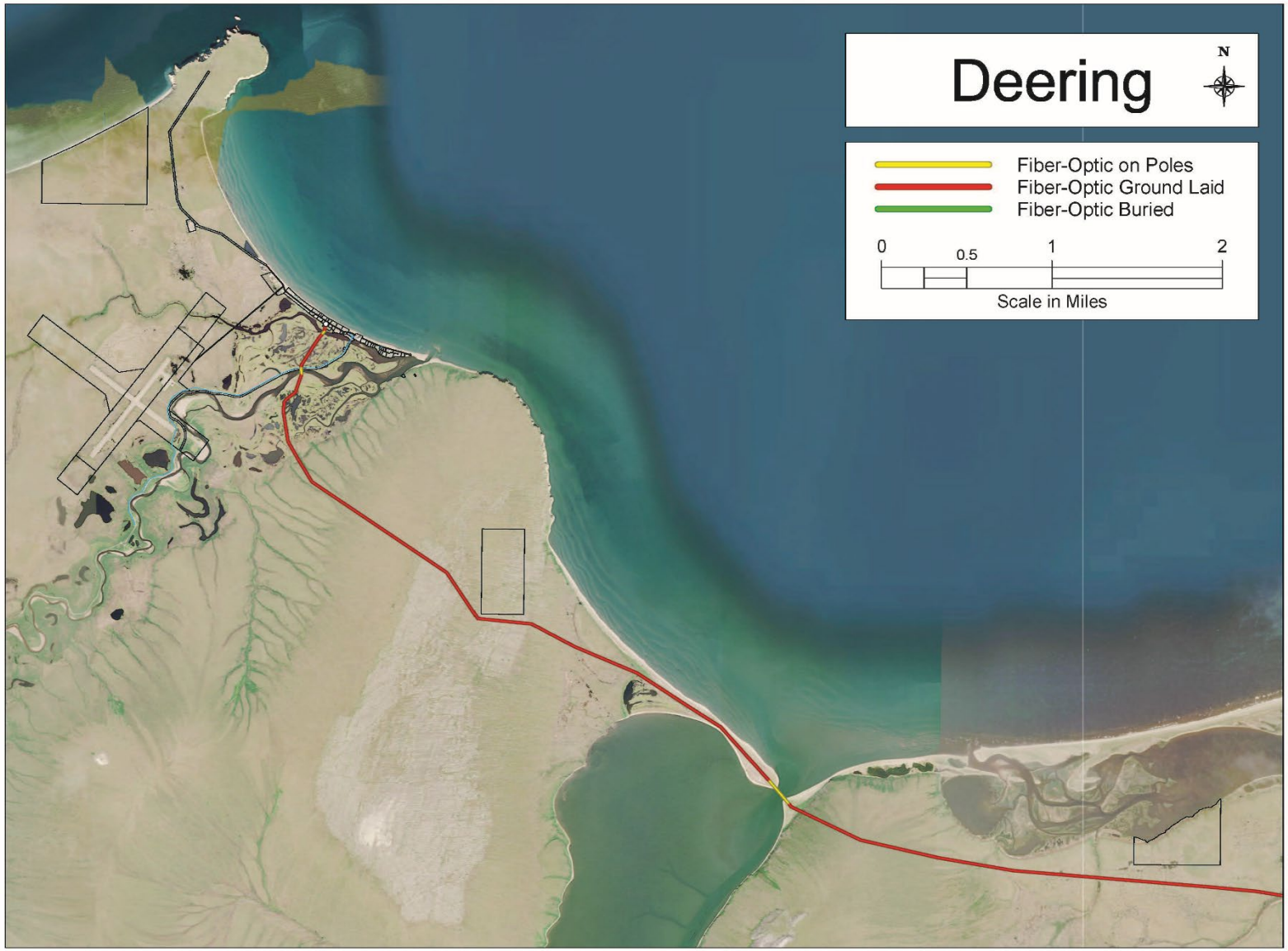
Appendix O11 – USFWS Letter of Concurrence

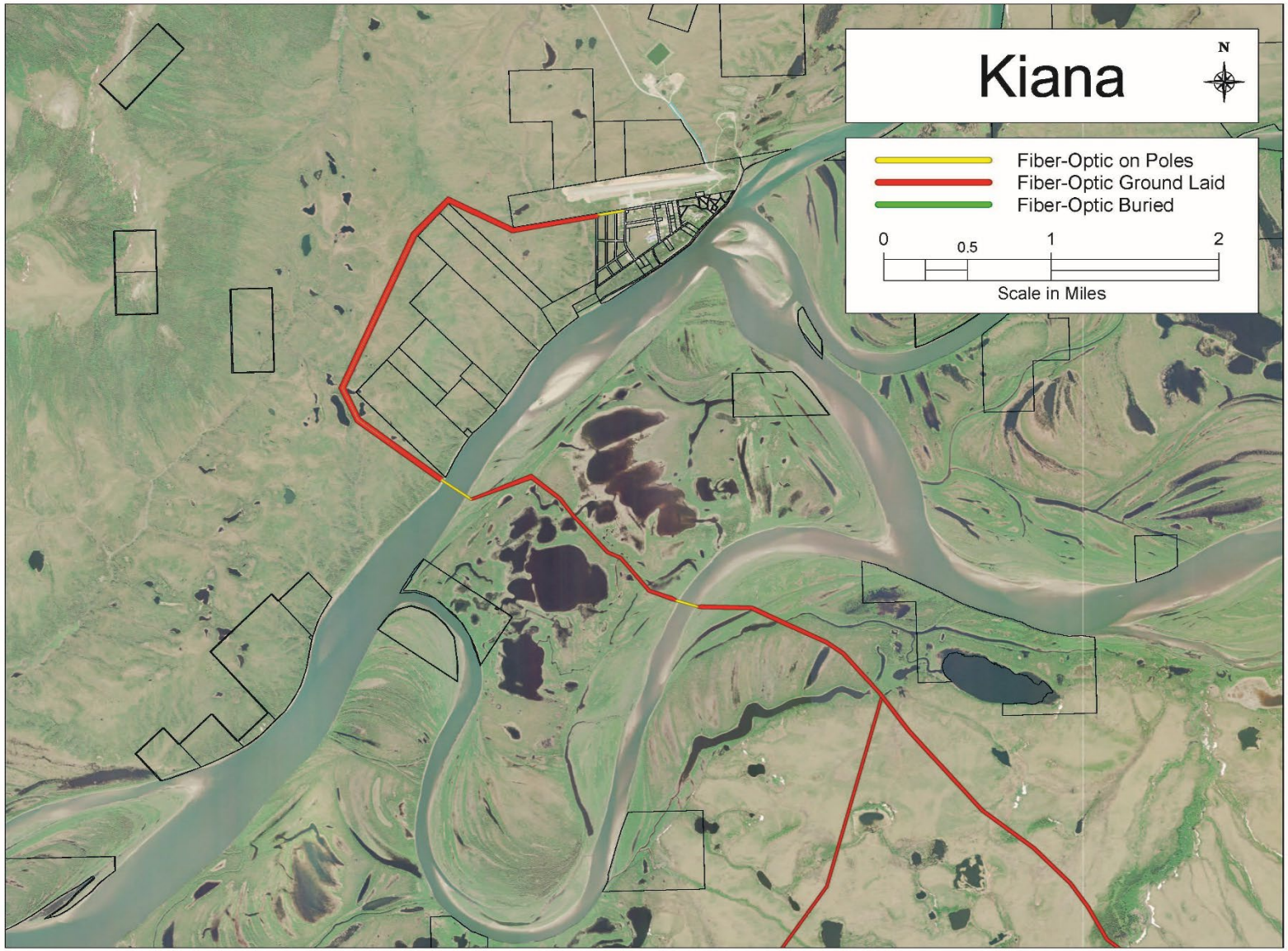
Appendix O12 – Essential Fish Habitat Letter of Concurrence

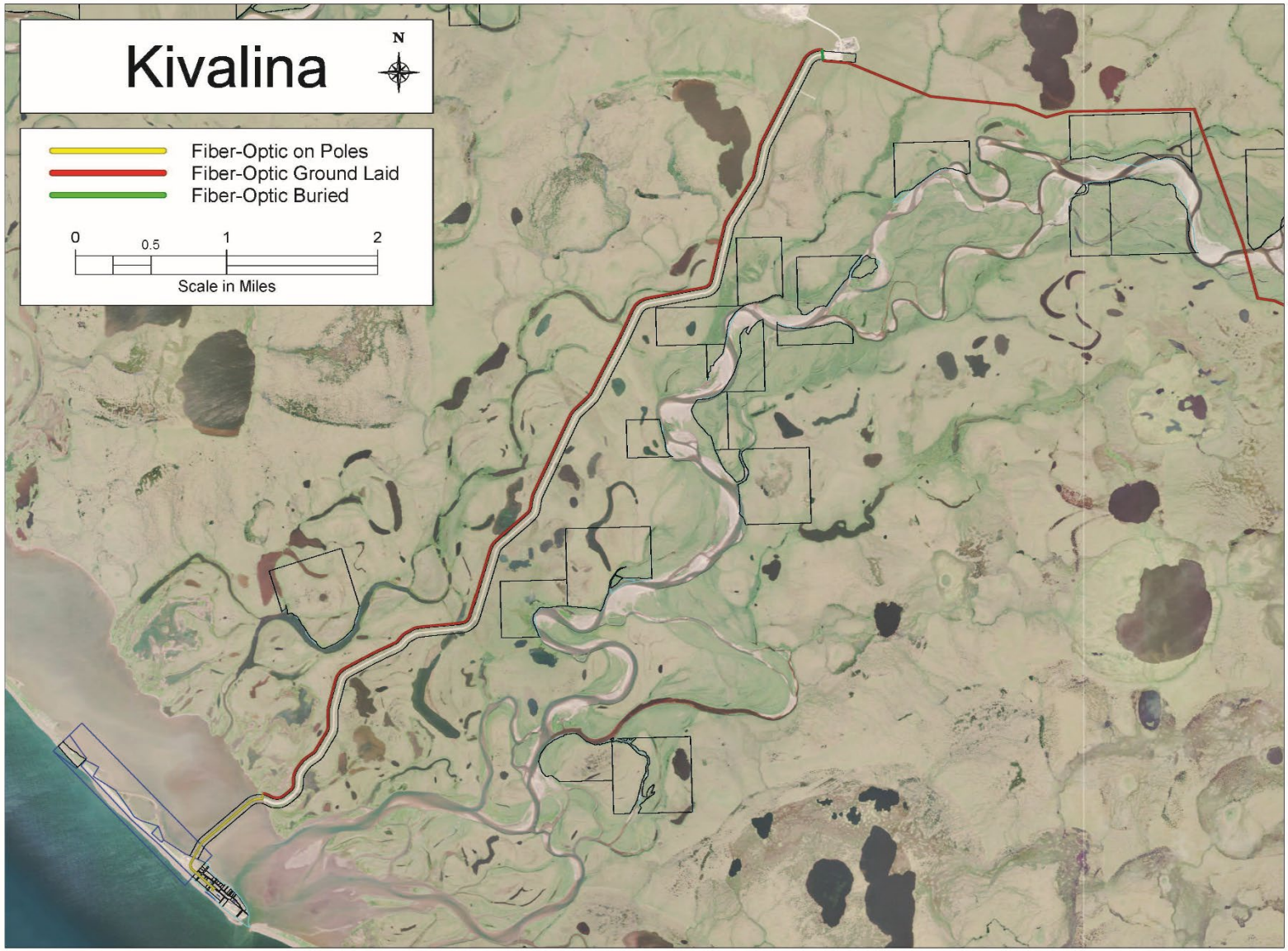
Appendix O1 – Scoping Meeting Maps

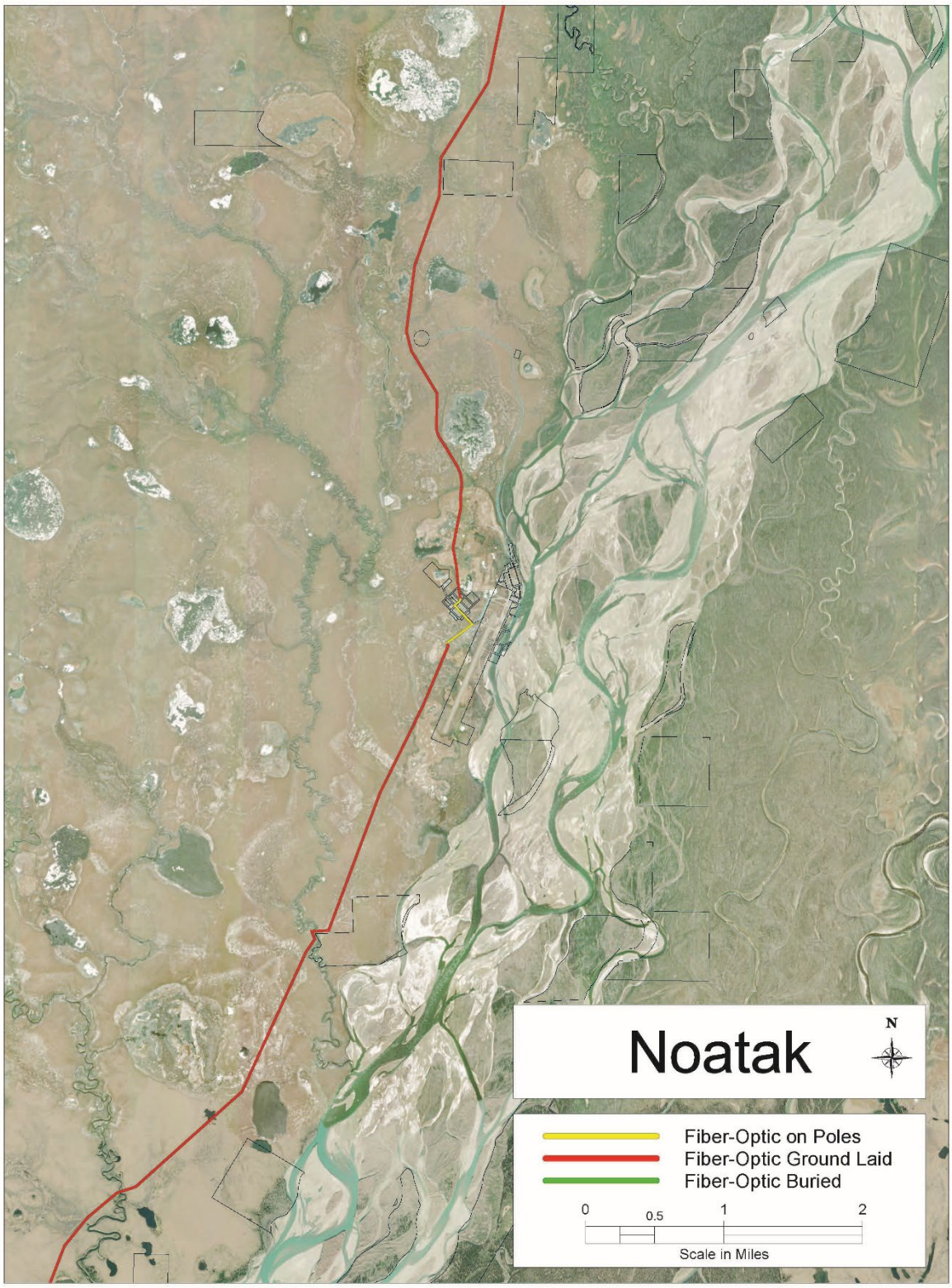

Ambler
N
Fiber-Optic on Poles
Fiber-Optic Ground Layed
Fiber-Optic Buried
0
0.5
1
2
1:19731.0624

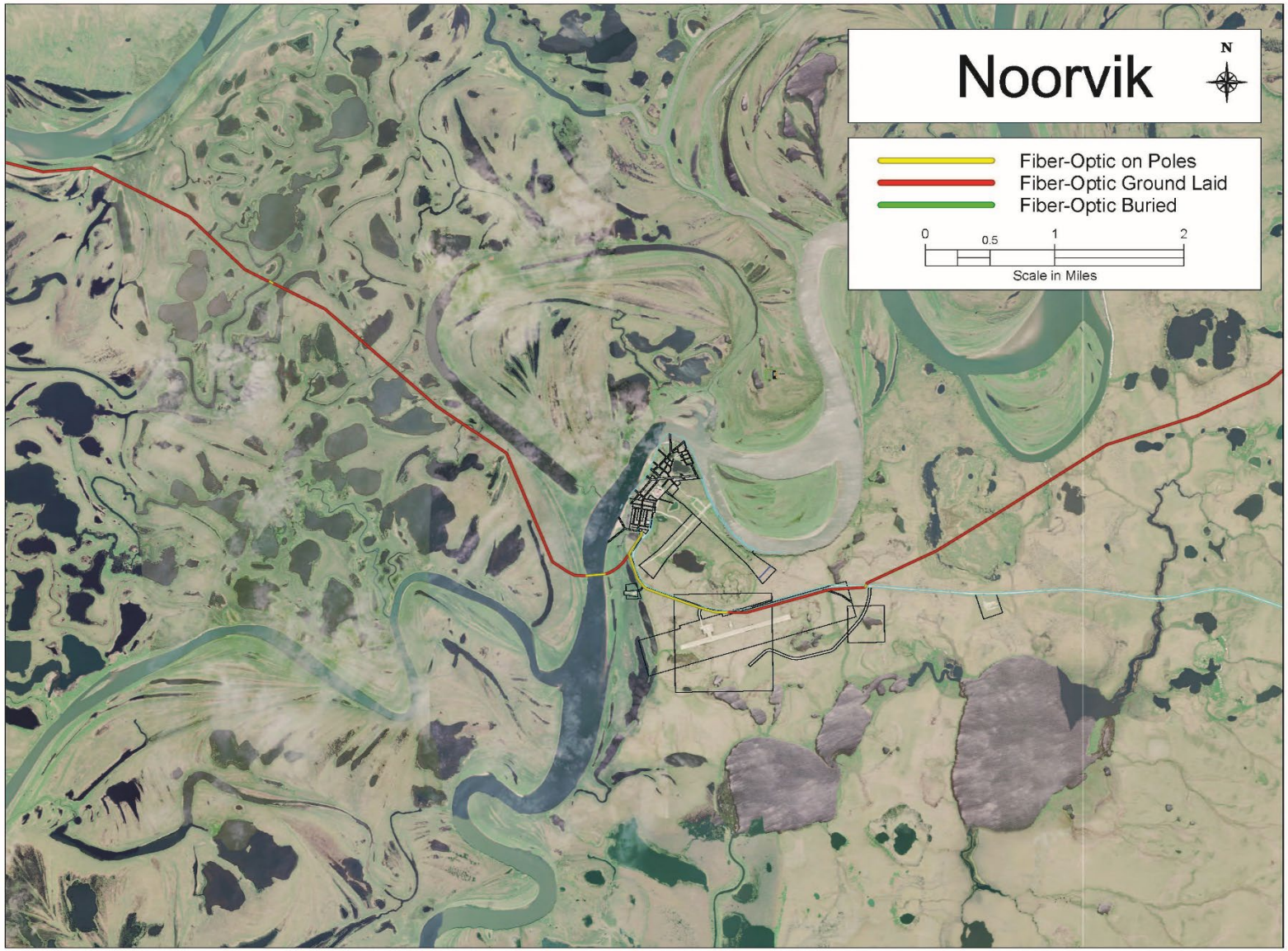

Buckland
N
Fiber-Optic on Poles
Fiber-Optic Ground Laid
Fiber-Optic Buried
0
0.5
1
2
Scale in Miles


Deering
N
Fiber-Optic on Poles
Fiber-Optic Ground Laid
Fiber-Optic Buried
0
0.5
1
2
Scale in Miles

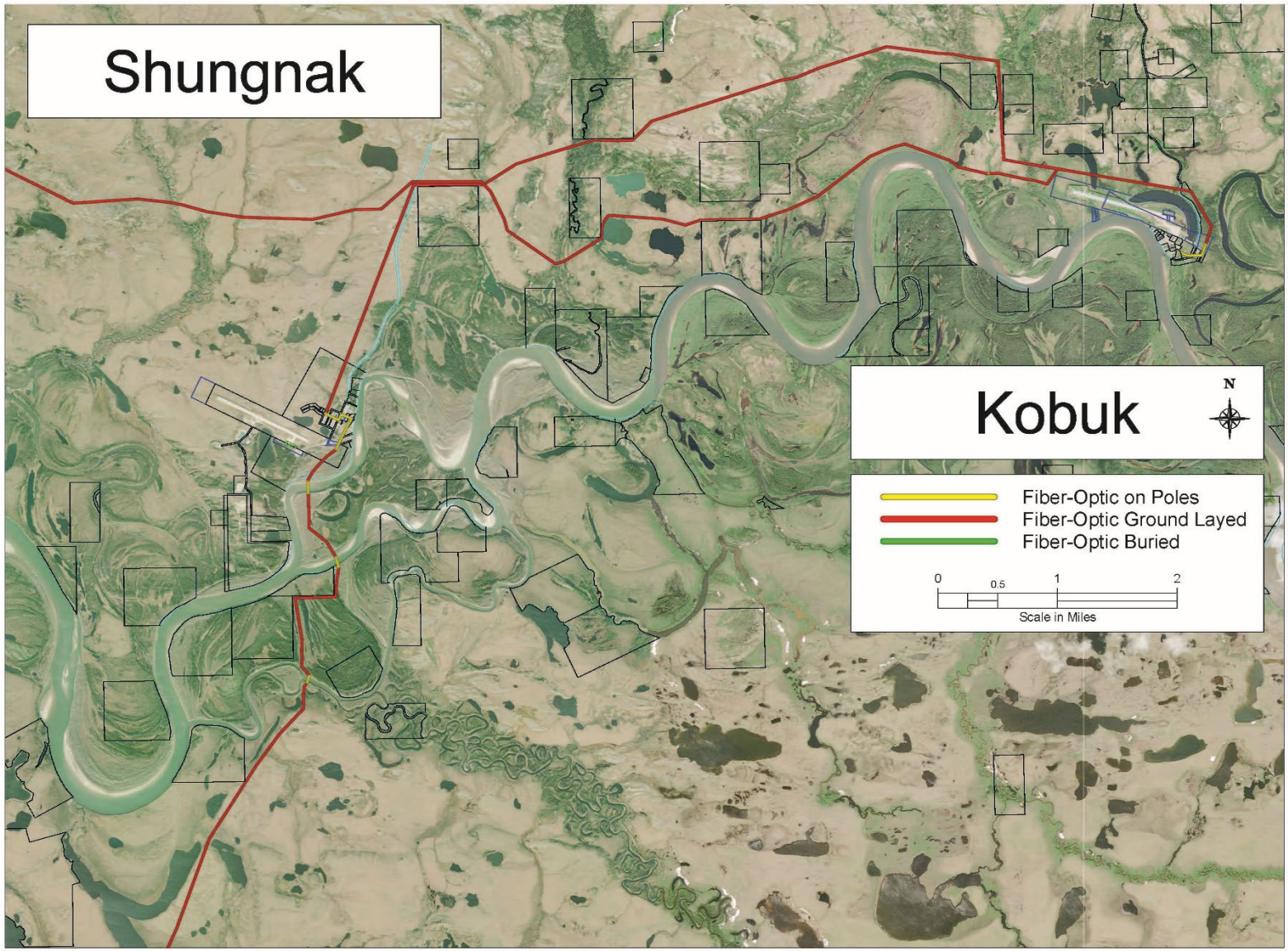

Kiana
N
Fiber-Optic on Poles
Fiber-Optic Ground Laid
Fiber-Optic Buried
0
0.5
1
2
Scale in Miles


Kivalina
N
Fiber-Optic on Poles
Fiber-Optic Ground Laid
Fiber-Optic Buried
0
0.5
1
2
Scale in Miles


Noatak
N
Fiber-Optic on Poles
Fiber-Optic Ground Laid
Fiber-Optic Buried
0
0.5
1
2
Scale in Miles


Noorvik
N
Fiber-Optic on Poles
Fiber-Optic Ground Laid
Fiber-Optic Buried
0
0.5
1
2
Scale in Miles


Selawik
N
Fiber-Optic on Poles
Fiber-Optic Ground Laid
Fiber-Optic Buried
0
0.5
1
2
Scale in Miles


Shungnak
Kobuk
N
Fiber-Optic on Poles
Fiber-Optic Ground Layed
Fiber-Optic Buried
0
0.5
1
2
Scale in Miles

Appendix O2 – Broadband Community Meeting Questions

NANA Regional Broadband Network Project Community Engagement Meeting Q&A

During the community engagement meetings held in 2024, NANA discussed the project and requested feedback and recommendations for route modifications on the proposed fiber routes, identification of sensitive areas to stay away from within and around the village community and region, identification of subsistence areas to stay away from within and around the village community and region, and recommendation for winter and summer construction activities of the project.

Middle Mile Questions:

1. Will this project affect the caribou?
    a. No. This question is near and dear to our Inupiat way of life. We are consulting with locals in the communities to ensure that we are considering caribou migration patterns and subsistence hunting activities as part of our construction plan. Additionally, as part of our environmental and permitting process, we are working with one of the preeminent caribou biologists in the state. Through these efforts, we are confident that the project will not have a negative impact on caribou or subsistence activities.
2. Will the cable have power?
    a. No, the Fiber cable will not have any power flowing across it.
3. Will the cable be locatable if damaged?
    a. Yes, the fiber cable is locatable and there will be test equipment available to isolate damages.
4. How will you cross the rivers?
    a. Aerial crossings will be made over large rivers.
5. What about barge traffic, will the cable be high enough?
    a. Yes, the cable will be installed so as not to impact barge traffic.
6. Is the cable strong entity for snow machines?
    a. Yes, the cable is very durable and is constructed with armor to protect it from damage.
7. What happens if the cable is damaged?
    a. If the cable is damaged, employees will use test equipment to locate the damaged location and will either repair or replace that small section of cable.

8. Who will work on the network?
    a. NANA will be hiring workers in the communities to work on the network.
9. Will there be pipes on the ground?
    a. The design is for this cable to be laid onto the tundra. The only area where there maybe be conduit (pipes) in the ground is if the cable is going through a high traffic area near the community, that way we can avoid the cable being in the way of daily activity.
10. Will construction happen during hunting season?
    a. Primary construction will be completed during the winter months and as part of our planning and permitting process, we will ensure that construction will not take place when it would have the potential to impact hunting.
11. What is the strength of the cable?
    a. The cable is very strong, it has a cable breaking load of 50 Kn (11,240 pounds), this is like 7 adult bull moose hanging from the cable at one time!
12. What happens if it is damaged?
    a. If the cable is damaged, depending on the severity, the system may change the direction the signal is feeding from, so that the system can keep working. Workers would use test equipment to locate where the damage is and would repair or replace the damaged area of the cable.
13. Will extra cable be stored if break happens?
    a. Yes, extra cable and repair parts will be stored so that in the event there is damage, we can quickly repair it.
14. Will cable crossing river be higher for barge landings?
    a. Yes, the cable where it crosses large rivers will be placed high enough that it will not affect barge landings or other river activities.
15. Will the cable need amplifiers in the field?
    a. No, the cable will not need amplifiers in the field. There will be electronics housed in buildings or huts in each community.
16. Will there be work available?
    a. Yes, our intent is for the construction contractor to utilize local labor on the build project wherever possible and NANA intends to recruit and hire locally in the communities for workers to operate and maintain the system.

17. When will training begin?

    a. Coordination for training for the construction phase will begin once we have a contractor hired for the project. Training for operations and maintenance of the system will likely start sometime in mid-2025

18. Will we have jobs in the community?

    a. Yes, in addition to construction jobs while building the system, NANA intends to recruit and hire local workers in the communities to operate and maintain the system (installers, splicers, repair personnel, customer service, etc.)

19. Will there be training for the job opportunities?

    a. Yes, NANA will work with the construction contractor on local-hire and NANA will train workers to operate and maintain the system.

20. What happens to cables when placed in willows?

    a. If there are locations where, when the cable is placed, it does not lay down onto the ground (but is hung up in the willows), during the inspection phase of the project, those locations will be identified, and workers will lay the cable onto the ground.

21. What happens with cable from erosion?

    a. The cable is being laid in a serpentine manner, which means that there is some slack when the cable is laid out. This means that in the event there is erosion of other shifts in the ground, the cable should move with those shifts and continue to lay on/in the ground.

22. Will the cable get cut by ice?

    a. The cable is very durable and has armor to protect it. Through the design and construction plan for the cable route we strive to identify potential trouble areas and either avoid or make modifications to avoid damage as much as possible.

23. How will repairs happen in winter and summer?

    a. Damage locations would be identified, and, in the winter, repairs would likely be made by workers traveling to the damaged location from the nearest community via snow machine. In the summer, depending on where the damage is located, workers would likely be transported to the location via helicopter.

24. What is the schedule?

    a. Construction is planned to start in early 2026, with all of the middle-mile cable being placed by the end of the summer in 2026. Local (in community) systems are planned to be constructed and services turned up in 2 phases: phase 1, spring through fall of 2026 and phase 2, spring through fall of 2027.

25. Where will the equipment office be located?
    a. NANA is identifying locations in each community for the equipment office. In most cases, they will be located on the same lot as the NANA building.
26. Will the local piece be built first?
    a. There may be some small amount of the "local piece" being build first, but for the most part the middle-mile (connection between communities) will be built first. Final construction sequencing will be determined once we have hired the construction contractor.
27. What type of vehicle will build it?
    a. The final determination on the construction vehicles will be decided by the construction contractor and NANA, however, it will likely be a low pressure tracked vehicle similar to a Pisten-Bully which will pull a sled with the cable containers.
28. Will there be trail improvements?
    a. The route that the cable is being laid on will likely have some clearing done, where possible/practical, we plan to lay the cable near existing trail systems.
29. How long will permitting take?
    a. Currently we plan for the permitting to be completed by the fall of 2025.

ISP Questions:

1. Will the in-home router have Wi-Fi capabilities?
    a. Yes, it will have Wi-Fi
2. Will the data be secure?
    a. Data is secure from the wireless devices to the Internet Gateway.
3. Will NANA manage the Wi-Fi?
    a. Yes, the customer will be able to manage their own Wi-Fi or NANA can.
4. Will NANA provide parent controls?
    a. Yes, home gateways do offer parental control.
5. How many devices can connect to the router?
    a. The current planned limit is approximately 250 devices.
6. Can I take my service with me to camp?

   a. No, this would be for your home and the area immediately surrounding it.

7. What will be available for low income and seniors?

   a. NANA is pursuing grants and other programs to be able to provide lower cost or subsidized services in the communities.

8. Will there be cyber security and end user training?

   a. Yes, there will be training on cyber security and training on the features and use of your router/modem device.

General Questions- Open Discussion and Comments

1. Will the guys have high viz?

   a. Yes, the workers will wear high-viz and follow stringent safety regulations.

2. When will the project be completed?

   a. We plan for Middle-mile (connection between communities) to be completed by fall of 2026 and Last-mile (in the communities) to be completed in 2 phases, 1 by fall of 2026 and 2 by fall of 2027.

3. Where will the equipment office be located?

   a. Final locations are still being determined, however, in most cases they will be located on the same lot as the NANA buildings.

4. What is difference in services between NANAs and competitors?

   a. NANA's system will be fiber optic cable (not satellite or microwave) and is an inherently more reliable system. NANA's system will provide faster speed packages than our competitors.

5. When will training become available?

   a. Training for workers will likely begin sometime in 2025, training for customers on use of the system will begin sometime ahead of system turn up (2026 and 2027).

6. Will this improve cellular service?

   a. Cellular providers would have the option to utilize this system, which could improve their services.

7. Will this service be available to other businesses and companies?

   a. Yes, services will be available to other businesses and companies.

8. Can you use Wi-Fi calling with your cell phone?

a. Yes, you can use Wi-Fi calling on this system.

9. What type of educational information about high-speed internet will be shared?

    a. The NANA team plans to share educational information on a wide range of internet topics, such as device information and use, internet safety, cybersecurity, remote learning, etc.

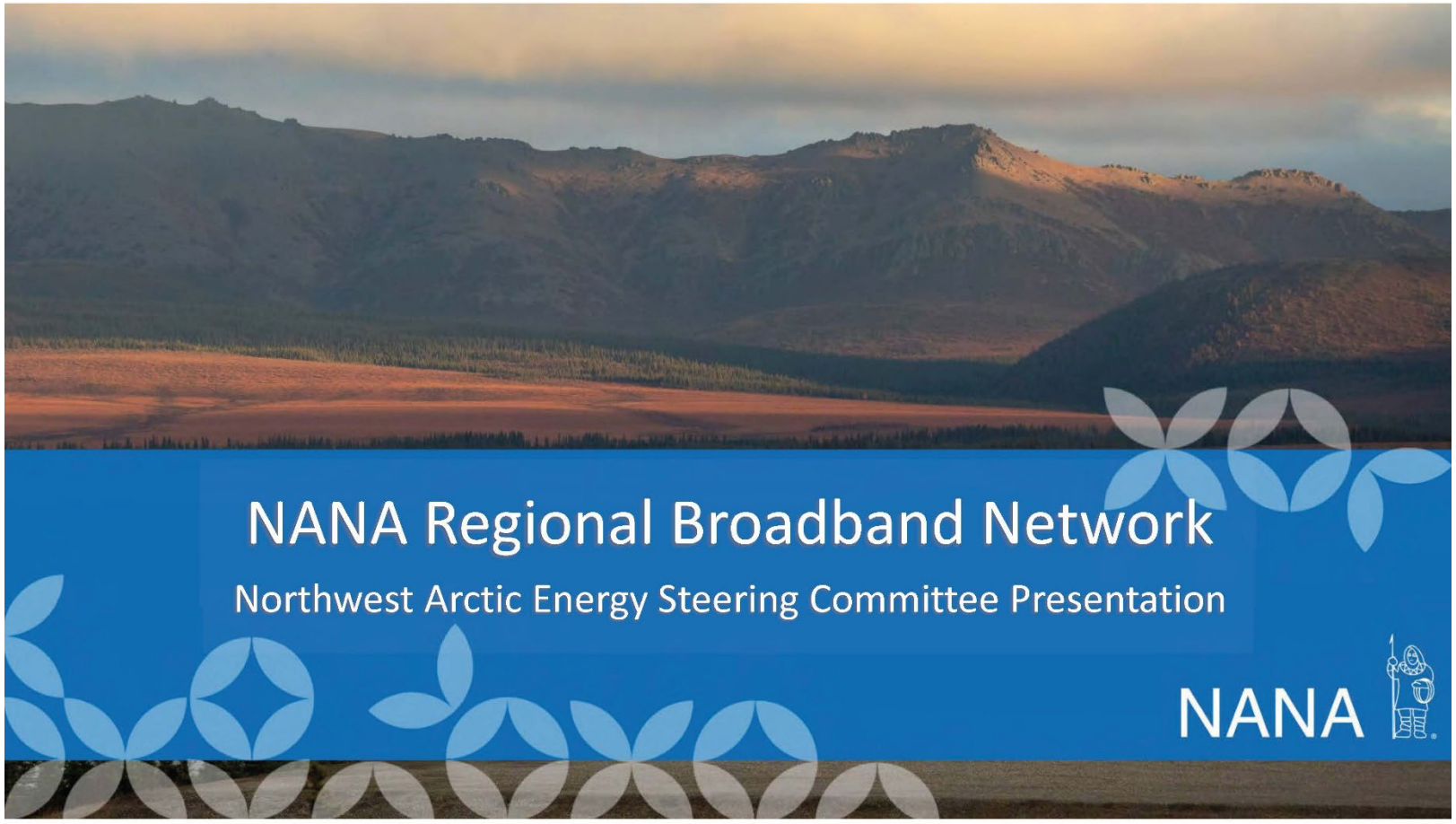
10. What is IoT?

    a. IoT is the "Internet of Things" it basically describes devices that connect with other devices and systems. When discussed in this application, it mainly is talking about "smart home" devices, things like; security systems, cameras, lights, thermostats and other home devices, that you will be able to control with your voice or your smartphone, utilizing your home Wi-Fi.

11. Will I be able to turn down dish network and use this to watch tv?

    a. You would be able to subscribe to streaming services and watch tv programming over this system.

Appendix O3 – Energy Steering Committee Presentation

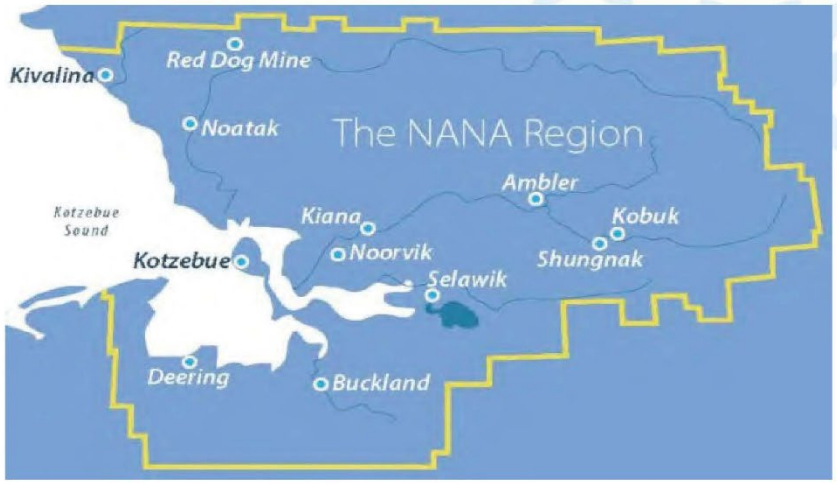

NANA Regional Broadband Network
Northwest Arctic Energy Steering Committee Presentation
NANA

NANA Regional Broadband Network

Under the U.S. Department of Commerce, National Telecommunications and Information Administration's Tribal Broadband Connectivity Program, NANA has been awarded a $65,168,000 broadband infrastructure deployment grant.

Project Objective:

Connect the Village Communities of Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Kotzebue, Noatak, Noorvik, Selawik, and Shungnak with Fiber Optic Cable



MEET THE TEAM
Combined over 140 years of industry experience in Alaska

NANA

Albie Panikpaiq Dallemolle

Vice President of Economic Development and Sustainability

Jason Louvier

Project Superintendent

Brett Carter

Sr. Director Compliance & Controls

Jeff Parrott

Director of Network Engineering & Operations

Travis Stubblefield

Director of OSP Engineering & Field Operations

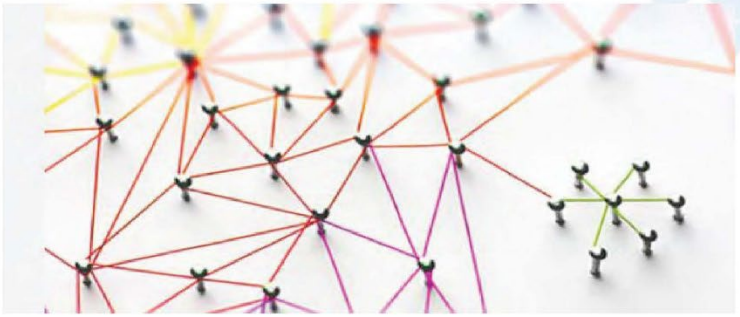
Anthony Parker

Senior Network Engineer

Mark Groeschel

OSP Design Engineer

NANA Regional Broadband Network



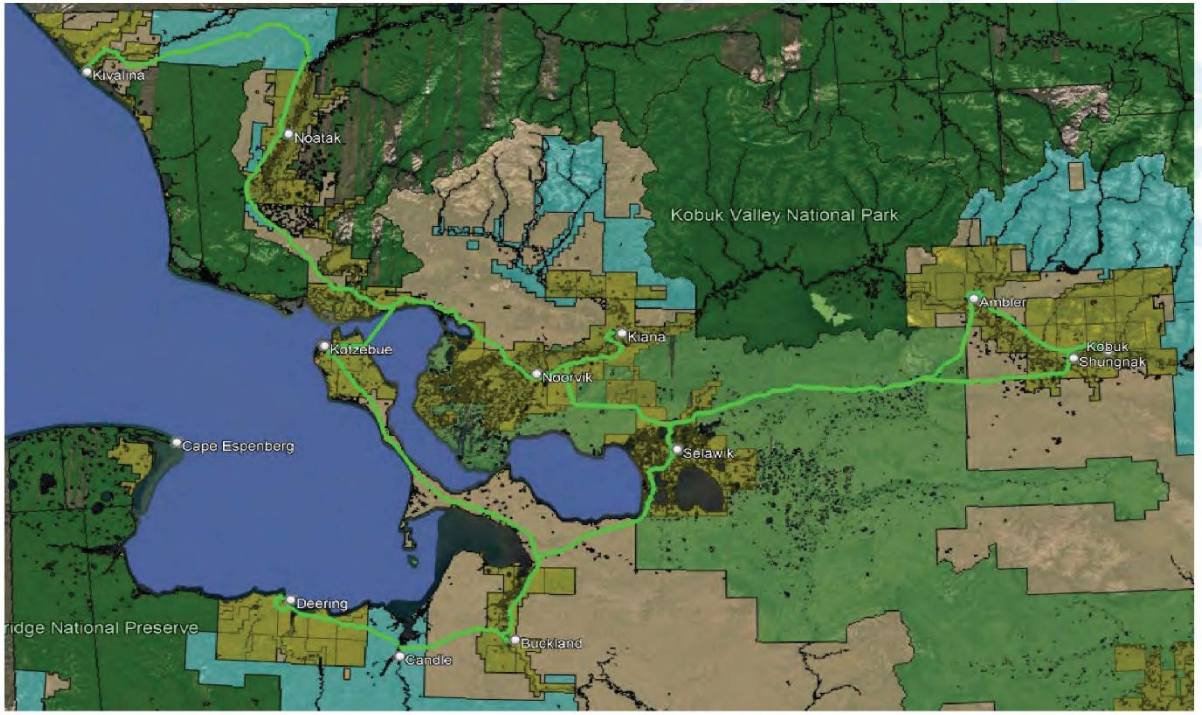
Below are some uses of the fiber infrastructure:

- Alternative Energy Monitoring
- Automotive Industry
- Broadcasting
- Call Center Support
- City Planning Software
- Computer Networking
- Data Center Services
- Expanded Search & Rescue
- Heart Monitoring
- Internet
- Lighting Management
- Mechanical Inspections
- Medical
- Military and Space
- Power Shedding
- Remote Education
- Remote Sensing
- Security Cameras
- Smart Appliances
- Surgical Procedures
- Telephone
- Television
- Temperature and Moisture Sensors
- Transportation Industry

Middle Mile Network Fiber Route

Middle Mile is the infrastructure between the village communities.

Proposed Fiber Route



Middle Mile Permitting & Land Use

Land Owners:
- NANA
- KIC
- BLM
- USFWS (Selawik NWR)
- State of Alaska

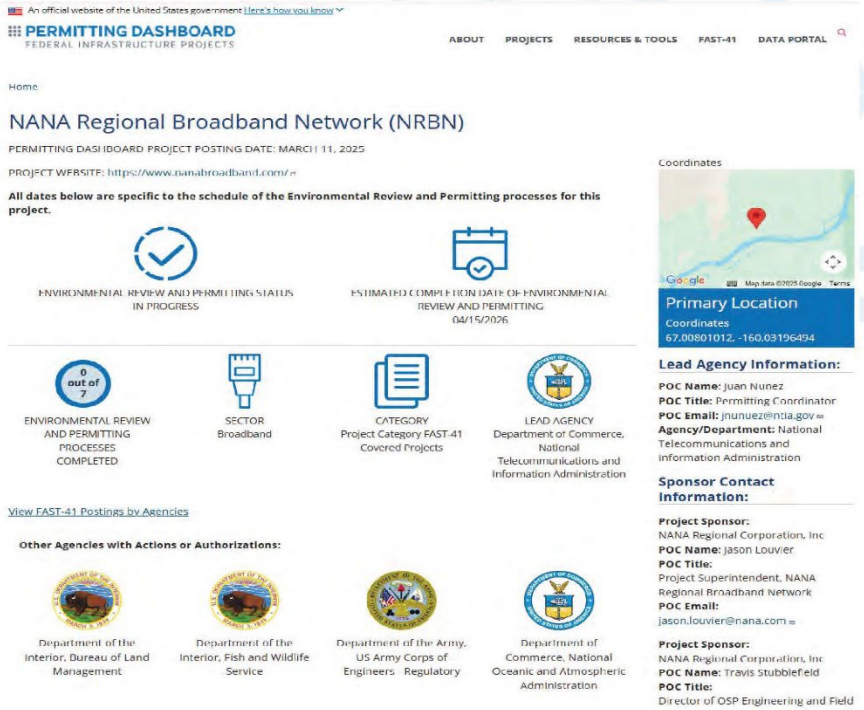
Other Permit Authorities:
- ADF&G
- USACE
- USFWS/NMFS
- NAB
- Cities

Middle Mile Permitting & Land Use - continued

NANA has elected to enter the FAST 41 process for permitting of the Broadband Project.

This will enable work with all Federal permitting and environmental agencies at one time, expediting the process so we can get to construction.

Typically, this process is reserved for projects more than $200M however, we are eligible to join the process due to the project being tied to Broadband (supported industry sector) and being an ANC.



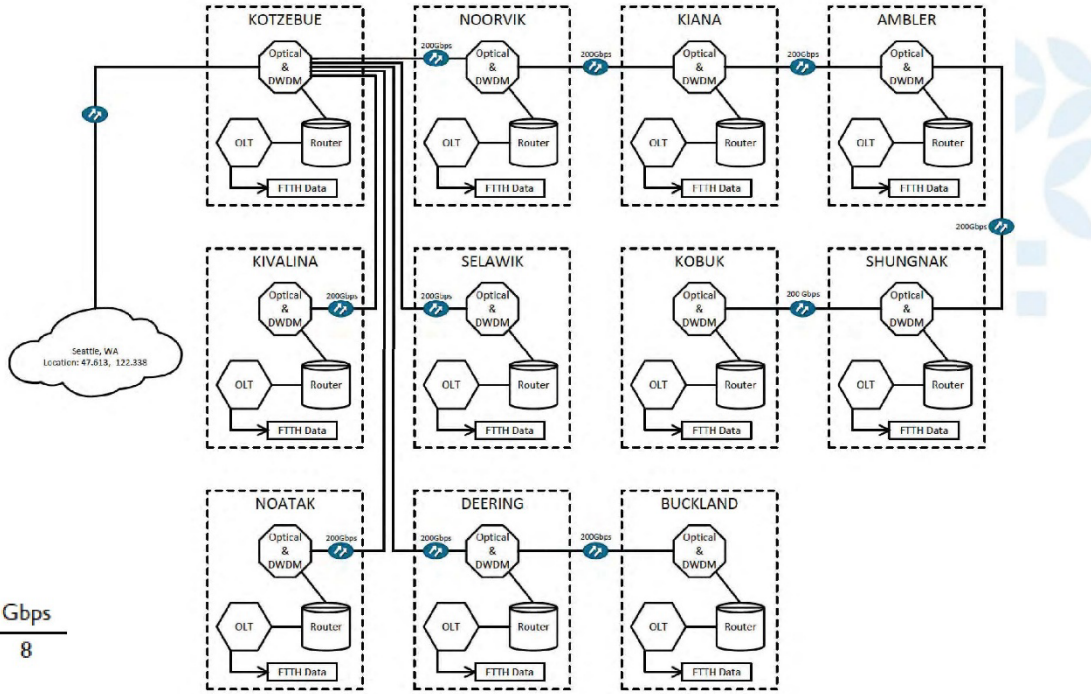
Middle Mile Network Design

1,000 Megabits per second = 1 Gigabit per second

Initial Capacity Design

200 Gigabits per provisioned fiber pair

48 Fibers placed into each community



NWAB Locations	Zoom HD Required Speed Mbps	Mbps	Gbps
2,000	4	8,000	8

Middle Mile Winter Construction

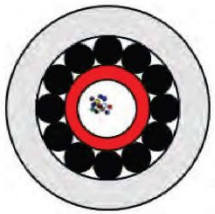
NANA

PistenBully PB600

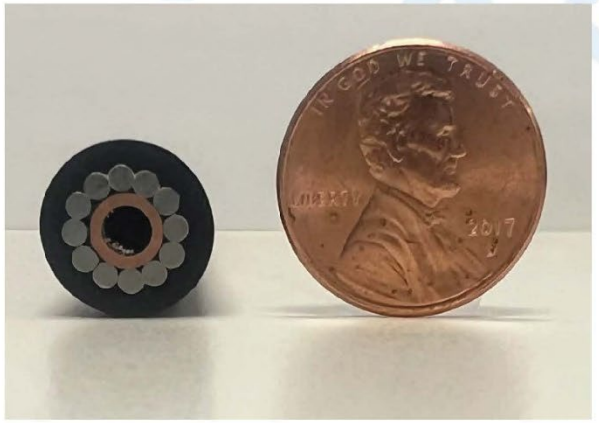
Sleigh Camp

Steigers Triple-Heading

Middle Mile Fiber Cable



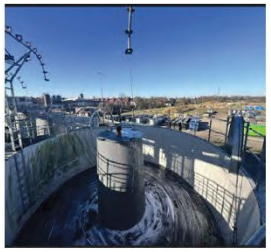
Mechanical Parameter		Unit	Value
Cable Outer Diameter		mm	12
Fiber Count	up to		48
Weight in air		kg / km	360
Minimum bending radius (MBR) with load		mm	800
Cable Breaking Load (CBL)		kN	50
Tension			
Dynamic (NTTS)		kN	40
Operational (NOTS)		kN	35
Static (NPTS)		kN	15
Operating temperature range*		°C	-50 to +60
Installation temperature range*		°C	-15 to +60
Storage temperature range*		°C	-50 to +70



Actual Cable Size

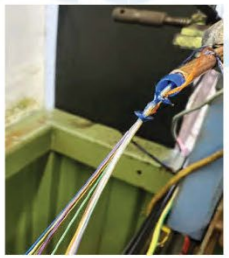
Middle Mile Fiber Cable - continued

Fiber Inside Copper Tubing Before Armoring



Fiber Batch Stored for Testing

Testing Stored Batch



Closeup of 24 Fibers

Empty Container

Loaded Container-25 Miles

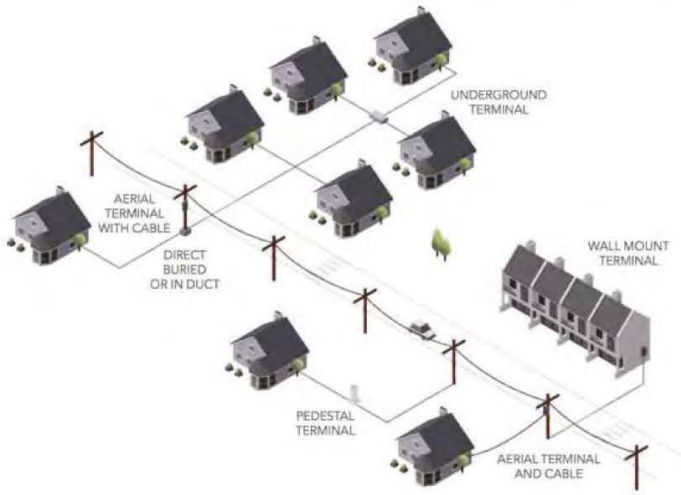
Testing Post Loading

First Fiber Container

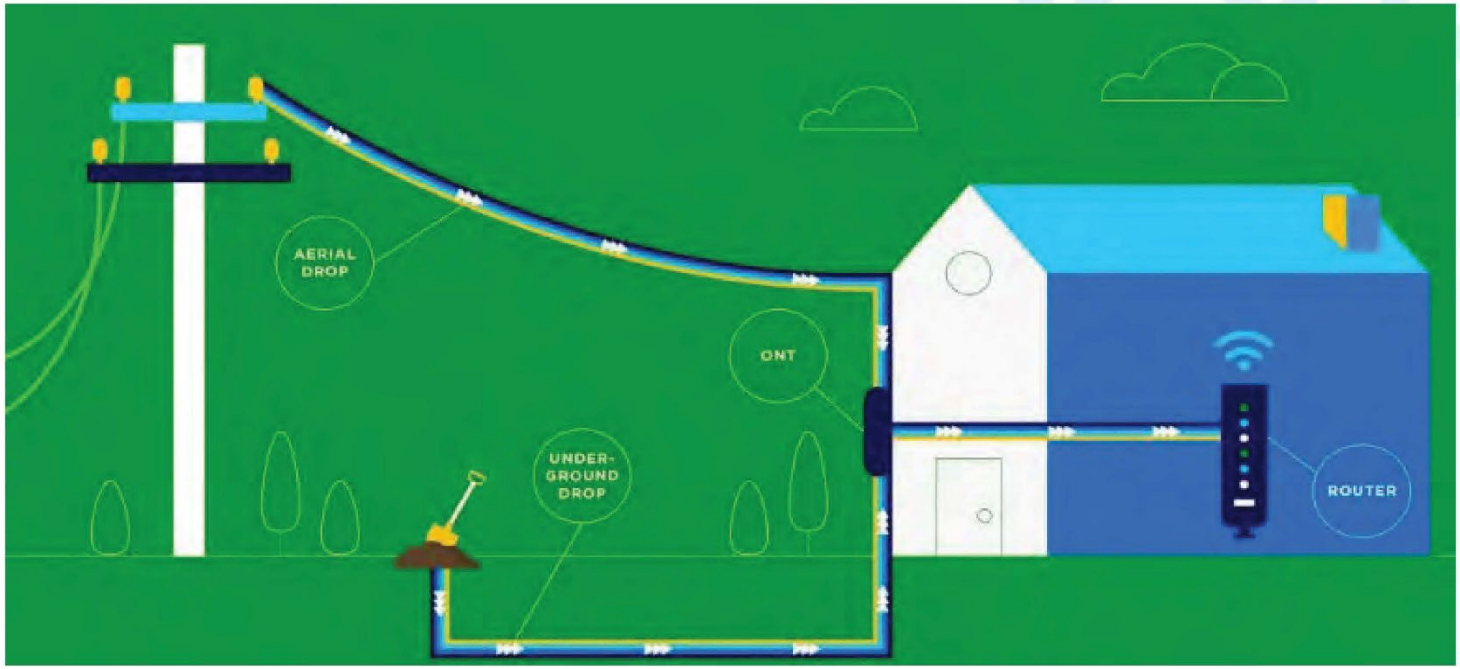
Last Mile Community Network

Last Mile is the infrastructure between the village communities.

- NANA Board of Directors approved two resolutions totaling $8M to build a Last-Mile Network in 10 villages to connect homes, clinics, schools, and NANA office buildings
- Aerial Fiber-to-the-Premise has been chosen for deployment
- This is a physical connection using Fiber to the location
  - Lower operating expenses and maintenance costs
  - Secure transport using Fiber
  - Higher throughput capacity, up to 10Gbps
  - Lower cost future electronic upgrades

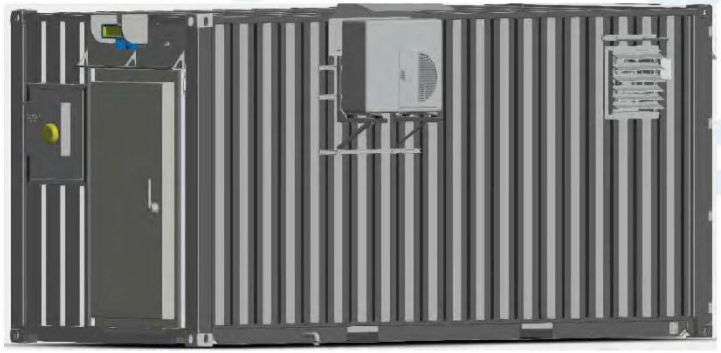


Last Mile Fiber Install



Proposed Facility Design: Village Central Office

Site Layout



Central Office

Establish Broadband Operating Company - ISP

NANA

Internet Service Provider (ISP) - A company that provides internet access to consumers and businesses.

Develop and establish a premier Internet Service Provider (ISP) company with a mandate to provide affordable internet service to NANA Shareholders and the NANA Region.

To operate the Middle and Last Mile broadband network infrastructure, a NANA Wholly-Owned ISP Subsidiary will be established.

Products and Services

NANA

Affordable High Speed Symmetrical Internet

- Parental Controls (Residential Services)
- Managed Wi-Fi
- Cybersecurity
- Managed Services
- NOC Support Services
- VOIP Services

E-RATE Services - Schools and Libraries

Secure School and Library private network interconnections and wide area networks.

- Managed Services
- NOC Support Services
- Remote Learning (Distance Education)

Rural Health Care Services - Hospital and Clinics

Secure Medical Clinic / Hospital private interconnections, real-time collaboration and communication with one another and residents.

- Managed Services
- NOC Support Services
- Telemedicine
- Private Line Services

NANA Operations Center (NOC)

- 24/7 Network Monitoring
- 24/7 Facility Monitoring
- Tier III Support
- Network Engineering
- Managed Network Services

Workforce Development

- Estimated Employees Needed in Region = 25

- Develop Workforce Training Program
  - Fiber Construction Training
  - Install and Repair Training
  - Network Operations Center (NOC) Training
  - Customer Service and Provisioner Training

- Technology Summits
  - Peak Opportunities to Explore
    - High School and Alaska Technical Center Technology Day
      - Introduction to Drone Technology
      - Introduction to Computer-Aided Design (CAD)
      - Internet of Things (IoT)
      - Broadband 101
      - Computer Programing
      - Connected Devises

FY 2025 Broadband Strategy Summary

Focus Area	FY25
Middle Mile	Complete Environmental Assessment
Middle Mile	Continue with permitting activities
Middle Mile	Procure fiber cable and other supplies
Middle Mile	Enter into contracts for middle-mile fiber installation
Middle Mile	Establish equipment testing lab environment
Last Mile	Finalize OSP Engineering and begin permitting
Last Mile	Begin Pole Attachment Agreements
Last Mile	Procure fiber cable and other supplies
Last Mile	Ship materials to Kotzebue for staging
Last Mile	Establish Go Live plan with soft launch
ISP	Obtain Licensing and Certifications
ISP	Establish Eligible Telecommunications Carrier as a Lifeline Broadband Provider
ISP	Register with Universal Service Administrative Company
ISP	Obtain assignment of IP addresses (ARIN)
ISP	Establish a secured physical and virtual network to manage middle and last mile networks
ISP	Develop company governance policies
ISP	Develop operating policies and procedures
ISP	Complete Product Development and management plan

Drone Work in Buckland

Drone Work in Shungnak

Drone Work in Kobuk

Drone Work in Kiana

Drone Work in Ambler

Drone Work in Noatak

Drone Work in Noatak


NANA
TAIKUU

Appendix O4 – Letter to Tribal and City Leaders

NANA

August 1, 2025

RE: NANA Regional Broadband Network Project - Upcoming Archaeological Field Work

Dear Tribal and City Leaders,

The NANA Regional Broadband Network Project is moving forward with fieldwork scheduled for August 2025 to support compliance with Section 106 of the National Historic Preservation Act (NHPA). This step ensures the project meets all federal requirements and demonstrates our commitment to respecting cultural and historical resources.

Fieldwork will be conducted across the project corridor, including surveys on federal, state, and Alaska Native Corporation lands. Stephen R. Braund & Associates (SRB&A) and Kuna Engineering are leading the work on behalf of NANA, which is overseen by the National Telecommunications and Information Administration (NTIA), the broadband project's federal funding agency.

Field teams will use helicopters to access remote locations and carry out aerial and on-the-ground assessments. While this is not construction work, residents may observe helicopter flights or hear related activity in the area. Community outreach and federal consultation efforts are ongoing, with additional engagement planned for Fall 2025.

This work ensures NANA's commitment to cultural stewardship and regulatory compliance as we prepare for winter 2026 ground deployment of the fiber.

Thank you for your time and continued partnership in moving this project forward.

Taikuu,

Albie Dallemolle
Vice President of Economic Development and Sustainability
NANA Regional Corporation

Appendix O5 – Letter to Allotment Owners

August 6, 2025

RE: NANA Regional Broadband Network Project – Public Scoping Notification

Dear Allotment Owner,

NANA Regional Corporation, Inc. (NANA) has proposed a broadband infrastructure project that would bring reliable, high-speed internet to communities throughout the NANA region. The goal is to install fiber optic cable along identified routes across federal, state, private, and Alaska Native Corporation lands to expand access to vital services like telehealth, education, and economic development.

The NANA Regional Broadband Network Project is moving forward with permitting as part of the National Environmental Policy Act (NEPA), which requires a public scoping process and environmental review led by the National Telecommunications and Information Administration (NTIA), in coordination with other federal agencies. Enclosed you will find a copy of the Scoping Letter from NTIA. It is also available on the project website at: https://www.nanabroadband.com/permitting/

You are receiving this letter because NANA and NTIA want to ensure local stakeholders are invited to participate in the NEPA process. This is a required step in the Environmental Assessment, and your voice is welcome.

Please note: **The NANA Regional Broadband Network Project does not anticipate any construction or activity on individual allotment lands.**

NANA is committed to transparent communication and meaningful community engagement. We have already held numerous public meetings throughout the region and will continue to provide updates as this project progresses. If you have any questions about this letter, the scoping notice, or the proposed project, please contact Jason Louvier, project superintendent at Jason.Louvier@nana.com.

Quyanaqpak for being part of this important high-speed internet project and supporting the future of broadband connectivity in our region.

Taikuu,

Albie Dallemolle
Vice President of Economic Development and Sustainability
NANA Regional Corporation

Appendix O6 – EA Scoping Letter

UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration
Washington, DC 20230

NTIA Requests Public Input on Issues related to the Proposed NANA Regional Broadband Network Project

AGENCIES:
Department of Commerce, National Telecommunications and Information Administration (NTIA)
Department of Commerce, National Oceanic and Atmospheric Administration (NOAA)
Department of the Army, US Army Corps of Engineers (USACE)
Department of the Interior, Bureau of Land Management (BLM)
Department of the Interior, Fish and Wildlife Service (FWS)
Department of the Interior, National Park Service (NPS)

SUMMARY:
NANA Regional Corporation, Inc. (NANA), a regional Alaska Native Corporation, has proposed to construct a Regional Broadband Network Project (project). The proposal would include installation of a fiber optic cable across federal, state, privately-owned lands, and waters in northwest Alaska.

NTIA, as the lead agency, in cooperation with the NOAA, USACE, BLM, FWS, and NPS, intends to prepare an Environmental Assessment for the project, in accordance with the National Environmental Policy Act of 1969, as amended (NEPA).

NTIA and cooperating agencies request your input on the issues related to this proposed project, potential alternative suggestions, and identification of relevant information and studies.

DATES:
Submit comments by *August 19, 2025*.

ADDRESSES:
Submit comments for consideration to:

- *NEPAComments@ntia.gov*
- *US Department of Commerce, National Telecommunications and Information Administration, 1401 Constitution Ave, NW, Room 4878, Washington, DC 20230*

SUPPLEMENTAL INFORMATION

Purpose and Need

The purpose of the proposed action is to develop and install broadband infrastructure within the NANA region of northwest Alaska. The project proposes to provide reliable, high-speed internet service, to enable access to distance learning, telehealth, public safety communications, and provide opportunities for economic development. The newly proposed infrastructure would support connectivity to meet current and future needs of residents, businesses, and public institutions. Anticipated federal authorizations and/or permits that would be required to achieve the purpose and need, and that carry a NEPA obligation, include Right of Way authorizations from the BLM and USFWS, a USACE Section 404 permit, and a USFWS compatibility determination.

The proposed action is needed because communities within the NANA region currently lack access to true broadband service. Available internet options offer inadequate connectivity, low speeds, and prohibitively high costs, which contribute to low internet adoption rates.

Background

The NANA region is without true broadband. Current options have poor connectivity, slow access, and prices that are beyond the reach of most residents. Internet adoption rates are low, and residents lack access to resources such as distance learning, telehealth, or the ability to work from home while remaining in their communities. Installation of additional broadband infrastructure would allow scalable high-speed data transmission, providing reliable and fast internet access to residents, businesses, and public institutions that are currently unserved/underserved and would support real-time communication, future growth, and provide a stable, affordable, durable connection.

Proposed Project Location

Located at the extreme northwestern edge of the North American continent, mostly above the Arctic Circle, the NANA region encompasses 38,000 miles, is sparsely populated, and isolated. No roads connect NANA villages to each other or to greater Alaska. Household goods and food are barged or flown into the region, resulting in high prices for basic goods, including food, fuel, and building materials.

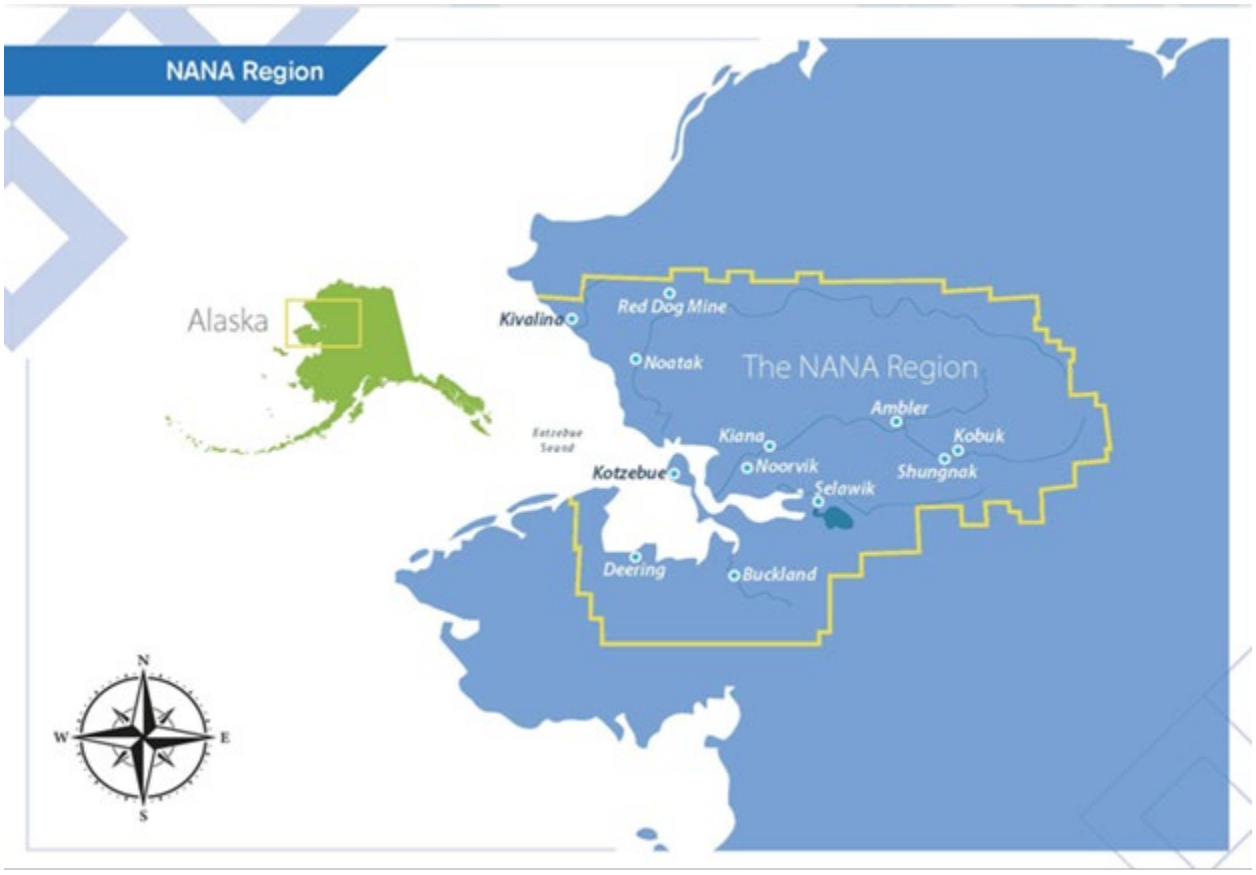
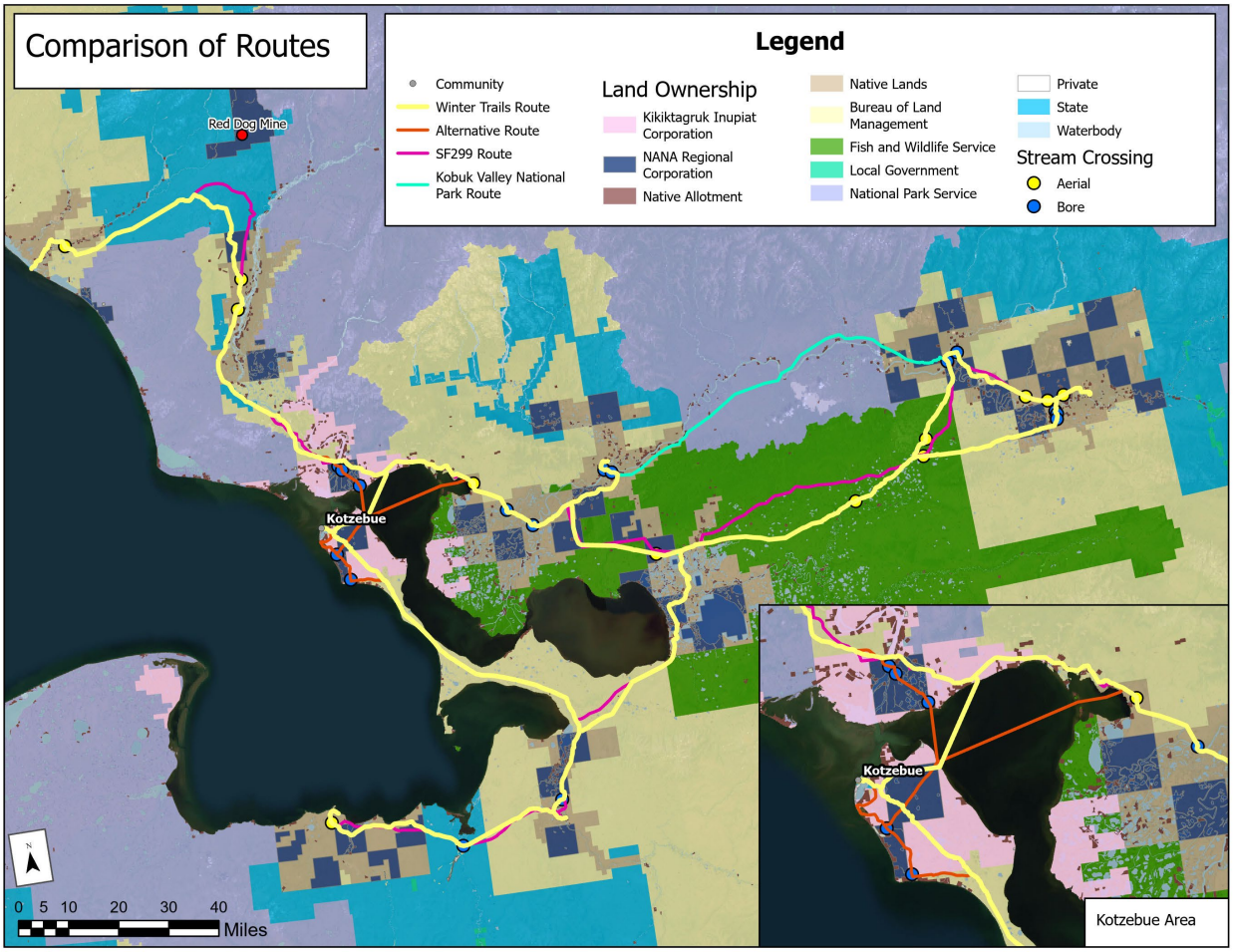


Figure 1. Map of NANA Region.

Proposed Action

The proposed project would establish fiber optic infrastructure through the deployment of long-haul fiber, connecting communities in northwest Arctic Alaska to regional and national telecommunications networks. The proposed fiber optic cable (FOC) route would incorporate a combination of terrestrial ground-laid, subsea, directional bored, trenched, and aerial cable placement methodologies. Figure 2 presents a map of the alternative routes proposed. The proposed route segments are also outlined in the table below.

Figure 2. Map of Routes.



* Ground-lay stream crossings are not depicted

Table 1. Analysis of Alternative Routes

Item	Winter Trails Route	Alternative Route	SF299 Route	Kobuk NP Route
Fiber Optic Cable (miles)	674	684	672	696
Subsea Fiber Crossings (miles)	10	27	10	10
Fiber Overland (miles)	639	611	651	678
Fiber Trench (miles)	1	20	0	0
Fiber Aerial (miles)	24	26	11	8
Stream/River Crossings	763	746	759	598
River Crossings (Aerial)	18	16	3	0
River Crossings (Bore/HDD)	17	18	0	0
River Crossings (Ground Lay)	728	712	756	598
Lake/Pond Crossings	59	57	53	N/A
ROW Width (feet)	30	30	30	30

*Lake/Pond Crossings were not annotated for Kobuk NP Route

Description of Construction Phases

WINTER PHASE CONSTRUCTION

The project proposes that the majority of the network would consist of ground-laid FOC installed during winter months across the terrestrial landscape, lakes/ponds, minor stream crossings, and river crossings. A deployment team will consist of approximately 14 people per crew (a total of 3 crews are anticipated for the project), along with tracked, low-ground-pressure cable deployment equipment, a mobile sleigh camp, vegetation clearing equipment, digging equipment, and snowmachines. Where vegetation clearing is necessary, a mulcher would cut vegetation to the level of the snow surface. Cable would be laid along the ground and anchored at no more than 6,000 foot intervals. FOC would be laid across the ice of lakes, ponds, and minor streams, and allowed to sink to the bottom after the ice thaws.

SUMMER PHASE CONSTRUCTION

Construction would occur during the summer for the subsea crossing and large river crossings. For subsea crossings, an excavator on floats, tugboat, barge, and static plow would be used. Trenching would occur from the low tide point to a water depth exceeding operating range of the excavator. Trenching would also occur in terrestrial areas of high pedestrian or ATV traffic, primarily around communities. At large river crossings the FOC would be horizontally directionally drilled (HDD) under the rivers, or installed aerially over the water. Aerial installation would involve one wooden pole placed vertically on each riverbank to support the aerial section of cable. The table below lists the proposed major river crossings.

Table 2. Major River Channel Crossings and Methods

River Name	Nearest Community	Crossing Method	
		Other routes*	SF299
Ambler River	Ambler	HDD	Aerial
Amaouk Creek	Noorvik	Aerial	Aerial
Buckland River	Buckland	HDD	Aerial
Cosmos Creek	Kobuk	Aerial	Aerial
Fish River	Selawik	Gravity Lay	Gravity Lay
Inmachuk River	Deering	Aerial	Aerial
Kiwalik River	Deering	HDD	Aerial
Kiyak Creek	Noatak	Aerial	Aerial
Kobuk River (6 crossings)	Kiana, Ambler, Shungak	HDD	Aerial
Kugaruk River (3 crossings)	Upper Kobuk Communities	Aerial	Aerial
Kugruk Estuary	Deering	Gravity Lay	Gravity Lay
Kungsugrug River	Selawik	Gravity Lay	Gravity Lay
Nazuruk and Melvin Channels of Kobuk River	Noorvik	HDD	Aerial
Noatak River	Noorvik	HDD	Aerial
Oblaron Creek	Selawik	Aerial	Aerial
Selawik River	Selawik	Existing 5th Avenue Bridge	Existing 5th Avenue Bridge
Shungnak River	Kobuk	Aerial	Aerial
Wesley Creek	Kobuk	Aerial	Aerial
Wulik River	Kivalina	Aerial	Aerial

Proposed Future Maintenance and Operations

Maintenance and operations activities are expected to be minimal and would include:

- One annual flight above the proposed route to identify any damage or areas of concern. Timing would be coordinated with landowners, land managing agencies, and consider potential sight and sound impacts to wildlife.
- Helicopter-supported preventative maintenance, if needed. Examples may include straightening poles and fiber markers, and/or tightening guy wires.
- Cable damage repairs. Summer damage repair would be supported by helicopter; winter damage repair would be supported by helicopter, snowmachine, or low ground pressure vehicle and could include splicing sections of new FOC into the existing line.

Proposed Future Decommissioning of Project

The expected useful life of the fiber optic network is 50 years. The fiber optic cable is expected to self-bury into the landscape over time. The fiber cable and ground anchors would be left in place to avoid unnecessary disturbance of the tundra/vegetation. Poles would be cut off at ground level, and supporting infrastructure would be removed. This activity is proposed to take place during the winter months, to avoid ground disturbance.

Past Community Engagement Efforts of the Proponent, NANA

- NANA has prioritized meaningful community engagement throughout the project planning process.

- Meetings were held with the City and Tribal governments in each of the communities along the proposed route to describe the project, discuss plans and timelines, and to answer any questions or address concerns.
- Initial public meetings in the village communities were held to introduce the project, show the proposed routes into/out of the communities, answer questions, and solicit feedback on the project and proposed routes, in order to make potential adjustments where needed.
    - In August 2024, meetings were held in: Ambler, Buckland, Kiana, Kivalina, Kobuk, Noatak, Noorvik, and Shungnak.
    - In November of 2024, meetings were held in Deering and Selawik.
    - Additional community engagement meetings are planned for the village communities in the region in the winter of 2025.
- Provided a project overview and update to the Northwest Arctic Energy Steering Committee Meeting May of 2025.

Appendix O7 – Scoping Comment: WACH

Western Arctic Caribou Herd Working Group

Goal: To work together to ensure the long-term conservation of the Western Arctic Caribou Herd and the ecosystem on which it depends, to maintain traditional and other uses for the benefit of all people now and in the future.

Chair: Vern Cleveland, Sr. Vice-Chair: Cyrus Harris

P.O. Box 175, Nome, AK 99762

August 19, 2025

Juan Nunez
Permitting Coordinator
National Telecommunications and Information Administration

Re: Request for Public Input on Issues related to the Proposed NANA Regional Broadband Network Project

Dear Mr. Nunez,

On behalf of the Western Arctic Caribou Herd Working Group (Working Group), I submit the following comments to the National Telecommunications and Information Administration and other partnering agencies regarding the request for public input on issues related to the proposed NANA Regional Broadband Network Project. We are interested in the proposed project and its potential impacts and request further consultation and information going forward.

The Working Group and its role in public processes

The Working Group is a permanent organization of diverse stakeholders that work cooperatively with each other and state, federal and regional resource management agencies with a goal "*to ensure the long-term conservation of the Western Arctic Caribou Herd and the ecosystem on which it depends, to maintain traditional and other uses for the benefit of all people now and in the future*."

The Western Arctic Caribou Herd (WACH) is one of the largest caribou herds in Alaska and has provided an important subsistence resource and contributed to the cultural heritage of northwestern Alaska residents for thousands of years. The caribou of the WACH also provide opportunities for people from outside the range of the herd to hunt and experience caribou in vast Arctic landscapes and serve as an important source of income for commercial operators that provide services to visiting users. Furthermore, the WACH is a critical component of the larger western Arctic ecosystem, influencing natural processes and providing resources for many other species.

In recognition of these varied values, the Working Group consists of subsistence users representing over 40 communities within the range of the herd, other Alaska hunters, guides, transporters, conservationists, and reindeer herders. Since its formation in 1997, the Working Group has submitted numerous advisory recommendations to government agencies, regulatory boards, and other bodies to support decisions that will ensure the long-term conservation of the WACH, its habitat, and its use.

Request for further involvement in the proposed decision

Based on the routes depicted in Figure 2 of the request for public input, the proposed routes for this project would overlap important seasonal habitats of the WACH and several communities represented on the Working Group. Proposed project activities would involve helicopter and ground-based construction and maintenance activities that could disturb caribou and subsistence. The importance of the WACH cannot be overemphasized – for many years it was the largest herd in the state, and among the largest in North America, and is relied upon by many people throughout northern Alaska and beyond. Currently the herd is in a state of decline, which has spanned approximately two decades and has led to restriction of subsistence harvest of the WACH for northwest Alaska residents. This has strong consequences for people who rely on caribou for food and culture. We are concerned about any decisions that could negatively affect the WACH and its habitat.

Moving forward, **we request that the Working Group be kept involved in the planning process for this project with more formal consultation and opportunity to provide input on project alternatives and decisions**. Please include our Working Group facilitator (Holly Spoth-Torres; holly@huddleak.com), Resource Development Committee Chair (Tim Fullman; tim_fullman@tws.org), and Working Group Chair (Vern Cleveland, Sr.; vernsr75@hotmail.com) on all future correspondence related to this process and decision. This will help ensure we are kept apprised and able to inform the Working Group members and our constituencies about updates in the decision-making process.

We also request additional time for such deliberation and commenting. The two weeks provided for this scoping period were inadequate to allow a reasonable review and analysis of the proposed work and formation of meaningful comments. The Working Group includes representatives of stakeholder groups from across the state of Alaska. It takes time to inform our members of new proposals and to organize discussion and feedback, especially for those living in remote villages where communication can be a challenge. Furthermore, representatives of the Working Group need time to communicate information with their communities about development processes and Working Group positions, to facilitate other comment development and submission. Short comment periods severely challenge the ability of the Working Group and those we represent to meaningfully engage in decision making. We request 60 to 90-day comment periods in future stages of the process to allow meaningful engagement and commenting.

We likely will have other input on the proposed decision but require additional information about work and additional time for discussion to inform those comments. We look forward to working with you towards a decision that benefits the people of northwestern Alaska as well as the caribou and environment on which we all rely.

Thank you for your consideration.

On behalf of the Working Group,

Vern Cleveland, Sr., Chair

cc:
Western Arctic Caribou Herd Working Group Members & Alternates

Appendix O8 – Scoping Comment: Trustees of Alaska

TRUSTEES FOR ALASKA

PROTECT | DEFEND | REPRESENT

Sent via e-mail

August 19, 2025

Adam Cassady
Principal Deputy Assistant Secretary and Deputy Administrator
National Telecommunications and Information Administration

Kevin Pendergast
State Director
U.S. Bureau of Land Management-Alaska

Col. Jeffrey Palazzini
District Commander
Alaska District, U.S. Army Corps of Engineers

Sarah Boario
Regional Director, Alaska
U.S. Fish and Wildlife Service

Sarah Creachbaum
Regional Director
National Park Service, Alaska Region

Re: Request for Public Input on the Proposed NANA Regional Broadband Network Project

To Whom It May Concern:

We submit this letter on behalf of the Brooks Range Council, Defenders of Wildlife, Alaska Soles/Great Old Broads for Wilderness, Northern Alaska Environmental Center, Wilderness Watch, The Wilderness Society, Friends of Alaska National Wildlife Refuges, and Alaska Wilderness League to convey our questions and concerns regarding the recent scoping announcement published on NANA's website regarding its proposed Regional Broadband Network Project (project).[1] We understand the NANA Corporation's desire for improved

[1] U.S. Dept. of Commerce, National Telecommunications and Information Administration, NTIA Requests Public Input on Issues related to the Proposed NANA Regional Broadband Network Project (undated) [hereinafter Scoping

121 W Fireweed Ln Ste 105, Anchorage, AK 99503
Phone: 907.276.4244 Fax: 907.276.7110 www.trustees.org

telecommunications for communities in northwest Alaska and support that goal. However, the federal agencies' permitting process thus far has been conducted with inadequate transparency and in a manner that may be unlawful.

It appears that, on Friday, August 1, NANA posted on an undated announcement from the National Telecommunications and Information Administration (NTIA) that the agency was beginning a formal scoping process under the National Environmental Policy Act (NEPA) and preparing an environmental assessment to evaluate the project's impacts.[2] The scoping announcement states that comments are due by August 19. The Announcement indicates that NTIA will act as the lead agency in permitting this extensive infrastructure project across state, private, and federally-managed lands in Arctic Alaska. It states that NTIA is acting as the lead agency in cooperation with the U.S. Army Corps of Engineers (USACE), Bureau of Land Management (BLM), Fish and Wildlife Service (USFWS), National Park Service, and National Oceanic and Atmospheric Administration. Only BLM and the NTIA have posted anything about this process on a public website.[3] The other federal agencies have not notified the general public of this very short scoping period or that any permit applications have been received for this project. To date, the FAST 41 dashboard has not been updated to account for this scoping process.[4] NANA's application has also not been made publicly available. As a result, there is little information accessible to the public about the proposal at this time, hampering meaningful engagement. Groups request that NTIA and the other agencies make NANA's application and supporting materials available to the public and extend the comment period to allow interested persons and groups time to review those documents prior to submitting scoping comments.

Critically, none of the limited documents provided to date identify that NANA and the federal permitting agencies intend to comply with Title XI of the Alaska National Interest Lands Conservation Act (ANILCA). ANILCA Title XI provides comprehensive procedures for the authorization of transportation and utility system units — including broadband infrastructure — through conservation system units.[5] Title XI establishes "a single comprehensive statutory authority for the approval or disapproval of applications for such systems."[6] Relevant to NANA's proposed project, Section 1104 requires applicants to use specific consolidated forms, and submit these forms to the heads of the federal agencies involved.[7] The agencies share decision-making responsibility on the application and must provide notice to stakeholders

---

Announcement], https://www nanabroadband.com/wp-content/uploads/NANA-Regional-Broadband-Project-Scoping.pdf.

[2] NANA, NANA Regional Broadband Network Project, https://www.nanabroadband.com/permitting/.

[3] BLM, NANA Middle Mile Fiber Optic Line Project (updated Aug. 4, 2025), https://eplanning.blm.gov/eplanning-ui/project/2039860/510.; NTIA, Request for Public Input on Issues related to the Proposed NANA Regional Broadband Network Project, https://broadbandusa ntia.gov/funding-programs/documentation-and-reporting/NANA_Regional_Broadband_Project_Scoping.

[4] Federal Permitting Improvement Steering Council, FAST-41 Postings by Agencies for NANA Regional Broadband Network, https://www.permits.performance.gov/permitting-project/nana-regional-broadband-network-(nrbn)/agency-postings?pid=116126.

[5] 16 U.S.C. § §§ 3161–3168; *Id.* § 3162(4)(B)(v)(defining "transportation or utility system" to include "[s]ystems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communication").

[6] *Id.* § 3161(c).

[7] 16 U.S.C. § 3164(b)(1), (c) (ANILCA § 1104).

including the State of Alaska, local governments, and the general public.[8] The head of each federal agency involved must make detailed findings prior to approving a decision to construct a utility system in conservation system units.[9] These include consideration of: alternative routes that would minimize impacts on the conservation system unit; whether impacts would affect the purposes of the conservation system unit; any adverse effects to public values; and "short- and long-term social, economic, and environmental impacts of national, State, or local significance, including impacts on fish and wildlife and their habitat."[10] Any action that purports to approve a utility system through a conservation system unit without following Title XI's requirements is void.[11]

Despite the sparse information provided in the scoping announcement, it is clear from the maps that the project would cross through multiple conservation system units managed by USFWS and/or National Park Service.[12] The scoping announcement explains that "[a]nticipated federal authorizations and/or permits that would be required to achieve the purpose and need, and that carry a NEPA obligation, include right-of-way authorizations from BLM and USFWS, a USACE Section 404 permit, and a USFWS compatibility determination."[13] Because the project is for the purpose of constructing a utility system through one or more conservation system units, the federal agencies' permits are precisely the types of authorizations governed by Title XI. It is therefore deeply concerning that the scoping announcement does not mention ANILCA Title XI and fails to provide proper notice to the public.

The scoping announcement also raises questions regarding how the agencies will comply with myriad other legal requirements, including but not limited to: ANILCA Section 810's subsistence protection mandates; the National Historic Preservation Act (NHPA) Section 106's historic property requirements; NEPA's mandate that agencies prepare an environmental impact statement for projects with significant impacts on the human environment; the National Wildlife Refuge System Administration Act; the Clean Water Act; the Federal Land Management Policy Act; and the Endangered Species Act.

We request that your agencies make available to the public detailed information regarding the proposed project, including the application and supporting materials, the project's potential impacts on relevant conservation system units, and how your agencies intend to comply with ANILCA Title XI and other applicable laws and regulations. We also request a new scoping comment period of at least 45 days to allow groups time to consider the application materials when submitting comments.

---

[8] *Id*. § 3164(b)(2), (d), (f).
[9] *Id*. § 3164(g)(2).
[10] *Id*.
[11] *Id*. § 3164(a). The applicability of Fast-41 to this process does not obviate the need to comply with ANILCA XI.
[12] Scoping Announcement, Fig. 2. No conservation system units are labeled on the maps provided in the scoping announcement. It appears the project would cross the Selawik National Wildlife Refuge, Kobuk Valley National Park, and potentially Cape Krusenstern National Monument and Noatak National Preserve. The fact that the scoping announcement does not specify which conservation system units would be traversed by the project only underscores the inadequacy of the federal agencies' process to date.
[13] Scoping Announcement.

If you have any questions or wish to clarify anything in this letter, please do not hesitate to contact me at (907) 433-2011 or by e-mail at bpsarianos@trustees.org. Thank you for your prompt attention to our concerns.

Sincerely,

s/Bridget Psarianos
Bridget Psarianos
Senior Staff Attorney
Trustees for Alaska

CC:

Jon Kurland
Regional Administrator
National Oceanic and Atmospheric Administration, Alaska Region

Daniel Opalski
Regional Director
U.S. Environmental Protection Agency, Region 10

Brian Bourdon
Realty Specialist
BLM-Alaska

U.S. Department of Commerce, National Telecommunications and Information Administration
NEPAComments@ntia.gov

Appendix O9 – Scoping Comment: DNR

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Natural Resources
OFFICE OF PROJECT MANAGEMENT AND PERMITTING

550 West 7th Avenue, Suite 1430
Anchorage, AK 99501-3561
Main: 907.269-8690
Fax: 907-269-5673

August 19, 2025

US Department of Commerce
National Telecommunications and Information Administration
1401 Constitution Ave, NW, Room 4878
Washington, DC 20230

Submitted via email to NEPAComments@ntia.gov

Re: NANA Regional Broadband Network Project

To Whom it May Concern,

The State of Alaska (State) reviewed the scoping information for the proposed NANA Regional Broadband Network Project. NANA Regional Corporation, Inc. (NANA), a regional Alaska Native Corporation, has proposed to construct a Regional Broadband Network Project (project), which would involve the installation of a fiber optic cable across federal, state, and privately-owned lands and waters in northwest Alaska. The project will be funded by the National Telecommunications and Information Administration (NTIA) and would deliver high-speed internet to seven rural communities in the NANA region of Alaska.

Federal lands in Alaska are subject to the provisions of the Alaska National Interest Lands Conservation Act (ANILCA). Included among these provisions is Title XI which specifically addresses the review of transportation and utility systems (TUS) in or across federal lands designated as conservation system units[1] (CSU) under ANILCA, such as the National Park and National Refuge lands currently identified as portions of the project. ANILCA Title VIII also requires a review of the impacts to subsistence uses and needs.[2]

The State appreciates the need for adequate internet connectivity in the region; as proposed the project has the potential to improve internet access for underserved Alaskans by connecting communities in northwest Alaska to regional and national telecommunications networks. The proposal aligns with the goals of improving regional infrastructure and addressing the digital divide.

Due to the mix of federal, state, native corporation, and other private property situated along each of the proposed routes, there are important considerations regarding state land ownership and management authorities that should be clearly addressed in any scoping documents and subsequent environmental assessments. As an impacted landholder and natural resource manager, the State requests the opportunity to review the draft Environmental Assessment (EA) documents. Additional State authorizations would be required during construction of the project.

[1] See ANILCA 102(4), definition of a conservation system unit.
[2] ANILCA 810

State agencies can provide valuable information during the EA development and should be consulted to inform the project proponents about those requirements. The following comments represent the consolidated views of state resource agencies, including the Departments of Natural Resources (DNR) and Fish and Game (ADF&G).

ANILCA Title XI Permitting

Title XI of ANILCA was created to address the unique social, environmental, and economic needs of Alaska by establishing a structured, balanced process for permitting transportation and utility systems in or across conservation lands such as Refuges and National Parks. The NTIA should reference the intent of ANILCA and the procedures of Title XI in future planning documents and the State recommends referring to 43 CFR 36 for permitting guidance.

A copy of "Understanding the TUS Process in Title XI of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA)" is attached to this letter to provide further information.

State Management Authority of Navigable Waters

Alaska DNR has management authority for state lands including navigable waters within the CSUs created under ANILCA, and requests explicit acknowledgement of this authority in any planning or EA documents. Along each of the proposed routes, installation of the fiber optic cable will require numerous crossings of waterbodies such lakes, rivers, streams, and tidally influenced waters using a combination of ground-laid, directional bored, trenched, or aerially supported methods. Even though trenches or boreholes may pass beneath the bed of navigable waterbodies, installation of a fiber optic cable is still considered a surface use and is therefore part of the surface estate. Any requests for input, scoping documents, and future EAs should disclose that State-owned submerged lands and navigable waters exist along the proposed route(s). Planning and environmental assessment documents should also provide tables, lists, or maps that clearly enumerate each of these water bodies and define their status as navigable waterbodies. The State requests that any future planning or EA documents add the brief description provided below:

> The Alaska Department of Natural Resources (DNR) has management authority for state lands, including the submerged land, water, tidelands, and shorelands of navigable waters within the State. This authority includes management of navigable waters, tidelands, and shorelands within and adjacent to the boundaries of federal lands, including conservation system units created under ANILCA. A map of these waters can be found on the DNR website using the "Navigable Waters (Title Purposes)" layer: https://mapper.dnr.alaska.gov/map#map=4/-16632245.12/8816587.34/0.

Permitting of Fiber Optic Cable Infrastructure in State Managed Waters

With consideration given to the length of the broadband network and the number of rivers and other water bodies present along the proposed route, it is likely that trail developers will need to construct water crossing infrastructure on State-owned lands. Any bridges, bridge pilings, culverts, or other improvements within State-owned navigable waters will require prior authorization from DNR. Requests for input and scoping documents should acknowledge the requirement to obtain authorizations from the State for trail infrastructure on or across navigable waters. According to the project planning geodatabase, the following water crossings will need

appropriate permits from the State of Alaska due to their status as navigable waters (including those in conflict, title not resolved with the federal government): Kivalina Lagoon, Wulik River, Kuchoruk Creek, Noatak River, Little Noatak Slough, Hotham Straight (out to 3 mile limit on each side), Buckland River, Kiwalik River, Kugruk Lagoon, Mangoak River, Mile #633 – BLM determined navigable, crossing between Mile 631 & 632 BLM determined navigable, Mile #63 BLM determined navigable, Kungsugrug River, Selawik River (2 channels), Shogvik Lake inlet/outlet channels (between Selawik Airport and Mile #613), Amaouk Creek, Oksik Creek, unnamed stream and lake system tributary to Oksik Creek outside of USS 5166, unnamed (LKA, Duffy Slough) (Sec 10, T17N, R9W, KRM), Kobuk River, Kiana (2 channels), Ambler (1 channel), Shungnak (3 channels), Winter trail crossing #310 (unnamed stream/Shogvik Lake), Fish River, Ikagowak River, Kuchuk Creek, Ambler River at Kiana, Winter trail crossing #466 (Pittik Creek/Lake system), Shungnak River, Wesley Creek, Winter trail crossing #559 (unnamed stream), and the Black River.

Water Rights

Should the construction or maintenance of the broadband network require withdrawal or diversion of a significant volume of water, NANA and/or its contractors will need to obtain authorizations from the DNR's Water Section. A significant volume of water by State law is defined as *more than 5,000 gallons of water from a single source in a single day, more than 500 gallons of water per day from a single source for more than 10 days in a year, or more than 30,000 gallons per day from a single source.*[3]

Wildlife

At this stage, ADF&G finds the proposal lacks sufficient detail for a comprehensive wildlife review.

The ADF&G has primary responsibility for managing Alaska's fish and resident wildlife populations on all lands, including Federal public lands, and the Secretaries of the Interior and Agriculture have authority over the management of most Federal public lands in Alaska. While several Congressional Acts preempt ADF&G's primary management authority for certain species (e.g., endangered species); the State of Alaska continues to have stewardship and public trustee responsibilities for all wildlife (Alaska Constitution Article VIII, Section 4). In Alaska, Master Memorandum of Understandings establish cooperative management roles between ADF&G and each federal land management agency, providing the framework for collaboration and coordinated resource stewardship on fish and wildlife issues.

For the past several winters, caribou have been present along much of route on the Baldwin Peninsula, Selawik National Wildlife Refuge, and the areas surrounding the villages of Kobuk and Shungnak. Without a clear project timeline or duration, it is difficult to assess the potential impact on both wildlife and the subsistence users who depend on these resources.

The ADF&G Marine Mammal Program suggests the EA for this project include an evaluation of beluga presence timing windows in the project area and avoidance of summer subsea cable laying activities during those beluga presence timing windows to avoid disturbance.

[3] 11 AAC 93.035

Finally, please note that ADF&G Fish Habitat Permits will be required for any work impacting anadromous fish streams or fish passage. For assistance with the permitting process, the project team should continue to work directly with the Fairbanks Habitat Office, dfg.hab.infofai@alaska.gov, to discuss the specific requirements of their applications.

ANILCA Title VIII

As the project progresses and a final route is selected, the federal agency having primary jurisdiction will need to evaluate the effects of this project on subsistence uses and needs, as required by Section 810 of ANILCA. This evaluation must consider the availability of other lands and alternatives that would reduce or eliminate the use of public lands needed for subsistence purposes. The use of the existing winter trail system aims to minimize new land disturbance, however, the 810 will need to consider if the proposed route(s) may significantly restrict subsistence activities. If the determination is made that the use, occupancy or disposition of such lands would significantly restrict such uses, the federal agency having primary jurisdiction over such lands shall:

- Give notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to Section 805;
- Give public notice and hold public hearings, in the vicinity of the area(s) involved;
- If a significant restriction of subsistence uses is necessary, consistent with sound management principles, the federal agency must ensure the minimal amount of public lands is used and reasonable steps are taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.

R.S. 2477 Trails

The public input request has proposed several alternative routes, each of which crosses multiple R.S. 2477 state rights-of-ways. DNR asserts the authority to manage these transportation easements in the best interest of Alaskans. R.S. 2477 trails have been used as historical transportation routes, and today these routes make up an essential network of trails by which Alaskans may access private property, mining claims, or inholdings within federally managed CSUs. Additionally, many of these routes are used to access subsistence opportunities and are expected to have higher frequency of use during hunting and fishing seasons. Future scoping or environmental assessment documents must acknowledge state management authority over R.S. 2477 and describe any anticipated impacts to R.S. 2477 trails or the use thereof.

Closing

Thank you for the opportunity to review and comment on this proposed project. Please contact me at (907)269-0880 or by email at catherine.heroy@alaska.gov to coordinate follow up discussions.

Sincerely,

Catherine Heroy
Federal Program Manager

Attachments: Understanding the TUS Process in Title XI of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA)

Understanding the TUS Process in Title XI of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA)

Updated April 1, 2025

Outline of the application and decision process for Transportation and Utility Systems in and across Conservation System Units and Areas

Prepared by: The ANILCA Training access team, which created and presents the access training portion of ANILCA Training for Department of the Interior University and Institute of the North https://institutenorth.org/engage/events/anilca-training/: Doug Campbell, retired US Fish and Wildlife Service, Chief of Realty Division; Tina Cunning, ANILCA Trainer; Sally Gibert, ANILCA Trainer; Chuck Gilbert, retired National Park Service, Alaska Region Manager of Land Resources Program.

INTRODUCTION

The purpose of this document is to supplement the Access & Transportation (A&T) presentation portion of the ANILCA Training, focusing on the Transportation and Utility Systems (TUS) provisions in ANILCA Title XI. This document is prepared for information only and is not legally binding.

During deliberations preceding final passage of ANILCA, Congress considered reserving specific corridors for future access. Because future demands for transportation were still largely unknown, Congress opted instead to establish an application and decision process to be used as TUS needs arose. The TUS process is contained in ANILCA Sections 1101-1108 and applies to any Congressionally-designated conservation system unit[1] (CSU) and designated national recreation and national conservation areas (Area) in Alaska. ANILCA Section 1104 preempts "any provision of applicable law" in approving or disapproving a TUS unless this section is complied with.

ANILCA Section 1101 contains the findings of Congress:

> *Congress finds that -*
> *(a) Alaska's transportation and utility network is largely undeveloped and the future needs for transportation and utility systems in Alaska would best be identified and provided for through an orderly, continuous decisionmaking process involving the State and Federal Governments and the public;*
> *(b) the existing authorities to approve or disapprove application for transportation and utility systems through public lands in Alaska are diverse, dissimilar, and, in some cases, absent; and*
> *(c) to minimize the adverse impacts of siting transportation and utility systems within units established or expanded by this Act and to insure the effectiveness of the decisionmaking process, a single comprehensive statutory authority for the approval or disapproval of applications for such systems must be provided in this Act.*

ANILCA's TUS provisions for Department of the Interior (DOI) are implemented through 1986 regulations at 43 CFR part 36. A 1987 lawsuit[2] resulted in the DOI regulations being upheld by the District Court, then the plaintiffs appealed. The regulations were amended in 1997 with a single

[1] Section 102(4) defines CSUs as units of the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wilderness Preservation System, or National Forest Monument

[2] *Trustees for Alaska, et al., v. United States Department of the Interior, et. al.,* Case No. A87-055

change to a definition following negotiations to settle the lawsuit. The statutory ANILCA TUS provisions apply to both DOI and the Forest Service within Department of Agriculture (DA). In the absence of DA regulations, the DA Office of General Counsel advised[3] that the DOI regulations provide instructive guidance to the Forest Service.

The source documents referenced in this Outline include:

- ANILCA Sections 1101-1108 – ANILCA's TUS provisions
- DOI regulations at 43 CFR Part 36 – The TUS implementation regulations adopted in 1986, including the explanatory preamble and response to comments
- 1997 amendment to the 43 CFR Part 36 regulations – A single definition change.

See also the flow chart of TUS application, NEPA, and decision process and list of examples of TUS authorizations in Alaska national park and refuges (in the Curriculum Training Packet). Additional information by the authors of Title XI is in Alaska Law Review "You CAN get there from Here."

MYTHS

Several myths about the TUS process interfere with understanding the law and its implementation:

- ***Myth:*** *The TUS process doesn't work, and no TUSs have been authorized.*

FACT: The TUS process has been used successfully and rights of way issued dozens of times on a variety of TUS projects both large and small.

- ***Myth:*** *It's easier to go directly to Congress for an authorization than use the TUS process.*

FACT: A likely origin of this myth is the 1985 Congressional authorization (P. L. 99-96) of a land exchange between NANA (an Alaska Native regional corporation) and National Park Service (NPS) for the Red Dog mine access road through Cape Krusenstern National Monument. DOI had no Title XI regulations at that time, and the TUS provisions had not been tried, so NANA pursued authorization directly through legislation.

CHALLENGES

The TUS provisions Congress crafted for ANILCA were innovative and untested, and some trends were not anticipated. For example, the length and complexity of environmental analysis documents produced under the National Environmental Policy Act of 1970 (NEPA) significantly increased over time, so the NEPA deadlines in Title XI are often not realistic without applying the provision for reasonable extensions. Another factor is the wide array of federal agencies, each with their own mandates that may conflict with the ANILCA TUS process. While the TUS process has been successfully used many times to authorize transportation and utility systems, compliance with portions of the Title XI TUS application and decision procedures has grown more complex.

TEXT NOTES

The following fonts and symbols are used to provide supplemental information to the text:

Italicized Arial font = This font is used to distinguish supplemental, consensus-based contextual explanations of the statutory and regulatory direction, based on insights of the ANILCA Training access team, representing decades of implementation experience, lessons learned, and recommended best practices

[3]Office of General Counsel, verbal instructions, ANILCA Training, Juneau 2016

[Bracketed citations] = applicable regulatory provisions in 43 CFR 36 unless otherwise noted

"*Italicized quotes*" = terms defined in 43 CFR 36.2 when first used, followed by the [regulation citation]

KEY DEFINITIONS

"***appropriate federal agency***" is any agency that has jurisdiction to grant an authorization required for a TUS to be constructed. ANILCA Section 1104 [43 CFR 36.2(d)].

The working determination of "appropriate federal agency" faces increasingly complex and independent permitting authorities. Initially, the TUS authorization process focused on route selection by the affected federal land managers plus, in some instances, the Department of Transportation. [See Federal Register page 31622 of the 43 CFR 36 Preamble.] In recent years, all federal agencies with applicable permitting authorities participate in the TUS application process, (e.g., Corps of Engineers (COE), Federal Energy Regulatory Commission (FERC), US Coast Guard (USCG)).

"***applicable law***" is "*any law of general applicability (other than this title) under which any Federal department or agency has jurisdiction to grant any authorization (including but not limited to, any right-of-way, permit, license, lease, or certificate) without which a transportation or utility system cannot, in whole or part, be established or operated."* ANILCA Section 1102(a).

APPLICATION PROCESS

I. Pre-application meeting with the land manager(s) of the CSU or Area is strongly recommended but not required [43 CFR 36.3(a)] to discuss project scope, concerns, costs, constraints, and project timelines.

In practice, land management agencies stress the importance of pre-application meeting(s) so the applicant better understands the application steps and the agencies better understand the scope and objectives of the project. Complex projects may require multiple meetings.

A. Determine if the process described in ANILCA Sections 1101-1108 is applicable:

1) Does the proposed project qualify as a transportation system or utility? [43 CFR 36.2(p)]

The TUS process is not used or only partially used when other ANILCA authorities apply, such as ANILCA Section 1110(b)—Access to Inholdings or ANILCA Section 1111—temporary access to nonfederal land.

2) Would the proposed project be in or across a CSU or Area? [43 CFR Sec 36.1(a)]

If "no," the project will not be located on federal land within the CSU or Area then the TUS process does not apply.
If "yes," is there a route or site that is not on federal land in the CSU or Area that works for the TUS? Locating the proposed TUS so it is not on the CSU or Area may reduce costs, time, and controversies of crossing a CSU or Area. If the route or site is proposed to be located on the CSU or Area, the Secretaries may be possible to conduct a minor boundary

adjustment under ANILCA Section 103(b)[4] or a land exchange[5] in order to facilitate location of a portion or all of a TUS outside of a CSU or Area. However, the Federal District Court in Friends of Alaska Refuges v. Bernhardt and King Cove, D 06/01/20, Case 3:19-cv-00216-JWS, found land exchanges cannot be used to avoid the procedural mandates of Title XI for a proposed TUS to be located within a CSU or Area. In 2022 the Ninth Circuit reversed the District Court's decision. Both decisions were vacated in 2022.

B. Identify *"appropriate federal agency"* [43 CFR 36.2(d)] and applicable permitting authorities.

There is often more than one such agency.

C. Identify pre-application data-gathering needs and activities; authorizations for necessary field work [43 CFR 36.3]

1) Reasonable activities necessary to complete the application "*shall be permitted*" [43 CFR 36.3(b)] if they will not:

a. cause significant or permanent damage

b. unreasonably interfere with other authorized uses or activities

c. significantly restrict subsistence uses

2) In an NPS or FWS unit, pre-application activities must be *"compatible with the purposes for which the unit was established"* [43 CFR 36.2(f)], defined as "*will not significantly interfere with or detract from the purposes for which the area was established."*

Discuss NEPA compliance, deadline/extensions, realistic timeframes, and the two different decision pathways dependent on the presence or absence of agency authority and/or involvement of designated Wilderness. See TWO DECISION PATHWAYS below.

Alert applicant that part of the process is to determine if an alternative to the proposed TUS exists elsewhere within or outside of the CSU or Area with less impacts [43 CFR 36.7(a)(2)(ii)].

If there are one or more alternatives, a determination of economic feasibility and of reasonableness of such alternatives must be completed and the alternatives included in the NEPA analysis for agency(s) consideration.

If anticipate using a NEPA contractor, review with applicant the importance of contractor qualifications and experience to keep the project on track. Discuss pros and cons of having the agency prepare NEPA documents with funds provided by the applicant. Per NEPA, the agency selects the contractor (See 40 CFR 1506.5). FWS works with the applicant to determine the best NEPA contractor from a list of contractors provided by the applicant or may conduct NEPA in-house. NPS has similar practices.

II. Application of Standard Form 299 submitted to all appropriate federal agencies [43 CFR 36.4]

A. Simultaneous filing date if multiple agencies are involved [43 CFR 36.4(a)]

---

[4]Section 103(b): *"Following reasonable notice in writing to the Congress of his intention to do so the Secretary and the Secretary of Agriculture may make minor adjustments in the boundaries of the areas added to or established by this Act as units of National Park, Wildlife Refuge, Wild and Scenic Rivers, National Wilderness Preservation, and National Forest Systems and as national conservation areas and national recreation areas. For the purposes of this subsection, a minor boundary adjustment shall not increase or decrease the amount of land within any such area by more than 23,000 acres."*

[5]Section 1302 authorizes land acquisition within or contiguous to CSUs through purchase, donation, or exchange under specified conditions, none of which require approval of Congress.

1) Filing with one Interior agency shall be considered as a filing with all of Interior's agencies [43 CFR 36.4(a)]
2) Any application filing fees are due at the time of filing [43 CFR 36.4(a)]
3) If single filing date not possible, applicant has up to 15 calendar days to file with all appropriate agencies [43 CFR 36.4(c)]
4) Identify a lead federal agency [43 CFR 36.5(a)]
   a) Land management agency with longest lineal portion of applicable ROW
   b) Different lead federal agency may be designated by agreement of the involved agencies
   c) Lead agency coordinates the overall TUS application and NEPA processes, although there may be a different lead agency for NEPA compliance
5) The lead federal agency for the TUS application identifies the filing date as the date of the latest application submittal to the appropriate federal agencies [43 CFR 36.4(c)]

B. Application deadlines

1) 60 days for each agency to determine sufficiency of application [43 CFR 36.5(c)]
2) 30 days for applicant to respond to any requests for more information [43 CFR 36.5(d)]
3) 30 days from receipt of additional information for agencies to determine sufficiency and, if sufficient, update "filing date" to be the date the final supplemental information was received [43 CFR 36.5(e)]

C. Agencies may grant additional time to provide requested information if applicant agrees the official filing date of completed application will be adjusted accordingly [43 CFR 36.5(d)(1)]

D. If applicant does not meet the original or extended filing deadlines, or any agency determines the application is deficient, the lead agency notifies the applicant the application is rejected and notifies other agencies to return their applications without further action [43 CFR 36.5(b), 5(d)(2), 5(e)(1)]

There is no process to appeal rejection of an application; however, the applicant may reinstate the application by providing requested information later [43 CFR 36.5(e)(2)] *or may restart the pre-application stage to refine project scope and submit a new application.*

E. Applications determined to be sufficient proceed to NEPA compliance

NEPA COMPLIANCE

I. NEPA and implementing regulations apply to the evaluation of all TUS applications through an Environmental Assessment (EA), Environmental Impact Statement (EIS), or a categorical exclusion [43 CFR 36.6(a)]

A. Lead agency, in cooperation with all appropriate federal agencies, completes an EA or Draft EIS within 9 months of the official filing date [43 CFR 36.6(a)(1)]

Lead agency facilitates the determination of the appropriate NEPA document in cooperation with the other appropriate federal agencies, ideally in consultation with the applicant during the pre-application process. A Categorical Exclusion is rare, but has been applied in limited circumstances, e.g., when a fiber optic cable was buried in a previously-constructed drainage ditch of the George Parks Highway through Denali National Park.

B. Lead agency may extend the 9-month NEPA preparation time for good cause [43 CFR 36.6(a)(2)]

1) Lead agency specifies a new time period, with rationale, and notifies the applicant
2) Lead agency publishes a notice of extension in Federal Register at least 30 days before end of original 9-month period

C. The NEPA document [43 CFR 36.7(a)(2)]:

The regulations do not require the following nine subjects to be addressed in the NEPA document, but as a practical matter the NEPA process is the best place to do so to avoid a disconnected step after NEPA compliance. ANILCA Section 1104(g)(2) requires detailed findings for eight of these, and the regulations add the ninth.

1) Need and economic feasibility
2) Economically feasible and prudent alternative route (defined at 43 CFR 36.2(h))
3) Feasibility of consolidating routes
4) Social, economic, and environmental impacts
5) Impacts on national security interests
6) Impacts on ANILCA unit purposes
7) Measures to avoid or minimize negative impacts
8) Comparison of adverse and beneficial affects to public values
9) Impacts, if any, on subsistence uses

D. Lead agency shall assure compliance with ANILCA Section 810 [43 CFR 36.6(a)(6)]

Section 810 applies to all federal agency decisions affecting "use, occupancy, or disposition of public lands" and requires an "evaluation" of effects on subsistence uses and efforts to "minimize adverse impacts" but does not require a complete absence of such impacts.

E. Cost Recovery

1) Application processing costs shall be reimbursed by the applicant if required by the authorities and policies of the appropriate federal agency [43 CFR 36.6(c)(1)]
2) Reasonable administrative and other costs of EIS preparation shall be reimbursed according to Bureau of Land Management's cost recovery procedures under Section 304 of the Federal Land Policy and Management Act (FLPMA) [43 CFR 36.6(c)(2)]

II. If the lead agency determines an <u>EIS is not required</u>, an EA and Finding of No Significant Impact (FONSI) will be prepared [43 CFR 36.6(a)(3)], or in rare cases a Categorical Exclusion may apply

III. If the lead agency determines an <u>EIS is required</u>:

A. The draft EIS will be subject to a hearing in Washington DC and at least one location in Alaska [43 CFR 36.6(a)(4)]

B. Consultation and public notice requirements include outreach to other federal agencies, the State, affected local governments, affected ANCSA corporations, and interested individuals and organizations [43 CFR 36.6(a)(5)]

C. The final EIS will be completed within 3 months of completing the draft EIS or within 1 year of the application filing date – whichever is later. Notice of availability of the final EIS shall be published in the Federal Register [43 CFR 36.6(b)]

TWO DECISION PATHWAYS

I. **DECISION PATHWAY ONE: Agency(s) has applicable authority to issue rights-of-way, <u>and</u> the proposed TUS is not in designated Wilderness** [43 CFR 36.7(a)]

A. Each appropriate federal agency has 4 months from completion of FONSI or Final EIS to decide to approve or disapprove the proposed TUS in accordance with applicable law and notify the applicant [ANILCA Section 1104(g); 43 CFR 36.7(a)(1)]

*Congress established a single statutory authority in Title XI for consistency in **processing** applications for TUSs in Alaska CSUs and Areas. Title XI provides no new authority for agency **decision-making on** applications. Each agency uses its own laws and regulations in **deciding** to approve or disapprove a TUS application. However, if there is conflict between agency procedures for processing applications and the provisions Title XI or its implementing regulations for processing applications, the provisions of Title XI and its implementing regulations supersede such agency procedures.*

B. Each agency, in making its decision to approve or disapprove an application, shall consider and make detailed findings for the nine subjects[6] listed in 43 CFR 36.7(a)(2)

*Although agencies use their existing authorities to make a decision whether to approve or disapprove a TUS application, Title XI and its implementing regulations require the agency to **consider** and make detailed findings on the nine subjects as part of their decision process. As a practical matter, these nine subjects are often addressed as part of NEPA compliance (see previous section).*

C. If each agency makes its decision to approve a TUS, the system shall be deemed approved [ANILCA Section 1106(a)(1)(A)], and the agencies proceed to issue permit(s) or other forms of authorizations.

D. If an appropriate federal agency disapproves any portion of a TUS, the entire application is disapproved [43 CFR 36.7(a)(4)]

E. If the application is disapproved, the applicant may file an administrative appeal pursuant to ANILCA Section 1106(a)(2) [43 CFR 36.7(a)(4)]:

The remainder of the decision pathway one is outside the jurisdiction of the administering agencies, hence is not covered in the DOI regulations. From this point in decision pathway one, guidance comes from the statute itself, which moves the decision process to the President. If the TUS application is approved by the President, the 43 CFR 36 regulations have some additional guidance regarding issuing permits.

1) Applicant appeals to the President
2) President must decide to approve or disapprove the application within 4 months
3) President shall consider the nine findings in 43 CFR 36.7(a)(2), NEPA compliance, public and agency comments, and individual agency decision documents
4) President's decision to approve or deny, along with rationale, will be published in the Federal Register
5) President shall approve the application if he finds:
   a) the system is in the public interest
   b) the system is "*compatible with the purposes of the unit,*" as defined in 43 CFR 36.1(f) to mean the TUS "*will not significantly interfere with or detract from the purposes for which the area was established."*

[6] ANILCA and the regulations require the agency to "consider, and make detailed findings" for a specified list. For editorial convenience, the generic term "subjects" is used when referring to what the findings are required to address and no unsupported meaning is intended by use of that term to describe the lists.

Note that the President must use the Title XI definition of "compatible" which may be different than an agency's definition of compatible.

c) there is no economically feasible and prudent alternative route

Per Section 1106(a)(2), if the TUS meets all three of these criteria, the President's approval of a TUS application is not discretionary. Section 1106 is a new authority with new decision-making criteria for processing and issuing rights-of-way.

6) If the President approves the application, each federal agency shall promptly issue rights-of-way and other applicable authorizations [ANILCA Section 1106(a)(3)]

7) If the President denies the application, the applicant has exhausted administrative remedies and may proceed to judicial review in federal court [ANILCA Section 1106(a)(4)]

II. **DECISION PATHWAY TWO: Federal agency(s) does not have applicable law to authorize all or part of a TUS application, <u>or</u> any part of the proposed project would be in designated Wilderness [43 CFR 36.7(b)]**

A. The federal agency with jurisdiction over a portion of a TUS, for which the agency has no applicable specific law, shall recommend approval of that portion if it is determined [43 CFR 36.7(b)(1)(i)]:

1) Such system would be compatible with the purposes for which the area was established [43 CFR 36.7(b)(1)(i)(A)], and

***Note** that here, in decision pathway two, the agency **must use the Title XI definition of "compatible"** which may be different than the agency's definition of compatible.*

2) There is no economically feasible and prudent alternate route [43 CFR 36.7(b)(1)(i)(B)]

B. Each appropriate federal agency has 4 months from completion of the FONSI or final EIS to tentatively approve or disapprove each right-of-way in their jurisdiction, and the Secretary of the Interior shall make notification pursuant to ANILCA Section 1106(b) [43 CFR 36.7(b)(1)]

C. If there is applicable law for a portion of the TUS which is outside designated Wilderness, the applicable law shall be applied using Decision Process One in making the determination to approve or disapprove that portion of the TUS [43 CFR 36.7(b)(1)(ii)]

The provisions in B and C above might appear to contradict the intent that the TUS will ultimately be approved or disapproved as a whole. The Preamble to the regulations (51 FR 171, Sept. 4, 1986, page 31624] *explains the purpose of the described distinctions:*

*"When there is no existing law applying to a part of a TUS, there will most likely be some existing law for the other part. Some of the decision-making will therefore involve agencies which do and do not have existing authority. Those agencies that have authority will be able to process the permits and approvals and prepare the documents that will be transmitted to Congress. **Those agencies that do not have authority will only be able to prepare their recommendations**. The final decision on the whole project will rest with Congress, although it is not expected that Congress will revisit those determinations already made by agencies having preexisting congressionally delegated authority."* [Emphasis added]

D. The Federal Register notice of the FONSI or final EIS shall be accompanied by the rationale and findings supporting each appropriate federal agency's position, the findings regarding the nine subjects listed in 43 CFR 36.7(a)(2), the final NEPA compliance documents, and any comments from the public and other federal agencies [43 CFR 36.7(b)(2)]

E. Each federal agency "*promptly*" notifies the President of their tentative approval or disapproval of each authorization for which they have jurisdiction, along with their rationale [ANILCA Section 1106(b)]

F. There is no administrative appeal for a denial issued under the provisions of 43 CFR 36.7(b) [43 CFR 36(8)]

The remainder of decision pathway two is outside the jurisdiction of the administering agencies, hence is not covered in the DOI regulations. From this point, guidance comes from the statute itself, which moves the decision process to the President and then to Congress. If the TUS application is approved by Congress, the 43 CFR 36 regulations have some additional guidance regarding issuing permits.

G. Within 4 months of receiving all NEPA documentation and agency rationale, the President shall decide whether the TUS application should be approved or denied [ANILCA Section 1106(b)(2)]

1) If the President denies the TUS application, the applicant has no administrative appeal options but may file suit in federal court.

2) If the President approves the TUS application, he/she shall submit such a recommendation for approval to Congress, along with the cumulative supporting documentation for the decision, plus conditions and stipulations that would govern the TUS if approved by Congress.

H. Congressional approval requires the Senate and House to approve a joint resolution within 120 calendar days following receipt of the President's recommendation and supporting documentation **[**ANILCA Section 1106(c)(1)]

Subparagraphs 1106(c)(2) and 1106(c)(3) contain technical details on how to calculate the 120 calendar days for purposes of this section. If Congress does not approve the TUS application within 120 calendar days, the TUS is effectively denied and the applicant has no administrative or judicial remedies.

ISSUING PERMITS [43 CFR 36.9]

The following are the regulatory requirements for the agency(s) to issue a permit:

36.9(a) Once an application is approved under the provisions of §36.7(a), a right-of-way permit will be issued by the appropriate federal agency or agencies, according to that agency's authorizing statutes and regulations or, if approved pursuant to the provisions of §36.7(b), according to the provisions of title V of the Federal Land Policy Management Act of 1976 [43 U.S.C. 1701] or other applicable law. The permit shall not be issued until all fees and other charges have been paid in accordance with applicable law.

36.9(b) All TUS right-of-way permits shall include, but not be limited to, the following terms and conditions:

(1) Requirements to ensure that to the maximum extent feasible, the right-of-way is used in a manner compatible with the purposes for which the affected area was established or is managed;

(2) Requirements for restoration, revegetation and curtailment of erosion of the surface of the land;

(3) Requirements to ensure that activities in connection with the right-of-way will not violate applicable air and water quality standards and related facility siting standards established pursuant to law;

(4) Requirements, including the minimum necessary width, designed to control or prevent:

(i) Damage to the environment (including damage to fish and wildlife habitat);

(ii) Damage to public or private property; and

(iii) Hazards to public health and safety.

(5) Requirements to protect the interests of individuals living in the general area of the right-of-way permit who rely on the fish, wildlife and biotic resources of the area for subsistence purposes; and

(6) Requirements to employ measures to avoid or minimize adverse environmental, social or economic impacts.

36.9(c) Any TUS approved pursuant to this part which occupies, uses or traverses any area within the boundaries of a unit of the National Wild and Scenic Rivers System shall be subject to such conditions as may be necessary to assure that the stream flow of, and transportation on, such river are not interfered with or impeded and that the TUS is located and constructed in an environmentally sound manner.

36.9(d) In the case of a pipeline described in section 28(a) of the Mineral Leasing Act of 1920, a right-of-way permit issued pursuant to this part shall be issued in the same manner as a right-of-way is granted under section 28, and the provisions of subsections (c) through (j), (1) through (q), and (u) through (y) of section 28 shall apply to right-of-way permits issued pursuant to this part.

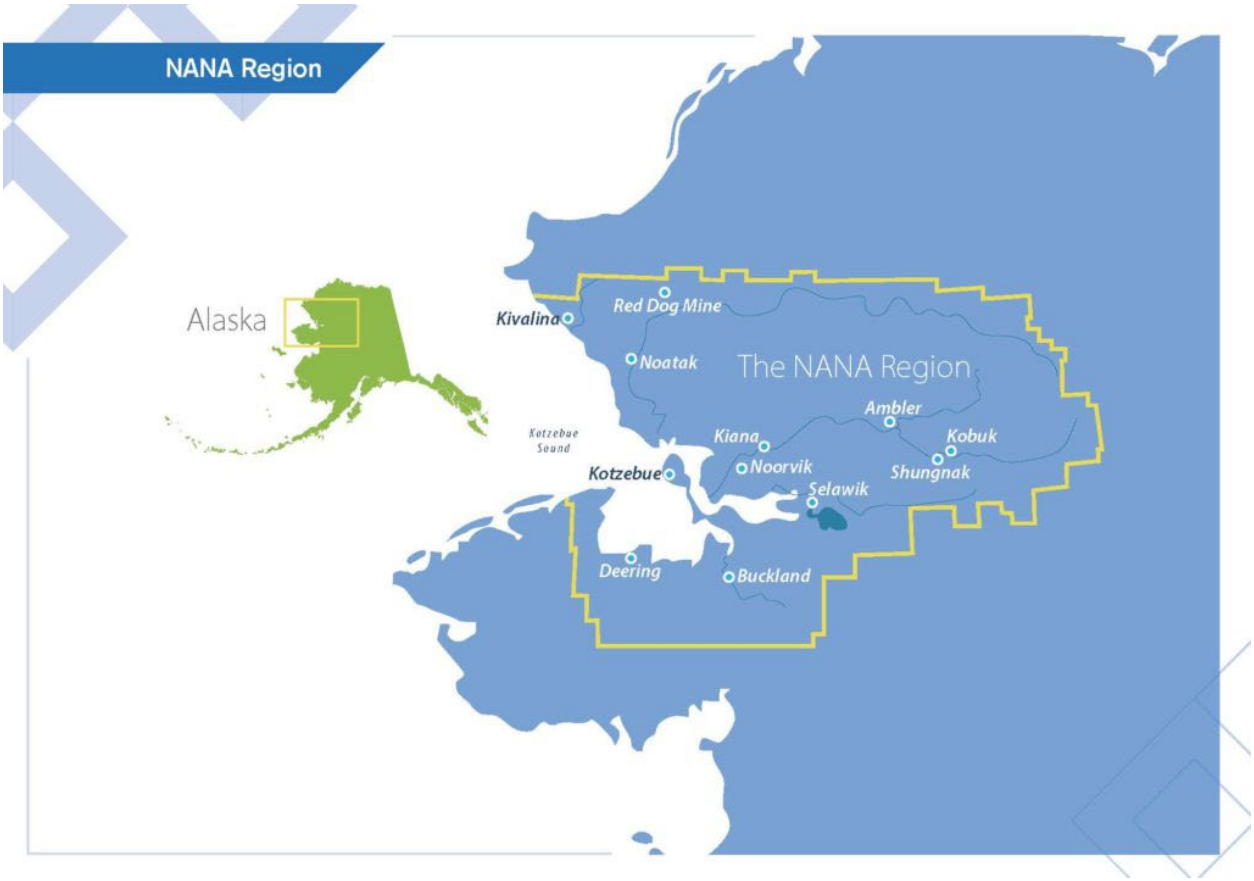
Appendix O10 – Website Snapshot

NANA Regional Broadband Network

HOME PROJECT DETAILS NEWS TEAM CONTACT

Project Details

Under the U.S. Department of Commerce, National Telecommunications and Information Administration's Tribal Broadband Connectivity Program, NANA has been awarded a $65,168,000 broadband infrastructure deployment grant. This grant provides funding to complete the design, permitting, and installation of a high-speed fiber broadband network, spanning 1,100 kilometers (683 miles), connecting the eleven geographically dispersed tribal villages communities in the NANA region.



Located at the extreme northwestern edge of the North American continent, above the Arctic Circle, our region is vast, sparsely populated, and isolated; no roads connect our villages to each other or our region to greater Alaska. Practically all necessities for life are barged or flown into the region, resulting in extremely high prices for basic goods, including food, fuel, and building materials.

The region is without true broadband and the available internet is inadequate with extremely poor connectivity, slow access, and prices that are beyond the reach of most residents. Internet adoption rates are low, and many things taken for granted elsewhere are

not available in the region, including distance learning, telehealth, or work from home opportunities.

COVID-19 devastated NANA families and communities in our region and highlighted this digital divide. While in other areas of the country, people were able to leverage the digital economy to adapt to pandemic lockdowns with online shopping, learning, and working, these were beyond the reach of the tribal Alaskan population in the NANA region.

With long lead times on permitting and accounting for the challenging construction conditions installation of a remote fiberoptic network in the Arctic entails, we expect this ambitious effort to take approximately four years.

The NANA Regional Broadband Network Project was officially accepted as a covered project in the FAST-41 program, gaining national recognition and permitting support to help bring high-speed internet to Northwest Alaska. This designation facilitates streamlined environmental reviews and improves coordination among agencies without changing any laws or public input opportunities.

In addition to the middle-mile buildout, which will connect the communities to one another and the world, NANA will also deliver a last-mile solution in each community, operating as an Internet Service Provider (ISP), bringing fast, affordable, and reliably consistent broadband services to each resident.

This ISP will provide affordable residential Internet service with unlimited data per household. This service level far surpasses the limited offerings currently available in the region, where all communities are considered unserved by NTIA standards.

In addition to providing Internet, our ISP will also create a Regional Network Operating Center (NOC) in Kotzebue, offering permanent jobs and infrastructure monitoring services across the region, as well as local village technician opportunities.

As an inherently regional entity, NANA supports NTIA's emphasis on regional solutions. We have collaborated in the past with other regional entities including Northwest Arctic Borough, the Northwest Arctic School District, Maniilaq Association (regional tribal health consortium), the Alaska Technical Center, and others. Together, we have addressed such challenges as workforce development, clean energy, and infrastructure development.

NANA looks forward to continuing those partnerships with area leadership to ensure broadband access to all regional residents, businesses, and schools. Our successful approach to this grant was truly a regional solution.

This project will deliver broadband access and bring digital equity to tribal communities in our region and will serve as a catalyst for lasting change for this generation and the generations to come. NANA has the community

Appendix O11 – USFWS Letter of Concurrence

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
Northern Alaska Fish and Wildlife Field Office
101 12th Avenue, Room 110
Fairbanks, Alaska 99701

In Reply refer to:
FWS/R7/2025-0134615

September 18, 2025

Albie Dallemolle
Vice-President, Economic Development and Sustainability
NANA Regional Corporation, Inc.
P.O. Box 49
Kotzebue, Alaska, 99752

Dear Albie Dallemolle:

Thank you for your consultation initiation package received on August 6, 2025, regarding the NANA Regional Corporation, Inc. (NANA) Regional Middle Mile Fiber Optic Project (Project). NANA requested informal consultation with the U.S. Fish and Wildlife Service (Service or USFWS) in accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq*.). The National Telecommunications and Information Administration (NTIA) has designated NANA authority as their non-federal representative to conduct this informal consultation (Memorandum from NTIA to Internet for All Grant Recipients and Service Field Offices, effective October 28, 2024). NANA has determined that the Project may affect, and is not likely to adversely affect polar bears (*Ursus maritimus*), spectacled eiders (*Somateria fischeri*), and the Alaska-breeding population of Steller's eiders (*Polysticta stelleri*), and designated critical habitat for polar bears.

Project Description

Project Purpose

NANA is proposing the design, construction, and operation of a high-speed broadband network, connecting each of the communities in the Northwest Arctic Borough to a fiber optic cable (FOC) system and associated infrastructure. The Project will install over 1,060 kilometers (km) of "middle mile" FOC connectivity between the unserved tribal communities of the region to a broadband Point of Presence in Kotzebue, Alaska. Once installed, this FOC network will provide long-term access to affordable and reliable high-speed internet, which provides a critical tool for better emergency communication capabilities, enhanced healthcare services, increased and new economic development, and improved educational opportunities, among other benefits.

Project Action Area

The Action Area means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved (50 CFR 402.02). The Project action area is along the 1,060-km-long route (Figure 1) that connects communities: Deering, Buckland, Shungnak, Kobuk, Ambler, Kiana, Noatak, and Kivalina, and traverses through Noorvik, Selawik, and Kotzebue. The FOC route will cross Bureau of Land Management (BLM)-managed lands and USFWS-managed lands (Selawik National Wildlife Refuge [SNWR]). An additional alternative route is being analyzed that avoids lands owned by Kikiktagruk Inupiat Corporation (KIC). For the marine portion of the Project, the Action Area includes the potential area for disturbance from presence of the cable laying barge and support vessels.

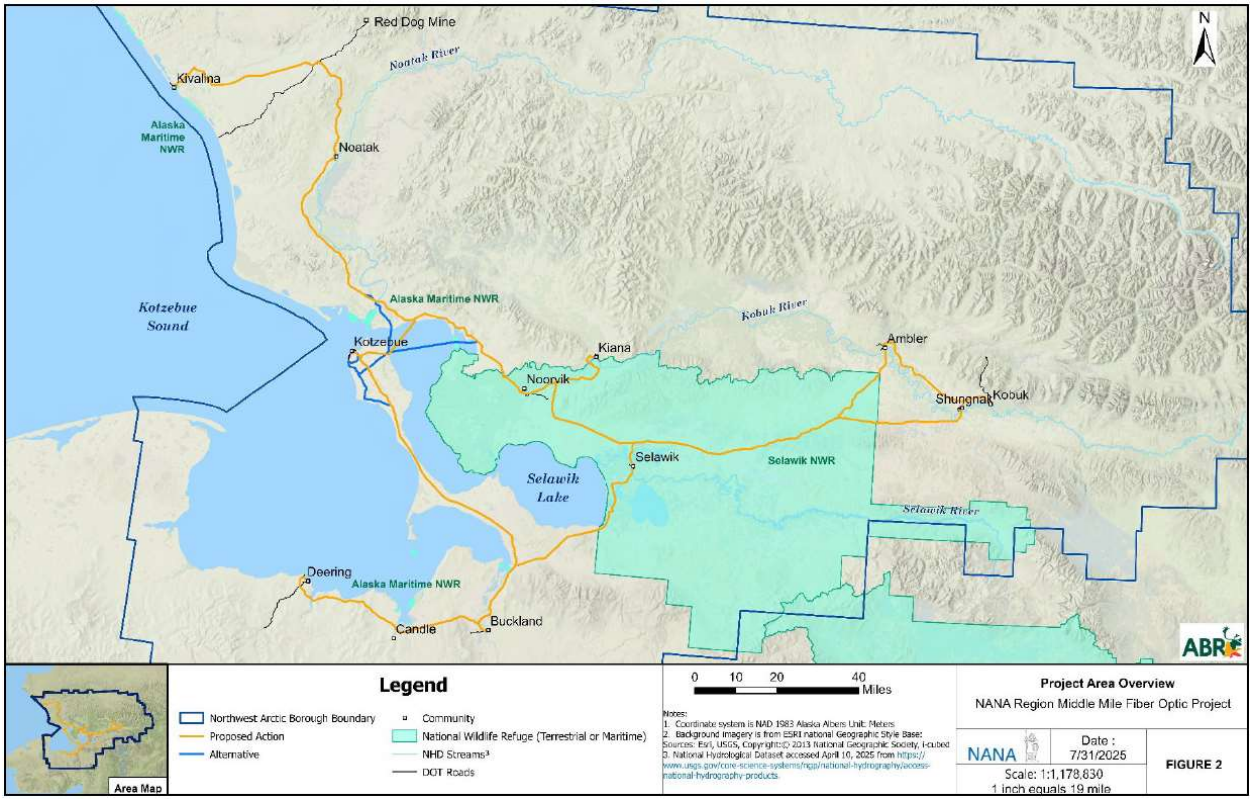


Figure 1. The Action Area of the Project, in which the orange route is the proposed fiber optic cable route system connecting the eight communities, and the light blue route is the potential alternative route. The dark blue line displays the boundary for the Northwest Arctic Borough. The shaded green region represents National Wildlife Refuge lands.

Project Timing

The construction season will be carefully scheduled around seasonal conditions in the region. Materials and equipment will be mobilized to the Project area during the open-water season of summer 2025, using regularly scheduled commercial barging service to Kotzebue.

NANA anticipates terrestrial construction would begin January 2026. All FOC placement would be installed during winter months (January through early May 2026 and 2027) and is expected to be completed by late spring 2027. Exact winter construction dates will depend on the region having adequate snow cover and ground conditions to support winter off-road travel. Winter

construction will focus on the placement of ground-laid terrestrial sections and aerial river crossings.

In-village work, and complex water crossings (e.g., Hotham Inlet, Kobuk River, Noatak River), will be completed during summer (June through September 2026) when ice is not present in these waterbodies. The summer construction schedule will commence following sea and river ice melts, allowing barges hauling equipment to travel upriver (approximately May 2026). Construction within the villages will occur throughout summer 2026. Subsea construction in Hotham Inlet is scheduled for June or July 2026. Horizontal directional drilling (HDD) crossings at major rivers (e.g., Kobuk and Noatak rivers) will occur from June through August 2026. Winter ground-laid FOC inspections and cable seating will take place from July through August 2026 and 2027. Finally, demobilization and final inspections will be completed by September 2027.

Once installed, the telecommunications system will operate continuously, providing uninterrupted service to all connected communities regardless of seasonal conditions. Maintenance activities will be conducted as needed. The Project has been designed to support a minimal operational lifespan of 25 years, with the expectation of continued service beyond this period through proper maintenance and potential equipment upgrades. A 50-year lifespan is anticipated.

Project Activities

In order to deliver a high-speed broadband network to the various communities under the Project, the following supporting Project infrastructure will be constructed:

- A Network Operations Center will be constructed in Kotzebue adjacent to the existing Quintillion Cable Landing Station (CLS) to serve as the system's control hub.
- A CLS will be established in each village to house network equipment and provide connection points for local distribution (part of NANA's subsequent "last mile" project).
- Aerial cable crossings at major rivers and streams using wooden utility poles (typically 13–15 meters (m) tall and secured with guy wires).
- Heavy, low-profile anchors to secure the FOC on streambanks at minor stream crossings, where the cable will be gravity laid along the streambed surface. Where necessary, the FOC will be encased in split armor piping or similar between anchor points to increase stabilization, protect the cable, and prevent frazil ice buildup. These anchors and cable grips will also be placed at regular intervals of no greater than 1,820 m to mitigate lateral movement and preserve FOC splice integrity.
- FOC splice cases with specialized anchoring devices to ensure cable stability. Splice points will occur at a minimum of every 39 km.
- Two to four 1.2-m by 2.0-m concrete vaults with anchoring will be installed on each side of the Hotham Inlet crossing(s) to protect and secure the cable.
- Approximately 4,250 m of 5-centimeter (cm) conduit (with the FOC inside the conduit) will be installed under 16 major rivers by HDD.

In the subheadings below, the Project activities are broken down to describe the relevant construction activities that would occur in the winter and summer. However, maintenance activities will be conducted as needed and could occur at any time after installation of the FOC system. Additional details on the Project Activities can be found in the Biological Assessment (BA) on pages 8-21 (ABR Inc., 2025).

Winter Activities

The winter activities described in this section would occur between January and early May; see *Project Timing* above for specific timing. Winter installation will begin with a field survey of the planned FOC route, followed by vegetation clearing (as needed to facilitate access for cable placing equipment), pole placement in preparation of aerial cable crossings of larger rivers, and placement of the ground-laid FOC. The Project's construction will require several types of temporary work areas to support the FOC installation. Other temporary work areas include equipment staging areas in or near each village CLS. Mobile camps will traverse the corridor with the installation teams to support the cable placement activities. Mobile fuel sleighs would be used to provide additional fuel for transfer to individual vehicles and equipment. Fuel to support construction activities would be stored in 18,900-liter fuel sleighs alongside the mobile camps and would be disbursed to field crews in quantities up to 9,500 liters. Mobile camps would move with the crews and fuel would be supplied from nearby villages.

The field survey of the planned FOC route was completed in March 2025. Vegetation clearing activities will be limited to areas where vegetative cover prohibits wintertime off-road vehicle travel. The proposed FOC alignment was designed to minimize forested and shrubby landcover to reduce the amount of vegetative clearing.

The FOC will be placed during winter months to minimize ground disturbance using purpose-built equipment designed to perform with minimal impact to the variable tundra landscape. Low-ground-pressure-vehicles (e.g., PistenBully (tracked), CAT D6 bulldozer (tracked), Steiger Case tractor (tracked), Mulcher (tracked), Mini-excavators (tracked), Scissor-neck trailer, Flat-deck trailer, Medium sleigh trailer) will be used to deploy the FOC and transport personnel, mobile camps, fuel, equipment, and FOC tanks along the route. Support snowmachines would also be used for crew transportation.

There will be 2 to 3 FOC construction crews consisting of 12 to 14 personnel each will operate concurrently for construction on different sections of the FOC route, and winter FOC deployment is anticipated to last 100–110 days. Most of the FOC will be ground-laid and placed directly on the tundra. The cable will naturally settle into the vegetation during spring thaw and eventually, will become partially embedded into the organic surface layer over successive freeze-thaw cycles. Overland route segments cross extensive wetland complexes and will be installed during winter months when adequate snow cover and frozen substrate conditions will minimize ground disturbances. Although waterbody crossings are minimized by routing overland, when possible, the Project includes nearly 800 stream and lake crossings. Most waterbody crossings will be installed during the winter, but there are few exceptions that will be installed during the summer months (see *Summer Activities* below). Additional details on the plans for FOC waterbody crossings can be found in the BA (ABR Inc., 2025). Across major rivers, FOC will

run aerially over waterways to allow for safe passage of boats, aircraft, and wildlife, in which the aerial cable will be connected to 14- to 15-m tall wooden poles, and have bird diverters to increase cable visibility and decrease the likelihood of bird strikes.

Summer Activities

The summer activities described in this section would occur between mid- to late-May through September; see Project Timing above for specific timing. Several complex Project construction components will occur during the ice-free summer months, including: the Hotham Inlet subsea crossing(s), major river crossings with HDD installations (e.g., Kobuk and Noatak rivers), all in-village construction, trenching outside of villages, and securing the FOC to existing utility poles. In addition to construction activities, helicopter supported inspections would be conducted to reposition the winter-ground-laid FOC by hand as needed. There will be three barges supporting summer Project activities in 2026 between June and September 2026 following marine transit routes: Kotzebue to Kivalina, Kotzebue to Selawik, and Kotzebue to Noorvik, Kiana, and Ambler.

For the subsea crossing(s), the FOC will be anchored to 1.2-m by 2.5-m concrete beach manholes (BMH) on either side of the channel, which will be constructed in stable locations that will minimize environmental impacts. The cable will then be trenched or bored between the BMH and the lowest tide point. Construction will then transition to operations using an excavator on floats, two tugboats 7.6-m by 28-m and two accompanying barges 46-m by 15 m and 62-m by 18-m. From the low-tide point, a barge will place cable in tandem with the floating excavator to be trenched as far as possible. Once the water is too deep to allow trenching, the FOC will be gravity laid or plow trenched by static skid across the sea floor to the opposite side of the inlet, where nearshore trenching and FOC laying activities will commence.

Sixteen major river crossings will be completed during the summer using HDD, which is a trenchless construction method that allows for placement of conduits without surface disturbance. Equipment needed (e.g., mini-excavators, utility poles, FOC, equipment and materials to support HDD) for the major river crossings will be transported upriver by the tugboats and barges used in the Hotham Inlet subsea crossing. One of the barges may serve as the field camp facility.

The Kugruk Estuary east of Deering will be crossed using gravity-lay methods in the summer months. The winter construction crews will ground-lay the FOC up to the overbanks of the estuary and will cut and store extra FOC on the banks. Crews will return by barge in the summer to gravity lay across the estuary and splice the cables.

Where ground-lay FOC sections have high pedestrian or all-terrain vehicle traffic, the cable will be buried to reduce risk to public safety and prevent cable damage. The Project will use the existing utility poles when entering/exiting villages and then transition to shallow trenched sections. Trenches will be excavated to approximately 0.6 m by 0.6 m but may vary based on the terrain; the FOC will be placed directly into the trench. Excavated material will be temporarily sidecast (less than 1 week) adjacent to the trench and then backfilled and

recontoured to match the pre-existing conditions. The communities of Kiana, Kivalina, and Kobuk will not require trenching.

Following winter construction activities, a crew will return in the summer to ensure the cable is properly seated on tundra and to ensure all construction materials and debris have been cleared from the area. Inspections will be performed by helicopter flyovers, while paying particular attention to waterbody crossings and shrubby-vegetated areas to ensure the anchors and cable are seated securely to the ground and substrate.

Conservation Measures

As listed in section 2.2.11, *Project Mitigation Measures,* of the BA (ABR Inc., 2025), the applicant will implement the following conservation measures with the intent to avoid and minimize adverse effects to polar bears, spectacled eiders, Steller's eiders, and polar bear critical habitat resulting from the Project.

General Mitigation Measures

1. If construction activities will occur outside of the time window specified in the BA, the applicant will notify USFWS of the situation at least 60 days prior to the end of the specified time window to allow for reinitiation of consultation.
2. In-water work will be conducted at the lowest points of the tidal cycle when feasible.
3. Consistent with Alaska Statute 46.06.080, trash will be disposed of in accordance with state law. The Project proponent will ensure that all closed loops (e.g., packing straps, rings, bands) will be cut prior to disposal.

Dredging/Screeding/Underwater Excavating Activities

4. All vessels involved in dredging, screeding, and underwater excavating operations, including survey vessels, will transit at velocities ≤10 knots.

Intertidal Fill/Bank Stabilization and Maintenance

5. Fill material will consist of rock fill that is free of fine sediments to the extent practical or will come from on-site dredged material.
6. Fill material will be obtained from local sources or will be free of non-native marine and terrestrial vegetation species.

Additionally, best management practices (BMPs) will be implemented throughout Project operations to protect the marine environment, minimize bank erosion, and avoid creating drainage paths (as described in section 2.2.3.2, ABR Inc., 2025).

Project-Dedicated Vessels

Vessel and crew safety should never be compromised.

7. Vessel operators will:
    a. Maintain a watch for marine mammals at all times while underway.

   b. Stay at least 91 m away from listed marine mammals.
   c. Travel at less than 5 knots when within 274 m of a polar bear.
   d. Reduce vessel speed to 10 knots or less when weather conditions reduce visibility to 1.6 km or less.
8. Vessels will not allow lines to remain in the water unless both ends are under tension and affixed to vessels or gear.
9. Project-specific barges will travel at 12 knots or less.

NANA committed to other conservation measures in the BA but these measures were not specifically listed in the Project Mitigation Measures section in the BA (see section 2.2.11; ABR Inc., 2025). We considered the following measures from other sections of the BA to be part of the Proposed Action:

Project-Safety Features (from section 2.2.10 of the BA, ABR Inc., 2025)

10. The Project will install bird deterrents, reflective markers for wildlife, and visual marker balls for aircraft on all aerial lines. The bird diverters increase the visibility of the cable and decrease bird strikes. The Project will install the same style of diverters as used for the Arctic Slope Telephone Association Cooperative FOC project that connects Atqasuk to Utqiaġvik, which are proven to be effective in the Arctic environment and recommended by USFWS. The diverters spin in winds over 4.8 km per hour, reflect light, glow during dawn and dusk, and are visible to birds up to 0.4 km away, and they will be placed at 9-m intervals. The luminescent material on the diverters emits visible light for up to 12 hours after dusk and in low light or fog conditions.

Waste Hazard Mitigation Measures and Waste Disposal (from sections 2.2.7.1 and 2.2.7.2 of the BA, ABR Inc., 2025)

11. A Hazardous Materials Emergency Contingency Plan and Comprehensive Spill Prevention and Response Contingency Plan would be provided to BLM. This plan would detail the Project's BMPs in the proper handling, transport, storage, disposal, and spill prevention methods for hazardous materials and wastes.
12. All hazardous materials and waste would be handled by designated, trained personnel following established safety procedures.
13. Hazardous substance storage vessels, including mobile fuel tanks and containers of lubricants, would be labeled and stored in designated, secured areas during construction and transport to prevent leaks and spills.
14. Spill containment measures, such as secondary containment methods, would be used for storage tanks and during refueling operations. Spill response kits would be readily available. All petroleum related releases would be contained, remediated, and reported to the Alaska Department of Environmental Conservation.
15. Proper disposal methods for hazardous and non-hazardous waste would be followed according to regulatory requirements.
16. Proper waste containerization and disposal methods would be followed for fuel and oil waste, other hazardous materials (e.g., batteries), and non-hazardous waste (e.g., excess FOC, packaging materials, pallets, wood waste, food waste). See the BA (ABR Inc., 2025) for additional details for how types of waste would be disposed.

Effects to Listed Species and Critical Habitat

Our analysis included an evaluation of effects on polar bears, polar bear critical habitat, spectacled eiders, and the Alaska-breeding population of Steller's eiders from the proposed FOC route. Our analysis also includes the alternative route, should the Project avoid construction of FOC-supporting infrastructure on lands owned by KIC.

Polar Bears

The Project is located within the range of the Chukchi Sea (CS) subpopulation of polar bears and the majority of the Project would take place between January and September (although maintenance activities could happen any time of the year); therefore, the timing of activities, specifically winter activities, overlaps with polar bear denning season (approximately November to April). Polar bears could potentially den near the Action Area, but the likelihood is exceptionally low, as the CS subpopulation of polar bears predominantly dens along the Russian coast (USFWS 2016). Based on the United States Geological Survey (USGS) polar bear den catalogue, no historical dens have been documented near the Action Area (Durner et al. 2020). Considering the extremely low density of polar bears in the Action Area and the lack of historical dens in the Action Area, the potential for the Project to affect denning polar bears would be extremely unlikely (i.e., discountable).

Transient (non-denning) polar bears may occasionally pass through the Action Area during winter or summer activities, although the majority of habitat used by the CS polar bears is sea ice, where terrestrial use on the Alaska coast is limited (Rode et al. 2015). While the Project involves some use of barges/vessels, the barges would primarily be in waters proximate to the FOC route and be operating during the open-water season when sea ice is not present in the Action Area. Additionally, vessel operators will follow conservation measures to avoid disturbing polar bears (see Conservation Measures) that include watching for marine mammals at all times while underway, polar bear avoidance measures, and reduced vessel speed in the presence of polar bears. In recent years, only a small number of polar bears have been observed along the western coast of Alaska. In the event a non-denning polar bear encounters the Action Area, they could be exposed to disturbance from Project activities (i.e., human presence, snowmachine use, mobile camps, vegetation clearing, operation of heavy equipment, helicopters or barges). When disturbed, individual polar bears may respond behaviorally (e.g., escape response) or physiologically (e.g., increased heart rate, hormonal response) (86 FR 42982). However, we expect that any effects from disturbance would be minor and temporary (i.e., limited to changes in behavior that would not be biologically significant) and transient bears would be able to respond to Project disturbance by departing the area.

In summary, we conclude that effects to denning polar bears would be discountable because no CS polar bears are known to den near the Action Area, and effects to transient bears would be discountable and insignificant because 1) CS polar bears primarily use sea ice habitat and are rarely found in the terrestrial environment of the Action Area, 2) applicants will follow conservation measures to avoid disturbing polar bears during barging operations; and 3) any Project effects are expected to be limited to minor, temporary changes in behavior that would not result in injury or death of individual bears. Although it is unlikely for polar bears to occur in the

Project Area, to further reduce the potential for human-bear conflicts, we encourage the applicants to implement the Service's Best Management Practices to Minimize Impacts to Polar Bears (enclosed).

Designated Critical Habitat for Polar Bears

The Project Action Area overlaps Critical Habitat Unit (CHU) 1 (Sea Ice Habitat) and CHU 3 (Barrier Island Habitat) of designated critical habitat for polar bears. CHU 1 consists of 464,924 square kilometers (km^2) of sea ice habitat used for feeding, breeding, denning, and movements, which is sea ice over waters 300 m or less in depth that occurs over the continental shelf with adequate prey resources (primarily ringed and bearded seals) to support polar bears (i.e., physical and biological features (PFBs)). CHU 3 consists of 10,576 km^2 of barrier island habitat used for denning, refuge from human disturbance, and movements along the coast to access maternal den and optimal feeding habitat (i.e., PBFs). This includes all barrier islands along the Alaska coast and their associated spits, within the range of the polar bear in the United States, and the water, ice, and terrestrial habitat within 1.6 km of these islands (i.e., the no-disturbance zone).

Sea Ice Habitat would only be present in the Action Area during the winter activities of the Project, as sea ice does not occur in the Action Area during the summer open-water season. The FOC route overlaps CHU 1 over the Hotham Inlet crossing(s) between Kotzebue and the mainland, but the FOC construction over this section would occur during the summer when sea ice is not present. During the timeframe that sea ice habitat is present, the Project could overlap CHU 1 for transporting personnel, camps, and equipment between Kotzebue and other segments of the overland FOC route that would be worked on during the winter months. Therefore, Project activities would occur over a short duration within CHU 1. Because CS polar bears are rare and are not known to den in the Action Area, and the Project activities are temporary and transient in nature within CHU 1, we do not anticipate the Project would limit sea ice habitat used for feeding, breeding, denning, or movements by polar bears.

Only 0.7 percent (i.e., 7 km of the 1,060-km FOC route) of the Project overlaps with CHU 3, merely overlapping the no-disturbance zones of Barrier Island Habitat in the village of Kivalina and adjacent to the village of Deering. Additionally, the affected area makes up an extremely small portion of CHU 3. The entire winter FOC deployment is anticipated to occur for up to 110 days, in which we could expect 0.7 percent of the entire winter FOC deployment to occur over a short duration of time (i.e., a few days at most). We anticipate that limited summer activities would occur within CHU 3, as trenching will not occur in Kivalina, and there are no complex water crossings within CHU 3, however, additional site visits may occur throughout the year for maintenance on an as needed basis, but are expected to be infrequent. It is unlikely that polar bears would seek refuge in the Barrier Island Habitat within Kivalina because of the existing human presence and associated disturbance there. Additionally, while the Barrier Island Habitat (specifically, the no-disturbance zone) overlaps the FOC route in Kivalina and outside of Deering, the majority of habitat used by CS polar bears is sea ice, in which terrestrial use on the Alaska coast is limited, and CS-polar bear dens have not been documented within the Action Area. Overall, we do not anticipate that the Project will limit access to denning habitats, or prohibit bears from using optimal feeding habitats or islands for refuge from disturbance because 1) CS polar bears primarily use Sea Ice Habitat and are uncommon in the Action Area; 2) we

expect the FOC deployment in CHU 3 to last a short duration of time; and 3) most of the Action Area occurs on land in which only 7 km of the 1,060-km route (i.e., 0.7 percent) overlaps CHU 3.

In summary, we conclude that the Project would not alter the PBFs that are essential to the CS polar bear subpopulation because (1) CS polar bears are rare and are not known to den in the Action Area; (2) the Project duration in CHU 1 and 3 is temporary and short; (3) there is minimal spatial overlap between the Project Action Area and CHU 1 and 3.

Listed Eiders

The Action Area overlaps with the known range of spectacled and the Alaska-breeding population of Steller's eiders (collectively referred to as listed eiders). While listed eiders nest on the Alaska Arctic Coastal Plain and the Yukon-Kuskokwim Delta, they do not nest in the Action Area. During the Project's winter activities (January through early May), listed eiders would occur in the offshore marine environment and neither spectacled or Steller's eiders are known to winter near the Action Area. During the Project's summer activities (mid-May through September), small numbers of listed eiders (e.g., breeding eiders migrating between breeding and non-breeding grounds, non-breeding listed eiders) could occur near the Action Area, but they generally stay offshore (Petersen et al., 1999). As a Project safety measure, NANA will install bird diverters on all aerial FOC water crossings to prevent potential listed eider collisions with FOC infrastructure should listed eiders occur in the Action Area. Overall, we do not anticipate summer terrestrial activities (e.g., helicopter operations, in-village construction) would impact listed eiders because listed eiders will generally remain outside of the Action Area during the summer months. Summer barge activity would be restricted to the Kotzebue Sound, in which barges would be transiting slowly (no greater than 12 knots) between Kotzebue and the coastal villages, and barge activity would not overlap with important marine habitats or stopover sites used by listed eiders. Therefore, we anticipate FOC and barge collision risk with listed eiders to be extremely low. While small numbers of listed eiders could potentially occur in the marine habitat proximate to the Action Area during summer activities, because barges would be transiting slowly, we would expect any effects from the Project to be minor and temporary (i.e., limited to changes in behavior that would not be biologically significant) because listed eiders exposed to disturbance from Project activities would be able to respond by departing the area.

We conclude that the effects of the Project to listed eiders would be insignificant and/or discountable because 1) the Project would not affect nesting listed eiders; 2) listed eiders generally stay offshore and are rare in the Action Area; and 3) if listed eiders were present in the Action Area, they are expected to respond to disturbances by departing the area. Responses are expected to be minor and temporary and not result in the injury or death of any listed eiders.

Summary

This concludes informal consultation pursuant to the regulations implementing the ESA (50 CFR 402.13). Reinitiation of consultation is necessary if (1) any take of listed species occurs; (2) new information reveals effects of the action that may affect listed species or critical habitat in a

manner or to an extent not previously considered; (3) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered during informal consultation or in written concurrence; or (4) a new species is listed or critical habitat designated that may be affected by the identified action.

Thank you for your cooperation in meeting our joint responsibilities under the ESA. If you have any questions or comments regarding this letter, please contact Annie Maliguine at Anastasia_Maliguine@fws.gov and refer to project code 2025-0134615.

Sincerely,

Holly Carroll
Acting Field Supervisor
Northern Alaska Fish and Wildlife Field Office

cc:

NANA, Project Superintendent, Anchorage, AK, (Jason Louvier) (Jason.Louvier@nana.com)
NTIA, Environmental Program Officer, Washington, D.C. (Amanda Pereira) (apereira@ntia.gov)
NTIA, Permitting Coordinator, Washington, D.C. (Juan Nunez) (jnunez@ntia.gov)
USFWS Selawik National Wildlife Refuge, Refuge Manager, Selawik, AK (Wil Wiese) (wilhelm_wiese@fws.gov)
USFWS Alaska Regional Office, Regional Threatened and Endangered Species Coordinator, Anchorage, AK (Nichole Bjornlie) (nichole_bjornlie@fws.gov)
Bureau of Land Management Anchorage Field Office, Field Manager, Anchorage, AK, (Jacob Vialpando) (jvialpando@blm.gov)
Permitting Council, Senior Infrastructure Project Advisor, Washington, D.C. (Cori Carraway) (cori.carraway@permitting.gov)
First Responder Network Authority, Director of Environmental Compliance and Federal Preservation Officer, Chicago, IL (Andrew Bielakowski) (andrew.bielakowski@firstnet.gov)
Kuna Engineering, Director, Anchorage, AK (Ryan Cooper) (rcooper@kunaeng.com)
Kuna Engineering, General Manager, Anchorage, AK (Matt Narus) (mnarus@kunaeng.com)
NANA, Director of OSP Engineering and Field Operations, Anchorage, AK (Travis Stubblefield) (travis.stubblefield@nana.com)
NANA, Senior Attorney, Anchorage, AK (Marla Quick) (marla.quick@nana.com)

Literature Cited

ABR, Inc. 2025. NANA Regional Middle Mile Fiber Optic Project Biological Assessment for U.S. Fish and Wildlife Service Consultation. Prepared on behalf of: National Telecommunications and Information Administration. August 2025.

Durner, G.M., Amstrup, S.C., Atwood, T.C., Douglas, D.C., Fischbach, A.S., Olson, J.W., Rode, K.D., and Wilson, R.R. 2020. Catalogue of polar bear (*Ursus maritimus*) maternal den locations in the Beaufort and Chukchi Seas and nearby areas, 1910–2018: U.S. Geological Survey Data Series 1121 [Supersedes USGS Data Series 568].

Petersen, M. R., W. W. Larned, AND D. C. Douglas. 1999. At-sea distribution of spectacled eiders: a 120-year-old mystery resolved. The Auk 116:1009–1020.

Rode, K. D., R. R. Wilson, E. V. Regehr, M. S. Martin, D. C. Douglas, and J. Olson. 2015. Increased land use by Chukchi Sea polar bears in relation to changing sea ice conditions. PLoS ONE 10:e014221.

U.S. Fish and Wildlife Service (USFWS). 2016. Polar bear (*Ursus maritimus*) Conservation Management Plan. U.S. Fish and Wildlife, Region 7, Anchorage, Alaska, USA.

Best management practices to minimize impacts to polar bears

USFWS Marine Mammals Management

Polar bears are protected under the Marine Mammal Protection Act (MMPA) and were listed as a threatened species under the Endangered Species Act (ESA) in 2008. The MMPA and ESA both prohibit the "take" of polar bears with limited exceptions, such as for authorized incidental take and when necessary for human safety. Take includes disturbing, injuring, and killing polar bears.

Polar bears use sea ice, marine waters and terrestrial areas in northern and northwestern Alaska for resting, feeding, denning, and seasonal movements. They are most likely to be encountered within 25 miles of the coastline, especially along barrier islands during July–October. Polar bears may also be encountered farther inland, especially females during the denning period (November-April). Be aware that polar bears also occur within human settlements such as villages, camps, and work areas.

This document lists best management practices the Service recommends to minimize the risk of human activities causing adverse impacts to polar bears, as well as polar bear encounter guidelines and reporting procedures. Following as many relevant measures as possible through the development and implementation of a polar bear avoidance and encounter plan will help protect both human and bear safety. Adherence to measures does not, however, absolve personnel of responsibility if they take (harass, harm, capture, or kill) a polar bear in violation of the Marine Mammal Protection Act. If you have questions about any best management practices or how they might be implemented in specific scenarios, please contact USFWS Marine Mammals Management (MMM) at FW7_AK_Marine_Mammals@fws.gov, 907-786-3800, or 800-362-5148.

Contents

Best practices for avoiding polar bear encounters and impacts to bears

Project siting and timing

- Avoid siting projects in polar bear high-use areas to the maximum extent practicable. High-use areas include all land within 2 km (1.2 miles) of the Chukchi and Beaufort Sea coasts. Polar bears are most likely to be encountered along coastal movement corridors along the Beaufort Sea coast between July and October. Polar bears may congregate near coastal communities in September and October when remains of subsistence-harvested whales are present. If coastal siting is unavoidable, maintain an open transit corridor for bears that is free of human presence and activity to help avoid conflict.
- Avoid establishing infrastructure in or near polar bear denning habitat (see USGS habitat maps: https://alaska.usgs.gov/data/polarBear/denHabitat/polarBear_denHabitat_allACP) and avoid undertaking activities in or near polar bear denning habitat between November and April.
- Be vigilant for sows with cubs during the den emergence period (March–May) in inland as well as coastal areas.
- Polar bears typically rest during day and become more active during dusk, night, or dawn. Plan activities with this in mind.

Den detection and avoidance

- Aerial infrared (AIR) surveys can locate polar bear dens that can then be avoided between November and April to prevent disturbance to denning bears. Anyone planning industrial operations or other activities involving large human presence or equipment between November and April and within 25 miles of the Bering, Chukchi, or Beaufort coasts (outside of communities) should contact Marine Mammals Management to determine if completing one or more AIR surveys is necessary to lower the risk of impacts to denning bears.
- Avoid any activities within one mile of known or suspected polar bears dens, including dens encountered in the course of activities. Locations of known or suspected polar bear dens can be obtained from MMM. Report any observed polar bear dens to the MMM Regulatory Program at FW7_MMM_Reports@fws.gov as soon as possible and within 24 hours of discovery. Should occupied dens be identified within one mile of activities, cease work in the immediate area and immediately contact MMM for guidance before proceeding with activities. The Service will evaluate these instances on a case-by-case basis and determine the appropriate action.
- During transit off of ice roads and established tundra travel routes, personnel in potential denning areas should constantly be on the lookout for signs of denning (e.g., piles of snow from den excavation, tracks) between November and April. Use vehicle-based forward looking infrared cameras to scan for dens when possible. Personnel should avoid crossing topographic features suitable for denning, such as riverbanks and along bluffs.

Avoiding impacts to sows and cubs after den emergence

- If a sow and cubs of the year are seen, cease operations within a 1.6 km (1 mi) exclusion zone and notify the Service at 800-362-5148 (or 907-786-3800) and FW7_MMM_Reports@fws.gov. Any operations in between the sow/cubs and the shoreline must be notified, and the bears must be provided a clear and unimpeded path to the sea ice through coordination with bear monitors.

Attractants management

- Be aware that garbage, food, deliberate feeding, animal carcasses, chemicals, petroleum products, sewage, and grey water can attract polar bears. Polar bears are curious and may also be attracted to novel or unfamiliar items (e.g., plastic objects, snowmachines).
- Incinerate garbage and food waste at work sites as frequently as possible. Locate incinerators outside of living areas. If incineration is not an option, store wastes as described below and remove them from site (e.g., fly them out) as frequently as possible.
- Store attractants in a manner that minimizes odors and prevents access by bears. Use bear-resistant storage containers and waste receptacles. Containers should be approved and certified by the Interagency Grizzly Bear Committee as "bear-resistant" (see information at http://www.igbconline.org/html/bear-resistant-products). Always store food away from living quarters.
- Maintain clean work areas and/or camps.
- Clean any fuel spills or spills/leaks of other chemicals or toxic materials properly and immediately, even if they are small.
- When travelling, avoid carrying strongly scented attractants or store them in air-tight containers to minimize odor transmission, and consume food in enclosed and secure areas whenever possible.

Bear avoidance, detection, and deterrence protocols

- Establish specific protocols to minimize the risk of encounters and maximize human and animal safety if an encounter does occur. These should include such measures as:
    - regular on-site safety discussions
    - using the buddy system for activities away from buildings or outside fences
    - being vigilant, traveling in groups, and making noise to avoid surprise encounters
    - using bear detection tools/methods including human monitors or "bear guards", physical barriers, trip wire systems, alarms, and/or motion detectors/cameras
    - establishing a notification system/communication plan (e.g., using radio, blow horns, or sirens) to alert workers of a polar bear in the area and contact outside help if needed (e.g., by satellite phone)
    - designating safe area(s) to gather if a bear approaches work areas

  Additional precautions should be taken on barrier islands, in river drainages, along bluff habitat or ice leads/polynyas, near whale or other marine mammal carcasses, or in the vicinity of fresh tracks. For example, prior to landing/docking on barrier islands or other coastal areas, survey the area to ensure polar bears are not present.

- Prepare bear deterrence plans to implement if a polar bear approaches and must be hazed to protect workers and property. The Service has issued Polar Bear Deterrence Guidelines (link to notice: https://www.federalregister.gov/documents/2010/10/06/2010-25044/marine-mammal-protection-act-deterrence-guidelines) that describe passive and preventative deterrence measures that do not require advance training. These include tools such as loud acoustic devices, air horns, electric fencing, or using a vehicle or boat to block an approaching bear. Bear spray is another effective preventative deterrence tool for individuals informed in its proper use. Use of more advanced deterrence methods, such projectiles from a firearm (e.g., pepper balls, cracker shells, bean bags, rubber bullets) requires appropriate specialized training, and the Service may provide a Letter of Authorization for Intentional Harassment for projects intending to use advanced deterrence. Contact MMM for additional information on the Service's Bear Safety and Bear Deterrence Specialist training and intentional harassment authorization.
    - If deterrence plans include use of a firearm by a Service-approved bear deterrence specialist, make sure plans identify how rounds will be handled to prevent mixing of lethal and less-lethal rounds.
- If working near a North Slope Borough community, reach out to the North Slope Borough Department of Wildlife Management (phone: (907) 852-0350) for information on recent polar bear activity in the area to inform avoidance plans.

Information and measures in the Polar Bear Encounter Guidelines section of this document should be incorporated into encounter and deterrence protocols

Personnel training materials and procedures

- Ensure all personnel working in polar bear habitat receive appropriate safety training, including education on site-specific protocols. Depending on individual duties and activities, this may include Bear Safety Training from the Service or the Alaska Department of Fish and Game.
- Any personnel that may need to deter an approaching polar bear should receive training in use of deterrents, including hands-on practice. Training from the Service or Service-approved trainers is critical for individuals planning to use advanced hazing tools (e.g., projectiles from a firearm or approaches with vehicle).
- Share or publicly post materials on bear safety and encounter protocols at work sites.
- Complete on-site polar bear safety drills.

Industrial infrastructure: site design and snow and lighting management

- For industrial infrastructure, ensure good visibility in all work site locations though facility layout and lighting. All personnel areas, including entrances, should be illuminated during working hours. Waste-management areas and pedestrian traffic areas should be particularly well-lit.

- Exterior doors should open outward, and there should be windows in or near exterior doors so personnel can look for polar bears before exiting a building. To limit risk of bears entering buildings, use oval-shaped versus handle-type knobs on exterior doors. Prevent snow from piling up below windows if it could allow a bear to climb and enter the building through the window. Grates on windows (in compliance with fire codes) are recommended to limit potential entry by bears.
- Take measures to prevent snow drifts from forming around elevated structures (including roads and pads), as they may obstruct visibility or attract bears as denning habitat. Prevailing wind directions and resulting drift should be considered when placing barriers or storing materials. Establish protocols to remove accumulated snow from infrastructure, as needed, and consider the need to maintain visibility when placing snow berms.
- Minimize the potential for polar bear concealment. Arrange any objects outdoors in a way that reduces or eliminates spaces where a polar bear could be concealed. Where practicable, install skirting under elevated buildings, cap off stored pipes, block culverts in the winter, surround equipment storage areas with fencing, and place gates or other barriers on stairwells.
- Avoid creating corners and areas where bears may feel trapped or workers may become trapped by a bear.
- Minimize outdoor storage and rearrangement of outdoor objects, which may attract curious polar bears.
- If work and camp activities are co-located (e.g., on a pad) ensure living quarters are centrally located.
- Use electric or other fences that exclude bears from work and living areas, but recognize that fences are not fail-safe and awareness within or outside fences is necessary.
- If full illumination of a work site is not possible, monitoring by a bear guard using infrared night-vision cameras or binoculars may be sufficient to detect approaching bears. Contact MMM if you are considering infrared night-vision monitoring.

<u>Remote field camp safety practices</u>

- Minimize and prevent access to attractants. Store food, garbage, and other attractants in a manner that minimizes odors and prevents access by bears. Do not allow any bears to receive a food reward in a camp. Use containers approved and certified by the Interagency Grizzly Bear Committee as "bear-resistant" to store food, garbage, and other attractants (see attractant section above).
- Use an electric fence or alarm system as additional campsite protection.
- Avoid camping or lingering in bear high-use areas such as river drainages, coastal bluffs and barrier islands, or along ice leads/polynyas. Do not camp within one mile of river drainages with steep banks and bluffs during denning season (November-April).
- Along the Beaufort and Chukchi coasts, locate overnight camps inland. Based on known patterns of land use by polar bears, camping just a mile or two inland will dramatically decrease the chance a camp will be in the path of a polar bear. Be aware, however, that camping inland or along the coast can result in an encounter with a grizzly bear, so take bear conflict-avoidance precautions regardless of camping location.

Watercraft operations

- Be especially vigilant for swimming polar bears when vessels are underway. If a bear is encountered while a vessel is in transit, allow the bear to continue unhindered: reduce speed, monitor the bear's movement, and without making sudden changes to travel direction, move away from the area. Avoid traveling in the same direction as the bear. Never approach, herd, chase, or attempt to lure a bear.
- Reduce speed and avoid sudden changes in travel direction when visibility is low.
- Vessels should maintain the maximum distance possible from polar bears. Under no circumstances, other than an emergency, should any vessel deliberately approach within an 805-m (0.5-mile) radius of polar bears observed on land or ice.
- For vessel operations in polar bear habitat, ensure the vessel crew has access to a deterrence tool for polar bears (e.g., bear spray, cracker shells or other projectiles) as a safety measure in case the vessel becomes stuck in sea ice or otherwise loses mobility.

Aircraft operations (including unmanned systems/drones):

- Pilots of all aircraft types (fixed wing, helicopters, and drones) should fly at the maximum distance possible from concentrations of polar bears. While operating in polar bear habitat, aircraft should maintain an altitude of 1500 ft (457 m) above ground level when operationally possible; drones that must operate at lower altitudes should maintain the highest altitude operationally possible. Under no circumstances, other than an emergency, should aircraft operate at an altitude lower than 1500 ft within 0.5 mi (805 m) of polar bears observed on ice or land.
- When weather conditions do not allow a 1500 ft flying altitude, such as during severe storms or when cloud cover is low, aircraft may be operated below this altitude. However, when lower flight is necessary, the operator should avoid areas of known concentrations of polar bears and should take precautions to avoid flying directly over or within 0.5 miles (805 m) of these areas. Operators should stay aware of bear congregation sites near their work areas through communication with the Service and regional and local bodies (e.g., the North Slope Borough Department of Wildlife Management, community councils). Note that Barter Island and Cross Island are consistent bear concentration areas.
- Aircraft should avoid performing any evasive and sudden maneuvers, especially when traveling at lower altitudes. Avoid circling, turning, or hovering aircraft within 0.5 mi (805 m) of polar bears or in known polar bear concentration areas.
- If a polar bear is spotted within a landing zone or work area while an aircraft is in flight, aircraft operators should travel away from the site, and if flying at a lower altitude, slowly increase altitude to 1500 ft (or a level that is safest and viable given current traveling conditions). Except in emergency situations, do not land aircraft within 0.5 mile of a polar bear.
- If a polar bear is observed while an aircraft is temporarily grounded, personnel should board the aircraft and leave the area. The pilot should also avoid flying over the polar bear.
- Do not operate aircraft in such a way as to separate individual members of a group of polar bears from each other.

- USFWS MMM may provide more specific guidance for particular types of aircraft or operations (e.g., for specific uses of drones). Contact MMM with questions at FW7_AK_Marine_Mammals@fws.gov or 907-786-3800.

Polar bear encounter guidelines

The general strategy for minimizing human-bear conflicts is to: 1) be prepared; 2) avoid encounters; and 3) know how to respond if an encounter occurs. Preparation and avoidance measures—which include avoiding high-use areas, minimizing attractants, developing a human-bear safety plan, preventing surprise encounters, carrying deterrents and practicing using them—are all described above. Guidelines for encounters are listed in this section. These encounter guidelines are based on up-to-date, expert assessment of polar bear incidents and practices that minimize negative outcomes.

Note that polar bears react differently to human presence depending on a variety of biological and environmental factors, as well as their previous experience with humans. Hungry (skinny) bears can be particularly dangerous.

If a polar bear is encountered:

- Prepare deterrent(s). Do not run from or approach polar bears. If the bear is unaware of human presence, allow it to continue what it was doing before it was encountered. Move to safe shelter (e.g. vehicle or building) if available and wait until it is safe to proceed.

- Group up. If no safe shelter is available, group up with others and stand positioned to allow for safe deployment of deterrents (e.g. firearm, pistol launcher, bear spray) – until the bear leaves.

- Observe bear behavior. Polar bears that stop what they are doing to turn their head or sniff the air in your direction have likely become aware of your presence. These animals may exhibit various behaviors:

  - C*urious* polar bears typically move slowly, stopping frequently to sniff the air, moving their heads around to catch a scent, or holding their heads high with ears forward. They may also stand up.
  - *A threatened or agitated* polar bear may huff, snap its jaws together, stare at you (or the object of threat) and lower its head to below shoulder level, pressing its ears back and swaying from side to side.
  - A *predatory* bear may sneak up on an object it considers prey. It may also approach in a straight line at constant speed without exhibiting curious or threatened behavior.

If a polar bear approaches you or your camp:

- Defend your group/camp. Any bear that approaches within range of your deterrents should be deterred. Stand your ground; do not run. Defend your group or camp, increasing the intensity of your deterrence efforts as necessary. Start with the least aggressive options, such as using noisemakers, yelling or clapping, or deploying air horns. Recent work has found bear spray to be an effective deterrent against polar bears, even under high wind scenarios. With wise use of deterrents, your group may be able to de-escalate the incident by keeping bears from making contact with site items, and by eventually increasing distance between you and the bear. Be aware that lethal take of polar bears is permissible if such taking is imminently necessary in defense of human life. Defense of life kills must be reported to the Service within 48 hours.

- If bear makes physical contact, fight back. If deterrence/lethal efforts have failed and a polar bear attacks (makes physical contact), **do not "play dead"**. Fight back using any deterrents available, aiming fists or objects at the bear's nose and face.

If defense of life becomes necessary:

- Defense of life kills are only allowed in self-defense or to save the life of a person in immediate danger. All defense-of-life kills of polar bears must be reported to the Service within 48 hours. Report to USFWS Marine Mammals Management (email FW7_MMM_Reports@fws.gov and/or call 1-800-362-5148). Events in the Arctic National Wildlife Refuge may alternatively be reported by calling the Arctic National Wildlife Refuge Manager at 1-800-362-4546 or by calling (907) 883-9409 and speaking to a law enforcement officer. If you send an email or leave a message, provide your name, contact info, and location so you can be reached to provide additional information about the incident.
- You will be required to document the circumstances leading up to, and immediately surrounding, the death of the bear, including documentation of the preventative methods you used to de-escalate the conflict in advance of killing the bear.
- The shooter may be required to transfer the carcass (including hide and skull) to a law enforcement officer or designated local representative. The shooter is responsible for the carcass once the bear is killed (it cannot be abandoned).
- The shooter may not keep any parts of the animal unless authorized by the US Fish and Wildlife Service.

Reporting

The Service requests that any polar bears sighted during activities are reported to FW7_MMM_Reports@fws.gov. Reports are mandatory if polar bears are harassed or harmed in an incident, and all sighting reports are helpful. Any injury or death of a bear related to human activities must be reported as soon as possible and no later than 48 hours after occurrence, as described in the defense of life section above. Please include as much of the following information as possible in reports:

- Date, time, and location of the polar bear observation
- Number of individual polar bears by sex and age, if possible
- Observer name and contact information
- Weather, visibility, and ice conditions at the time of the polar bear observation
- Estimated closest point of approach for the polar bear from personnel and facilities/equipment
- Project activity at time of the polar bear observation and possible attractants if present
- Polar bear behavior
- Description of the encounter with the polar bear. A full written description, including the duration of encounter and all actions taken to minimize harassment or harm to the bear, is required when a human-bear interaction occurs.
- In cases involving aircraft or vessels:
    a. Aircraft or vessel heading
    b. Aircraft or vessel speed
    c. Aircraft altitude
    d. Initial behaviors of the polar bear before responding to the aircraft or vessel
    e. A description of any apparent reactions from the polar bear to the aircraft or vessel
- If injured, distressed, or dead polar bears are observed that not associated with project activities (e.g., found outside the project area, previously wounded polar bears, or carcasses), please report this information to the Service as soon as possible at 1-800-362-5148 and FW7_MMM_Reports@fws.gov. The following website has instructions for reporting found polar bear remains: https://www.fws.gov/polar-bear-dead. Photographs, video, location information, or any other available documentation is very helpful for all reports.

Appendix O12 – Essential Fish Habitat Letter of Concurrence

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, AK 99802-1668

August 15, 2025

Amanda Pereira, Environmental Program Officer
National Telecommunications and Information Administration
Office of Internet Connectivity and Growth
1401 Constitution Ave., NW, Room 4878
Washington, DC 20230

Re: NANA Regional Middle Mile Fiber Optic Project; NMFS ECO Reference No. AKRO-2025-02339

Dear Ms. Pereira:

The National Marine Fisheries Service has reviewed the essential fish habitat (EFH) assessment provided on August 11, 2025, regarding the above referenced project. The purpose of this project is to install approximately 660 miles of fiber optic cable to provide internet service to eight remote communities in northwest Alaska. The proposed scope of work includes ground-laid fiber optic cable, aerial transmission, and horizontal directional drilling. The cable will be installed within freshwater and marine EFH.

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act and the Fish and Wildlife Coordination Act require Federal agencies to consult with us on all actions that may adversely affect EFH and other aquatic resources. The EFH consultation process is guided by the regulation at 50 CFR 600 Subpart K, which mandates the preparation of EFH assessments and outlines each agency's obligations. In support of this consultation process, you provided a notice of the proposed action, an assessment of effects, and your agency's conclusion regarding impacts on EFH. We offer the following comments on this project.

Essential Fish Habitat

The North Pacific Fishery Management Council has identified EFH for nearshore marine waters in the vicinity of the project footprint's marine component to include EFH for Chinook, chum, pink, sockeye, and coho salmon (NPFMC 2024a). Juvenile salmon use nearshore habitat during spring and early summer for feeding and predator avoidance prior to migration out to sea. Designated EFH for Pacific salmon also includes freshwater habitat supporting egg, larval, and juvenile life stages (NPFMC 2024a). The Alaska Department of Fish and Game's Anadromous Waters Catalog identifies streams and rivers within the project footprint as supporting anadromous fish, including Chinook, chum, pink, sockeye and coho salmon (Giefer & Graziano 2024).

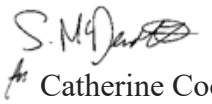
The proposed project location is designated as EFH for several species of groundfish or crab (NPFMC 2024b). In addition, the Nearshore Fish Atlas of Alaska (NMFS 2021) indicates that species utilizing nearshore habitat in the vicinity of the project include: starry flounder, Pacific herring, and least cisco.

Assessment of Effects to EFH

Your agency has concluded that the proposed project activity may adversely affect EFH in the project area. You also concluded those effects would be minimal and temporary in nature. Federal regulations define an adverse effect as "any impact which reduces the quality and/or quantity of EFH" (50 CFR 600.810(a)). Based on our review of the project plans and the information provided, we agree with your conclusion of effects. Potential adverse effects to EFH can be mitigated if your identified mitigation measures and best management practices are implemented. Therefore, we have no conservation recommendations for the proposed action and additional EFH consultation is not necessary.

Significant changes to the project may require reinitiating a consultation. Additional information regarding the EFH consultation process can be found in our EFH Fact Sheet and our Regional website, where you can find FAQs. Lucas Byker (lucas.byker@noaa.gov) is available to answer questions or discuss further actions.

Sincerely,



Catherine Coon
Assistant Regional Administrator
Habitat Conservation

cc: Ryan Cooper, rcooper@kunaeng.com
Jason Louvier, Jason.louvier@nana.com
Travis Stubblefield, travis.stubblefield@nana.com

References

Giefer, J., and S. Graziano. 2024. Catalog of waters important for spawning, rearing, or migration of anadromous fishes – Western Region, effective June, 2024, Alaska Department of Fish and Game, Special Publication No. 24-06, Anchorage.

National Marine Fisheries Service (NMFS). 2021. NOAA Fisheries Nearshore Fish Atlas of Alaska database (alaskafisheries.noaa.gov/mapping/sz/index.html?tab=fa).

North Pacific Fishery Management Council (NPFMC). 2024a. Fishery Management Plan for the Salmon Fisheries in the EEZ off Alaska. Anchorage, Alaska, North Pacific Fishery Management Council. https://www.npfmc.org/wp-content/PDFdocuments/fmp/Salmon/SalmonFMP.pdf

North Pacific Fishery Management Council (NPFMC). 2024b. Fishery Management Plan for Fish Resources of the Arctic Management Area. Anchorage, Alaska, North Pacific Fishery Management Council. https://npfmc.b-cdn.net/wp-content/PDFdocuments/fmp/Arctic/ArcticFMP.pdf