

Appendix L – ANILCA 810

ANILCA Section 810 Analysis

NANA Region Middle Mile Fiber Optic Project

Northwest Arctic Borough, Alaska



List of Acronyms

ANILCA	Alaska National Interest Lands Conservation Act
BLM	Bureau of Land Management
EA	Environmental Assessment
FOC	fiber optic cable
HDD	Horizontal Directional Drilling
NEPA	National Environmental Policy Act
NPS	National Park Service
NTIA	National Telecommunications and Information Administration
Project	NANA Region Middle Mile Fiber Optic Project
USFWS	U.S. Fish and Wildlife Service

1 Background

The Alaska National Interest Lands Conservation Act (ANILCA, Public Law 96-487) established protections for millions of acres of federally owned or managed land in Alaska, including lands managed by the National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), and Bureau of Land Management (BLM).¹ When a proposed action involves withdrawal, reservation, lease, or otherwise permission to use, occupy, or dispose of public lands (such as issuance of a right of way, lease, or other permit), Section 810 of ANILCA requires evaluation of the effect of the proposed action and each alternative on subsistence uses (Evaluation). Such an Evaluation must conclude with a finding that the proposed action and alternatives may, or will not, significantly restrict subsistence uses for identified subsistence communities or groups (Finding). A Finding that the proposed action *may* significantly restrict requires that the agency proceed to a notice and hearing; whereas a Finding of no significant restriction completes the ANILCA Section 810 process.

¹ As relevant here, “public lands” pursuant to ANILCA “means land situated in Alaska which, after December 2, 1980, are Federal lands, except--(A) land selections of the State of Alaska which have been tentatively approved or validly selected under the Alaska Statehood Act and lands which have been confirmed to, validly selected by, or granted to the Territory of Alaska or the State under any other provision of Federal law; (B) land selections of a Native Corporation made under the Alaska Native Claims Settlement Act [ANCSA] which have not been conveyed to a Native Corporation, unless any such selection is determined to be invalid or is relinquished; and (C) lands referred to in section 19(b) of [ANCSA].” As codified, section 19(b) of ANCSA addresses acquisition of title to surface and subsurface estates in reserve, as well as the election(s) of Village Corporations.

2 Overview of the Proposed Action and Alternatives

The NANA Region Middle Mile Fiber Optic Project (Project) is utilizing federal funds provided by the National Telecommunications and Information Administration (NTIA) for a project that is proposed to cross lands managed by the BLM and USFWS. The purpose of the project is to develop infrastructure that would provide broadband high-speed internet to the communities of Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Noatak, and Shungnak. An Environmental Assessment (EA) has been prepared to fulfill the obligations under the National Environmental Policy Act (NEPA), and this ANILCA Section 810 analysis has been prepared in conjunction with the NEPA process in accordance with Section 810 procedural requirements.

The proposed action includes the construction, operation and maintenance, and decommissioning of a fiber optic cable network across northwest Alaska. The Project would install 670-680 miles of fiber optic cable (FOC). The Project will primarily utilize surface-laid terrestrial FOC with strategic subsea, aerial, horizontal directionally drilled (HDD), and trenched segments where necessary for system integrity, resident safety, and environmental protection. In addition to connecting the communities of Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Noatak, and Shungnak, the proposed project would also connect to Kotzebue, Noorvik, and Selawik.

Construction of surface-laid FOC segments would occur primarily in the winter. Construction crews would traverse the route with low-ground pressure vehicles including tractors, dozers, and snowmachines and pull sleighs with fiber optic cable, fuel, and living quarters for the crew. Cable would be laid across the ice over most wetlands, streams, rivers, and lakes. Heavy “boxes” would be placed on top of the ground at water body crossings and at least every 6000 feet along the line to anchor the FOC in place. Vegetation above the level of the snow, including shrubs and trees, would be cleared to allow for the passage of equipment.

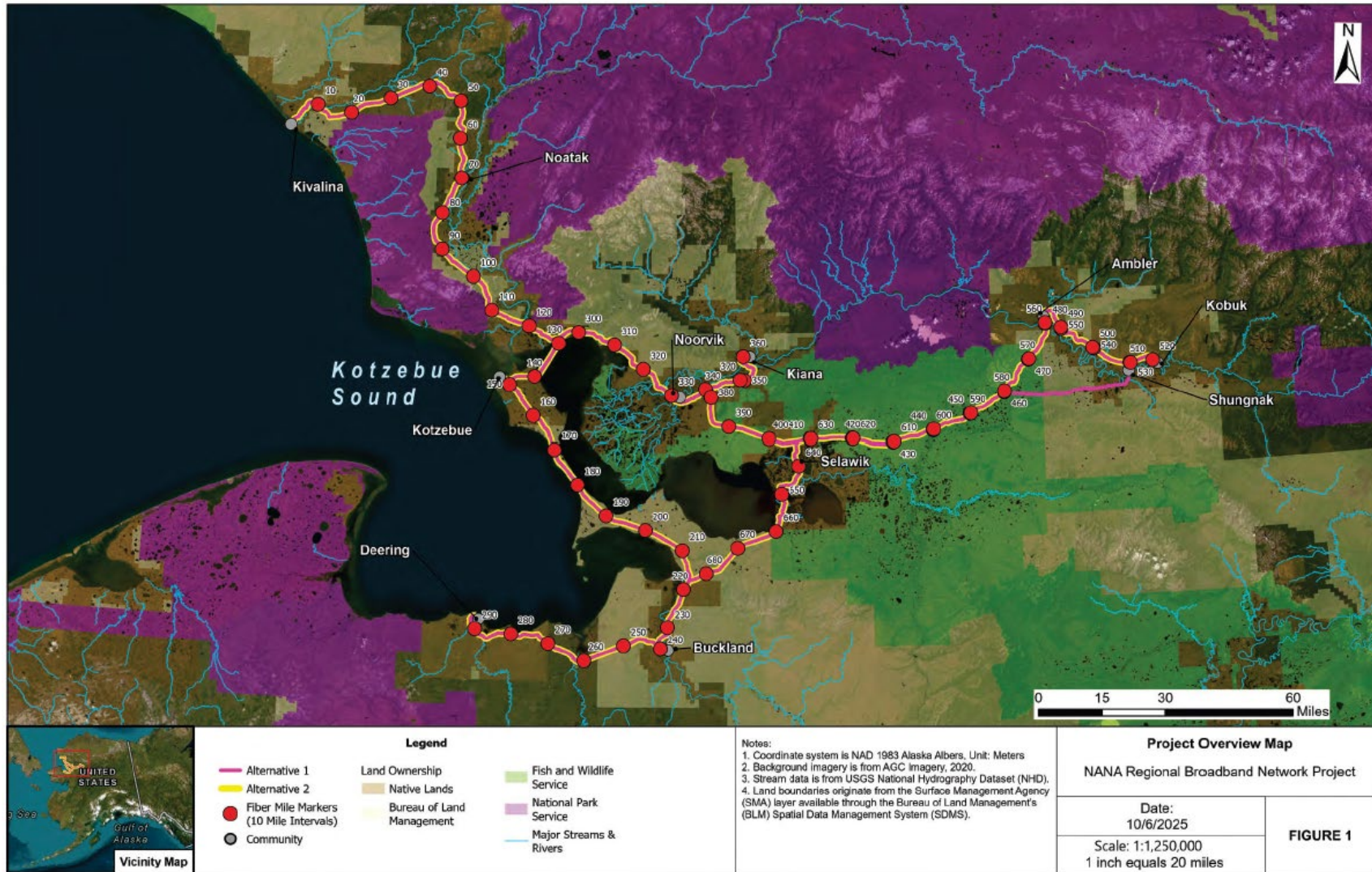
Construction of some aerial river crossings and HDD crossings would occur during the summer. Equipment and personnel would access crossing locations via barge. At aerial crossings, equipment would be used to clear vegetation along the banks and to bore holes for placement of support poles. One to three poles on either side of the river would be used to support the FOC, which would be strung across approximately 20 feet above the water level. At HDD crossings, equipment would be used to bore underneath the river channel.

After construction is completed an inspection of the FOC would occur during the summer. Crews would access the route via helicopter and walk sections of the line. In subsequent years, annual overflights would occur via helicopter to inspect the FOC and other infrastructure. If breaks in the line occur, access to the area would be via helicopter or snowmachine and new sections of line would be spliced in around the break. If major repairs are needed to the line or other infrastructure, equipment and methods similar to those used during construction would be used.

The FOC and anchor boxes would be left in place when the network is decommissioned. Poles and support infrastructure at river crossings would be removed.

Two alternative routes are being evaluated for the project that use BLM and USFWS lands. In Alternative 1, a “loop” would be used between Ambler, Shungnak and Selawik. Alternative 2 is routed similarly to Alternative 1, however no loop would occur, eliminating a 19-mile-long ROW corridor west of Shungnak. Additionally, a No Action Alternative is being evaluated.

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Map of ownership and proposed fiber optic cable route connecting communities of Kotzebue, Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Noatak, Noorvik, Selawik, and Shungnak.

3 Evaluation

3.1 Factor 1: Evaluate the effect of the proposed action and alternatives on subsistence use and needs.

Evaluation of the effects of the proposed action is focused on the 11 communities within the northwest arctic Alaska region that would be connected by the FOC route, including Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Kotzebue, Noatak, Noorvik, Selawik, and Shungnak. All of the communities are highly dependent on subsistence to meet their nutritional, cultural, social, spiritual, and economic needs. Over three-quarters of households in all of the communities either gave or received subsistence resources during the most recent study year.

Subsistence use areas for the 11 communities extend across a large area and encompasses the entirety of the Project area. Generally, Kobuk River communities focus their hunting activities along the Kobuk River and in overland areas extending north and south of the river and around other communities in the region. Kotzebue Sound communities have a greater focus on marine uses, with subsistence activities occurring throughout Kotzebue Sound and into the Chukchi Sea; however, these communities also use local river systems, including the Kobuk and Noatak rivers, to hunt caribou and other large land mammals and to harvest fish, berries, and other resources. Kivalina subsistence uses occur primarily in the Chukchi Sea and in and around the Wulik and Kivalina rivers. Selawik subsistence users use lands and waters of the Selawik River, Selawik Lake, and Kobuk Delta drainages. Subsistence users in Buckland and Deering use waters of Kotzebue Sound, Eschscholtz Bay, and local rivers, and lands to the south, east and west of their communities.

Overall, the seasonal pattern of subsistence use is similar between communities in the region, with residents targeting the most subsistence resources during the summer (June through August) and fall (September and October) months when fishing and hunting of large land mammals and marine mammals are at their peak. All communities report overland uses during the winter months, when they travel by snowmachine to hunt caribou, furbearers, and small game. Other winter subsistence activities include ice fishing and cutting firewood. The early spring months are a transitional time when residents continue to engage in key winter activities (e.g., hunting and trapping small land mammals and furbearers, caribou, and ptarmigan) while also preparing for the upcoming spring harvests. Spring (April/May) subsistence activities include ice fishing and migratory bird hunting. Marine mammal hunting begins in the spring and continues through the summer. Other summer activities include fishing, berry picking, and harvesting birds and bird eggs.

Presence of the fiber optic cable and associated infrastructure on the landscape is not expected to substantially affect distribution and abundance of subsistence resources and access to subsistence resources. The cable is likely to be largely unnoticed by most subsistence species. Overland sections of cable and anchors would be buried by snow in the winter and would not affect ability to travel via snowmachine. Aerial crossings would be visible to subsistence users in all seasons but would not impede access as lines would be high enough to allow for travel underneath by boats and snowmachines. Aerial lines and support structures could result in some mortality of migratory birds, however impacts would be mitigated through following best management practices. Intentional and unintentional alterations to habitats from cutting/mowing of woody vegetation and impacts of overland vehicle travel are not expected to substantially effect the abundance or distribution of subsistence species. In some places removal of vegetation could create additional access corridors for travel by snowmachine by subsistence users.

Winter construction would occur within the wintering range of the Western Arctic Caribou Herd and during a time period when subsistence users harvest caribou. Winter construction activities could temporarily displace caribou and other subsistence wildlife species from areas, however no substantial change to the overall distribution or abundance of caribou and other wildlife is expected as mobile construction camps would represent points of activity within a large area of available habitat. The snow “trail” and presence of the cable left behind from construction would not be expected to impact the distribution of caribou or other wildlife. Subsistence hunters may experience minor and temporary reductions in access as they avoid construction activities.

Summer construction activities along water bodies, including transporting of equipment, horizontal directional drilling, and aerial crossing construction, would temporarily affect abundance and distribution of fish and wildlife and would temporarily affect access to areas for subsistence use. Effects would be minor and of short duration as construction at a single location is expected to last less than a week.

Subsistence users in the region have expressed concerns over the effects of helicopters and other low flying aircraft on migration of caribou. Routine helicopter overflights would be scheduled for summer, when caribou are largely absent from the project area. However, repairs could be required at any time of year, and helicopter use could temporarily displace caribou or other subsistence resources and impact subsistence users’ access to resources. Repairs could also require use of methods and equipment similar to those used during construction, and effects on subsistence resources and users would be expected to be similar to those of construction. A minor and temporary limitation on the access of subsistence users to harvestable resources may occur in limited areas for short-term periods during maintenance or repairs.

Comparison of Alternatives

Effects of Alternative 1 and Alternative 2 are similar, except that under Alternative 2 the potential for effects to abundance and distribution of subsistence resources and access to subsistence resources would be reduced by elimination of the 19-mile-long ROW corridor west of Shungnak. Under the No Action Alternative, no direct impacts to subsistence would occur as FWS and BLM would not authorize construction of a fiber optic cable network across Federal lands.

3.2 Factor 2: Evaluate the Availability of Other Lands for the Purposes Sought to be Achieved

Several other alternatives routes were considered to reduce or eliminate use of Federal public lands. NANA Regional Corporation, Inc. (NANA), originally proposed a route that would use submerged lands in State of Alaska managed waters. NANA ultimately applied for rights-of-way for a primarily over-land route, citing concerns over the reliability of a network involving cables submerged in arctic rivers. An overland route paralleling the Kobuk River between Kiana and Ambler, Shungnak, and Kobuk that would cross Kobuk Valley National Park and NANA-owned lands was considered. The route would require use of less federal public lands but was not preferred by NANA due to increased expected cost of constructing in more steep and forested terrain, and additional permitting requirements for crossing National Park Service managed lands. Other adjustments to the route

were considered to avoid federal public lands between Noorvik and Selawik, and between Selawik and Buckland.

3.3 Factor 3: Evaluate Other Alternatives That Would Reduce or Eliminate the Proposed Action from Lands Needed for Subsistence Purposes.

In addition to the alternative routes discussed above, alternative technologies were considered for providing broadband connectivity to communities in the region. Alternative technologies considered include microwave repeater networks and satellite services.

Microwave networks rely on towers placed every twenty to forty miles to relay broadband signal. One microwave tower network is currently operating in the region, and a second is under development. Both networks use Federal public lands for the siting of towers. Microwave signals have limited bandwidth when compared to FOC and it is unclear whether microwave technologies would be able to meet overall demand for connectivity in the long term.

Satellite services, including low-earth orbit or geostationary orbiting satellites could be used to provide internet connectivity without the use of Federal Public lands. However, drawbacks to satellite technologies include potential for providing insufficient bandwidth into the future, higher latency than FOC, and overall limited capacity.

4 Finding

This Evaluation has determined that:

- A significant reduction in subsistence uses from impacts to harvestable resources, habitat or increased competition for resources would not occur;
- A significant reduction in subsistence uses due to changes in the availability of resources caused by an alteration in their distribution, migration, or location would not occur; and
- A significant reduction in subsistence uses due to changes in access to resources would not occur.

Based on review and evaluation of information indicated above, the proposed action will not result in a significant restriction of subsistence uses.