DOWL

MEMORANDUM

To: Alaska Broadband Office

From: Theresa Dutchuk, Project Manager, DOWL

Date: September 4, 2025

Subject: FirstNet PEIS Alaska Region Sufficiency Review Memo

Introduction

In May 2017, the First Responder Network Authority published the Final Regional Programmatic Environmental Impact Statement (PEIS) and Record of Decision (ROD) for the Non-Contiguous United States. The PEIS provided a broad, program-level analysis of potential environmental impacts associated with the nationwide deployment of the FirstNet broadband network for public safety, allowing for consistent and efficient subsequent, site-specific reviews under the National Environmental Policy Act (NEPA).

As a Cooperating Agency on the PEIS, the National Telecommunications and Information Administration (NTIA) is now conducting a revalidation of the analysis in accordance with Section 108 of NEPA, as amended by the Fiscal Responsibility Act of 2023. Section 108 requires re-evaluation of programmatic documents older than five years. NTIA's re-evaluation will describe any changes to the proposed action, regulatory setting, or areas of concern since 2017, and determine whether the PEIS may still be relied upon for subsequent environmental reviews.

Separately, the Alaska Broadband Office (ABO), as an Eligible Entity for the Broadband Equity, Access, and Deployment (BEAD) Program, must satisfy Environmental and Historic Preservation (EHP) Requirement (14) of its Final Proposal. The requirement (14) directs the Eligible Entity to evaluate the sufficiency of the environmental analysis contained in the Alaska Chapter (Volume 1, Chapter 3) of the PEIS. To meet this requirement, ABO has retained DOWL, a qualified NEPA EHP consultant, to conduct the evaluation and prepare this memorandum.

This review evaluates the fifteen resource areas described in the PEIS. For each resource, the memorandum addresses three categories:

1. ***Changes in the Affected Environment (3.1)*** - updates or omissions in the baseline environmental and regulatory context since 2017.
2. ***Changes to the Environmental Impacts of the Project (3.2)*** - *w*hether the impacts analyzed in the PEIS remain accurate and sufficient in light of new information or conditions.
3. ***Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices*** - whether the measures outlined in the PEIS and NTIA's BMP and Mitigation Measures resource remain appropriate or require supplementation with updated guidance.

If categories in the PEIS are sufficient, no additional discussion is provided, noting “no changes identified.” Only categories requiring updates or clarification are addressed in this memorandum. This approach allows efficient adoption by reference of the PEIS, while clearly documenting areas that require updates or additional consideration.

Evaluation

Infrastructure:

Changes in the Affected Environment (3.1)

The following updates are recommended to improve the accuracy of the PEIS infrastructure and public services analysis. These revisions address missing regulatory requirements, update outdated transportation and utility data, and incorporate recent changes to public safety services in Alaska to ensure the affected environment is accurately characterized.

1. 3.1.1.2 Special Regulatory Considerations
    a. The PEIS does not address the requirements of Section 408 of the Rivers and Harbors Act (33 U.S.C. § 408). Section 408 requires U.S. Army Corps of Engineers (USCACE) approval for any proposed alterations, modifications, or occupation of existing USACE civil works projects, such as levees, dams, navigation channels, or other federally authorized infrastructure. If the proposed action would interact with or modify any USACE project features, a Section 408 review and approval process would be triggered and should be documented in subsequent NEPA analysis.
2. 3.1.1.3 Transportation
    a. Airports: A 2023 Federal Aviation Administration fact sheet[1] states that there are 763 registered landing areas (private, public, and military). Of those, 391 are public use airports (282 land-based, 105 seaplane bases, 4 heliports). Of the 391 public use airports, 249 are included in the National Plan of Integrated Airports System, 26 of which hold certificates under FAR Part 139. This data differs from airport data provided in the PEIS. Additionally, the Alaska Aviation System Plan Phase III[2] will be completed in late 2025 or early 2026. Data attributed to this source should be reviewed for accuracy upon issuance.
    b. Waterways and Seaports: The Alaska Ports and Harbors Map[3] published in 2021 on the State of Alaska Geoportal documents more than 55 seaports. The Geoportal should be reviewed, and the number of seaports should be revised to reflect current conditions.

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[1] 2023_Alaskan_Region_Aviation_Fact_Sheet.pdf
[2] Alaska Aviation System Plan - Documents
[3] Alaska Ports and Harbors Map | State of Alaska Geoportal

c. Roads: In 2025, the American Society of Engineers released the Alaska Infrastructure Report Card.[4] This document provides updated data on roads used in the PEIS: Total Road Miles: 17,637 miles; Paved Road Miles: 6,188 miles; Rural Road Miles: 14,578 miles; Urban Road Miles: 3,149 miles. Additionally, the number of bridges in Alaska has increased to 1,685, with 6.4% of bridges in poor condition as of 2024.

3. 3.1.1.4 Public Safety Services
   a. Police Services: The Alaska State Troopers geographic detachments[5] as provided on the Alaska Department of Public Safety website have been reorganized as follows: Detachment A North (HQ Soldotna), Detachment A South (HQ Ketchikan), Detachment B (HQ Palmer), Detachment C (Anchorage), and Detachment D (HQ Fairbanks). Additionally, Figure 3.1.1-2 *Alaska State Trooper Detachment Boundaries and Post Locations* should be updated to reflect this change.
4. 3.1.1.6 Other Utilities
   a. Water and Wastewater Service: In 2019, the Alaska Department of Environmental Conservation provided updated information[6] related to the status of rural Alaska water and sewer system types, necessitating an update to Figure 3.1.1-3 *Rural Alaska Water and Sewer System Types*.

Changes to Environmental Impacts of the Project (3.2)

No changes identified.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Soils:

Changes in the Affected Environment (3.1)

The following updates are recommended to strengthen the soils analysis in the PEIS. These revisions clarify farmland designations in Alaska, ensure impact criteria accurately reflect local conditions, and incorporate consideration of permafrost-related risks that are unique to Alaska's environment.

1. 3.1.2.4 Soil Suborder Characteristics
   a. Slope and Runoff and Erosion Potential: The PEIS correctly notes that prime farmland does not exist in Alaska. However, it should also clarify that farmlands

[4] 2025-alaska-report-card-full-report.pdf.pdf
[5] Detachments - AST - Alaska Department of Public Safety
[6] Alaska Water and Sewer Challenge | AK Dept. of Environmental Conservation

of unique or statewide importance are not present either[7]. Only farmlands of local importance exist in Alaska, and these are limited to the Kenai Peninsula, Matanuska-Susitna Valley, and the Greater Fairbanks area. No national or state designations have been established.

Changes to Environmental Impacts of the Project (3.2)

1. Table 3.2.2-1 *Impact Significance Rating Criteria for Soils*
    a. In the soil erosion row of this table, the PEIS identifies potential impacts to prime or unique farmland. This reference should be removed, as prime or unique farmland does not occur in Alaska and therefore such impacts are not applicable.
2. 3.2.2.3 Description of Environmental Concerns
    a. Soil Erosion: This section would benefit from consideration of permafrost. Because large portions of Alaska's soils are underlain by permafrost, construction activities that disturb or thaw frozen ground can lead to land subsidence, slope instability, and thermokarst development. These impacts differ from short-term surface erosion and may result in more severe, long-lasting soil loss and sedimentation. While the PEIS identifies soil suborders with moderate to severe erosion potential, many of these are directly associated with permafrost regions.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

1. 1.2 Resource Area: Soils
    a. The Soils BMPs provide general erosion and sediment control measures but do not explicitly mention permafrost, which is a defining soil condition in Alaska. While permafrost concerns are addressed under the method-specific terrestrial broadband BMPs, adding a cross-reference or explicit mention in the general Soils section would strengthen the guidance and highlight its relevance across all terrestrial projects.

Geology:

Changes in the Affected Environment (3.1)

The following updates are recommended to ensure the PEIS geology and hazards analysis reflects current data on energy production, seismic activity, landslides, and permafrost-related subsidence.

1. 3.1.3.3 Environmental Setting
    a. Mineral and Fossil Fuel Resources: The PEIS states that Alaska ranked 14th among the 50 states for total energy production in 2014; however, more recent

[7] NRCS Prime and other Important Farmlands

data[8] demonstrates that, as of 2025, Alaska ranks 13th in total energy production. Additionally, Alaska ranks 5th for natural gas withdrawals.

2. 3.1.3.4 Geologic Hazards
    a. Seismic and Volcanic Activity: In 2023, the U.S. Geological Survey (USGS) published the National Seismic Hazard Model[9]. The map displays the likelihood of damaging earthquake shaking in the United States over the next 100 years. Figure 3.1.3-2 *General Seismic Hazard Map of Alaska* should be updated to reflect this new map. Additionally, nine earthquakes of a magnitude of eight or more have now occurred in Alaska, the most recent occurred in 2021 on the Alaska Peninsula with a magnitude of 8.2[10]. This new data should be considered.
    b. Landslides: In 2025, USGS published a U.S. Landslide Inventory and Susceptibility Map[11]. The PEIS should be updated to include reference to this data and map.
    c. Land Subsidence: The text does not address that many Alaska Native villages are at risk from subsidence, particularly in permafrost regions, and that numerous villages have developed Hazard Mitigation Plans[12] (HMPs) to identify and manage these risks. It is recommended that this section be revised to incorporate reference to village-level vulnerabilities and existing HMPs to provide a more complete assessment of potential impacts.

Changes to Environmental Impacts of the Project (3.2)

1. 3.2.3.3 Description of Environmental Concerns
    a. Potential Effects to the Proposed Action, Land Subsidence: The PEIS refers to “trenching activities in frozen soils”. For clarity and technical accuracy, these soils should be identified as permafrost.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

1. 1.3 Resource Area: Geology
    a. The Geology BMPs do not reference permafrost, though thaw can drive subsidence and slope instability. A cross-reference to the Terrestrial Broadband BMPs would ensure consistency and highlight permafrost as both a soil and geologic concern in Alaska.

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[8] U.S. Energy Information Administration - EIA - Independent Statistics and Analysis
[9] National Seismic Hazard Model (2023) - Chance of Damaging Earthquake Shaking | U.S. Geological Survey

[10] Latest Earthquakes
[11] U.S. Landslide Inventory and Susceptibility Map | U.S. Geological Survey
[12] https://www.commerce.alaska.gov/dcra/admin/PlanMgmt?menuLibraryTypeID=2

Water Resources:

The following updates are recommended to strengthen the PEIS water resources analysis. These revisions address missing regulatory references, incorporate updated datasets on surface water, groundwater, and floodplains, and clarify technical inaccuracies.

Changes in the Affected Environment (3.1)

1. 3.1.4.2 Specific Regulatory Considerations
    a. The PEIS does not include discussion on Section 10 in the regulatory considerations section. Section 10 requires authorization from the U.S. Army Corps of Engineers (USACE) for any work in, over, or under navigable waters of the United States, or for any activities that could alter or obstruct the course, condition, location, or capacity of such waters. The omission of Section 10 in the PEIS leaves a regulatory gap in the analysis, and future NEPA reviews should ensure these requirements are fully considered and documented.
2. 3.1.4.3 Environmental Setting
    a. Inland Surface Water Characteristics:
        i. Figure 3.1.4-1 *The Spatial Distribution of Alaska's Perennial Streams*: This map was developed using the USGS National Hydrography Dataset (NHD) from 2015. Because NHD data are periodically updated, through efforts such as NHDPlus High Resolution[13] and the 3D Hydrography Program[14], the figure should be refreshed to reflect changes over the past decade.
        ii. The PEIS lists current human-induced stressors to Alaska's surface waters but does not mention per- and polyfluoroalkyl substances (PFAS). Since publication, PFAS contamination has become a more prevalent water quality concern in Alaska, with detections documented near military installations, airports, and other sites where aqueous film-forming foams (AFFF) and industrial uses have occurred[15].
        iii. Table 3.1.4-2 *Water Quality Summary for Alaska Waterbodies*: This table provides a statewide overview of the number of surface waterbodies assigned to each water quality numeric category, as outlined in the 2012 Alaska Integrated Water Quality Monitoring and Assessment Report (Integrated Report). The most recent Integrated Report was published in 2024[16], with the next report scheduled for release in 2026, which may also warrant review. The table below presents an assessment of the 2024 Integrated Report dataset, compiled from the Environmental Protection

[13] NHDPlus High Resolution | U.S. Geological Survey
[14] 3D Hydrography Program | U.S. Geological Survey
[15] Eielson Air Force Base | AK Dept. of Environmental Conservation
[16] Integrated Report

Agency (EPA) ATTAINS database[17]. Furthermore, the Alaska Water Quality Standards (18 AAC 70) were updated recently on August 9, 2025[18].

Water Quality category	Number of Waterbodies
1 - Meets water quality standards	Majority of waterbodies
2 − Evidence of water quality problems, but meets standards	138
3 – Insufficient Data	561
4a – Has TMDL	41
4b – Has a pollution control program	29
4c – Impaired by a non-pollutant	0
5 – TMDL needed	20

b. Floodplain Characteristics: The PEIS acknowledges that floodplains are mapped on NFIP Rate Maps, however these maps (and corresponding insurance rates) are only available for communities that have adopted and enforced a floodplain management ordinance that meets program standards[19]. As provided in the 2025 Community Status Book Report for Alaska[20], many communities do not participate and therefore do not have floodplain maps available, this should be noted in the PEIS. Figure 3.1.4-3 *Example Map of Alaska Floodplains* should be updated accordingly.

c. Groundwater Characteristics: According to the Alaska Department of Environmental Conservation, 83 percent of Alaska's 1,602 public drinking water systems use a groundwater source. However, groundwater withdrawals for these systems account for only 37 percent of the total freshwater used by public water systems[21]. This represents an increase from the data cited in the PEIS and should be updated accordingly. In addition, Table 3.1.4-3 *Alaska Groundwater Withdrawals in 2005* presents Alaska groundwater withdrawal data from 2005; more recent information is available in the USGS *Estimated Use of Water in the United States in 2015*[22], which should be consulted for updated figures.

[17] Expert Query | US EPA
[18] DEC Regulations | AK Dept. of Environmental Conservation
[19] Floodplain Management, Planning & Land Management, Division of Community and Regional Affairs
[20] Community status book report for state AK
[21] Groundwater In Alaska | AK Dept. of Environmental Conservation
[22] circ1441.pdf - Estimated Use of Water in the United States in 2015

Changes to Environmental Impacts of the Project (3.2)

1. 3.2.4.3 Description of Environmental Concerns
    a. Water Quality – Potential Impacts Associated with Sedimentation, Pollutants, or Water Temperature: The PEIS states, “During periods of permafrost, the amount of sediment introduced to streams during vehicular travel, ground disturbance, or road work…” This statement is inaccurate. Permafrost, by definition, remains frozen year-round and is not subject to “periods.” What changes seasonally is the *active layer* above the permafrost, or seasonal frost, which does thaw and refreezes on an annual cycle. The language should therefore distinguish between permafrost (permanently frozen ground) and seasonal frost to avoid mischaracterizing site conditions and their influence on sedimentation and water quality.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

1. 1.4 Resource Area: Water Resource
    a. The Water Resources BMPs omit subsea installation, which is only covered in the Marine Broadband BMPs. Adding a cross-reference would improve clarity and consistency.

Wetlands:

The following updates are recommended to strengthen the PEIS wetlands analysis. These revisions clarify regulatory authority, incorporate modern assessment methods and datasets, and ensure that distinctions between temporary and permanent impacts, as well as overlapping Section 404 and Section 10 requirements, are properly addressed.

Changes in the Affected Environment (3.1)

1. 3.1.5.2 Special Regulatory Considerations
    a. This section would benefit from greater clarity regarding regulatory authority under Section 404 of the Clean Water Act. While it mentions the U.S. Army Corps of Engineers (USACE), it does not clearly establish that USACE is the *primary* permitting authority for Section 404, nor does it reference the EPA’s oversight and enforcement role. Additionally, the list of agencies involved in wetland management could be more effective if grouped by type (federal land managers, state/local entities, and Alaska Native corporations) to improve readability. Lastly, it should be noted that while guidance on compliance with Alaska government regulations for wetlands can be found on the Alaska DEC website, the USACE website[23] should be the primary resource for this information.
    b. Although it has been recommended to include discussion of Section 10 of the Rivers and Harbors Act in the Waters Resource category, this regulation should also be considered under Wetlands. For broadband deployments, this

[23] Regulatory Mission Overview

requirement frequently applies where submarine or aerial fiber optic cables, conduits, vaults, anchors, or other infrastructure intersect rivers, streams, wetlands, or coastal waters designated as navigable. Because many wetlands are adjacent to or hydrologically connected to navigable waters, Section 10 jurisdiction often overlaps with Clean Water Act Section 404 permitting. Including Section 10 under Wetlands highlights the need for coordinated review of both navigation and ecological impacts.

2. 3.1.5.3 Environmental Setting
    a. The use of Categories 1–3 to describe wetlands reflects an outdated framework that is no longer applied in current USACE practice. Today, functional assessments in Alaska typically rely on methods such as HGM or WESPAK-SE, which evaluate wetlands on a function-by-function basis rather than assigning a single categorical rating. Retaining the categories may be useful for context, but the text should clarify that modern assessments emphasize site-specific functions and values instead of broad categorical rankings.
    b. Since publication of the PEIS, the USACE has issued updated guidance on compensatory mitigation in Alaska, including watershed-based approaches and revised mitigation ratios, which should be incorporated into any current analysis.
    c. The PEIS references the National Wetland Inventory (NWI) and the Environmental Sensitivity Index (ESI), though these are important tools to assess wetlands in Alaska, the data is not uniformly available across Alaska and therefore cannot be relied upon solely for statewide assessments. The PEIS does not mention the National Land Cover Database (NLCD), which provides the most consistent proxy for wetland distribution. Updating this section with these modern datasets and guidance would ensure sufficiency for current and future analyses.

Changes to Environmental Impacts of the Project (3.2)

1. 3.2.5.2 Impact Assessment Methodology and Significance Criteria
    a. This section references the wetland categories, as addressed above in 3.1.5.3 (a), and should be amended.
    b. Table 3.2.5-1 *Impact Significance Rating Criteria for Wetlands:* The Impact Level columns do not distinguish between temporary impacts and permanent impacts. This distinction is important, as temporary construction-related effects (e.g., trenching, side casting, vegetation disturbance) are often resolved through natural recovery or standard mitigation, whereas permanent fill or long-term alteration may warrant a higher level of significance. Adding an annotation to distinguish these impact types would strengthen the analysis. Additionally, any project that can be permitted under a USACE Nationwide Permit are generally presumed to have no more than minimal individual and cumulative adverse effects, which aligns with an impact level of less than significant. The table could

be refined to reflect that NWP-level projects rarely rise to the level of significant impact.

2. 3.2.5.3 Description of Environmental Concerns
    a. Wetland Loss: This discussion of wetland loss does not differentiate between temporary and permanent impacts. It would strengthen the section to explicitly acknowledge that temporary impacts (e.g., construction access, vegetation clearing, soil compaction, or side cast material placement) are usually short-lived, and wetlands often recover after construction and restoration. Permanent impacts (e.g., placement of fill that converts wetland to upland, or sustained hydrologic modification) represent true loss of wetland acreage or function.
3. 3.2.5.4 Potential Impacts of the Preferred Alternative
    a. Potential Deployment Impacts: In evaluating potential deployment impacts, it is important to distinguish between temporary and permanent effects on wetlands and waters, ensuring that both are clearly addressed in the analysis. The discussion should also reiterate the applicability of Section 10 of the Rivers and Harbors Act where broadband infrastructure intersects navigable waters, as authorization may be required in addition to Section 404 permitting. Furthermore, while Section 404 regulates the discharge of dredged or fill material, pile-supported structures and associated piles are not considered fill and therefore fall outside the scope of Section 404. Recognizing these nuances is critical for accurately characterizing impacts and identifying the appropriate regulatory pathways for broadband deployment.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Biological Resources:

Changes in the Affected Environment (3.1)

The following updates are recommended to strengthen the PEIS analysis of vegetation, wildlife, fisheries, and threatened and endangered species (TEC). These revisions incorporate updated datasets, clarify regulatory responsibilities, and ensure species lists and habitat information are current.

1. 3.1.6.3 Terrestrial Vegetation
    a. The PEIS presents vegetation types based on the Gap Analysis Program; however, the USGS NLCD[24] was updated in 2024 and provides more current information on vegetation within Alaska. To ensure accuracy, Table 3.1.6.3-1 *Vegetation Types/Land Cover Classes in Alaska* should be revised using the

[24] https://www.usgs.gov/centers/eros/science/annual-national-land-cover-database

2024 NLCD vegetation types, and Figure 3.1.6.3-1 should also be updated with the corresponding spatial data.

b. Invasive Species: The Alaska Exotic Plants Information Clearing House (AKEPIC)[25], managed by the University of Alaska Anchorage, maintains an up-to-date database of non-native and invasive plant species in the state of Alaska. AKEPIC currently identifies 170 non-native species in the state. The plant list on page 3.1.6-10 of the PEIS should be revised using AKEPIC data, which may also necessitate updates to other species references in this section.

2. 3.1.6.4 Wildlife
   a. Specific Regulatory Considerations: In paragraph two of this section, the text should be updated to clarify that both the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) administer and enforce the Endangered Species Act (ESA). The PEIS currently states that ESA authority rests solely with USFWS. Additionally, in paragraph five, the text should be revised to state that subsistence and recreational fishing in Alaska require permits tailored to specific fish habitats, such as the Upper Cook Inlet Personal Use Fishery. The current PEIS only notes generally that permits are required; however, it is important to clarify this distinction to reflect the habitat, and application, specific nature of permitting in Alaska.
   b. Terrestrial Habitats and Wildlife (Invertebrates, Mammals, Reptiles and Amphibians): Update all species lists, and herd location information with the most recent data from ADFG[26].
3. 3.1.6.5 Fisheries and Aquatic Habitats
   a. Specific Regulatory Considerations: In paragraph two of this section, the *Catalog of Waters Important for the Spawning Rearing or Migration of Anadromous Fishes* is updated regularly, and applicants must ensure they reference the most current version. In addition, revise the reference from “The Fish Passage Act requires a permit…” to specify the correct permit name and citation, Title 16 Fish Habitat Permit.
4. 3.1.6.6 Threatened and Endangered Species and Species of Conservation Concern
   a. Table 3.1.6.6-1 *Federal and State-listed Threatened and Endangered and Candidate Species Known to Occur in Alaska*:
      i. Update the type of habitat for polar bear *(Ursus maritimus)* to marine *and* terrestrial.
      ii. Add the sunflower sea star *(Pycnopodia helianthoides)*. The sunflower sea star has been proposed to be listed under the ESA, and no critical habitat has been designated or proposed to date. Please refer to the

[25] Alaska Exotic Plants Information Clearinghouse (AKEPIC) – Alaska Center for Conservation Science
[26] Caribou Additional Resources, Alaska Department of Fish and Game

NMFS[27] website for species details. It would also be prudent to review NMFS[28] and USFWS[29] for any additional species within the state that have been listed or proposed.

Changes to Environmental Impacts of the Project (3.2)

1. 3.2.6.3. Terrestrial Vegetation
    a. Potential Impacts of the Preferred Alternative: In the *Activities with the Potential to Have Impacts* section, update the first bullet under wired projects to specify that vegetation loss is *temporary.* In the fourth bullet under wired projects, define the geographic extent for submarine work and associated impacts as the mean high water (MHW), which clarifies that no vegetation impacts would occur. Revise the remainder of this bullet to consistently reflect the MHW.
2. 3.2.6.4. Wildlife
    a. Vegetation and Habitat Loss: In the *Amphibians and Reptiles* sub-section, revise the text to clarify that these species are only present in certain regions of Alaska and they are absent from the North Slope and the Aleutian Islands.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Land Use:

The following updates are recommended to improve the PEIS land use and ownership analysis. These revisions address the need for clearer guidance on determining land ownership, incorporation of updated datasets, and recognition of ownership or lease agreements as potential project impacts.:

Changes in the Affected Environment (3.1)

1. 3.1.7.3 Land Use and Ownership
    a. Land Ownership: A discussion of how best to determine land ownership in Alaska would be beneficial, as private and municipal land ownership (i.e. land associated with taxable authorities) represents only a small portion of the state. The recommended land ownership discussion should reference the use of Alaska Department of Natural Resources (DNR)[30] and Bureau of Land Management (BLM)[31] databases, which provide essential resources for assigning legal descriptions and land use types to a given area.

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[27] https://www.fisheries.noaa.gov/species/sunflower-sea-star
[28] https://www.fisheries.noaa.gov/species-directory/threatened-endangered
[29] https://ecos.fws.gov/ecp/report/table/critical-habitat.html

[30] Map Library
[31] ArcGIS - BLM National Public Lands Access Data (PLAD) Web Map

b. Table 3.1.7-2 *Major Landowners in Alaska* should be updated using the most recent data available from USGS[32].

Changes to Environmental Impacts of the Project (3.2)

2. 3.2.7.4 Potential Impacts of the Preferred Alternative
    a. Potential Deployment Impacts: In the *Activities with the Potential to Have Impacts* section, under the first bullet under wired projects, additional discussion should be included in the exchange of ownership and/or lease agreements associated with new build-buried fiber optic plants/projects. These agreements have a potential impact to landowners and land use types in a given project area and should be acknowledged in the analysis.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Visual Resources:

The following update is recommended to ensure the PEIS visual resources analysis reflects current conditions. Specifically, revisions should incorporate updated scenic byway data and associated mapping resources.

Changes in the Affected Environment (3.1)

1. 3.1.8.2 Specific Regulatory Considerations
    a. National Scenic Byways: The list of scenic byways in Alaska has been revised since the original development of the PEIS, which identified five national scenic byways. This section should be updated using current data from the National Scenic Byway Foundation[33], which now recognizes 10 additional scenic byways in the state. Figure 3.1.8-1 *Areas in Alaska Managed for Visual Resources* should also be updated using the same Alaska DOT data.

Changes to Environmental Impacts of the Project (3.2)

No changes identified.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

[32] https://www.usgs.gov/programs/gap-analysis-project/science/protected-areas
[33] Alaska - National Scenic Byway Foundation

Socioeconomics:

The following updates are recommended to improve the PEIS socioeconomic analysis. These revisions incorporate the most recent demographic, housing, economic, and subsistence datasets to ensure accuracy and consistency throughout the section.

Changes in the Affected Environment (3.1)

1. 3.1.9.1 Introduction
    a. Remove all references to environmental justice. Environmental justice, established under EO 12898, has been rescinded reference the following terms and/or concepts should be removed from the PEIS; environmental justice, EO 12898, relative populations of low-income or minority populations, and/or disproportionate impacts to low-income or minority populations.
    b. The PEIS currently relies on U.S. Census Bureau ACS data from 2009-2013. Updated data are available for 2018-2023[34], and all references should be revised to use the most recent five-year estimates. Specific table updates are identified in the bullets below.
2. 3.1.9.3 Communities and Populations
    a. Table 3.1.9-1[35] *National, State, and Borough Population, Population Density, and Growth Rates* is outdated and is recommended to be updated utilizing five-year 2018-2023 ACS data. The subsequent Figure 3.1.9-2 *Population Distribution and Density* should also be revised to reflect these updated table values.
    b. Table 3.1.9-2 *Population Projections*, is currently based on data from the 2000 decennial census analyzed by a University of Virgina research office. Because this section of the PEIS is specific to the state of Alaska, population projections should instead rely on data from the Alaska Division of Labor and Workforce Development (ADWLD)[36], which provides more accurate and state-specific estimates. In addition, more recent datasets are available, including the 2020 decennial census and 2024 state projections. Table 3.1.9-2 is recommended to be updated with ADWLD data.
3. 3.1.9.4 Real Estate, Tax Revenues, Property Values, Local Economic Activity, and Subsistence
    a. Table 3.1.9-3 *Select Economic Indicators* currently relies on 2013 U.S. Census data for the U.S. and 31 boroughs/census areas within Alaska. There are now 35 designated boroughs/census areas, and updated census data is now available. The table should be revised to incorporate current data on per capita income,

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[34] https://data.census.gov/advanced
[35] https://data.census.gov/table/DECENNIALCD1182020.P1?q=Annual+Estimates+of+the+Resident+Population
[36] https://live.laborstats.alaska.gov/article/alaska-population-projections

median income, and unemployment[37]. Figures 3.1.9-3 *Median Household Income* and 3.1.9-4 *Unemployment* should also be updated accordingly.

b. Table 3.1.9-4 *Housing Units, Occupancy, and Tenure* uses a combination of 2010 and 2013 U.S. Census data, which is outdated. This table should be updated using the most recent 2020 U.S. census housing occupancy data[38].
c. Tables 3.1.9-5 *Housing Costs*, 3.1.9-6 *Median Value of Owner Occupied Single Family Homes, 2009 to 2013 ACS*, and 3.1.6-7 *Real Estate Taxes, Owner-Occupied Units with a Mortgage* rely on a combination of 2010 and 2013 U.S. Census data and are therefore outdated. These tables also present data for only 31 boroughs/census areas, while there are now 35 designated boroughs/census areas in Alaska. Housing costs should be updated with the latest U.S. Census ACS five-year estimates for 2018-2023[39]. All three tables can be updated utilizing the same U.S. Census Bureau dataset. Figure 3.1.9-5 *Property Values* should be updated accordingly.
d. Subsistence harvest (hunting and fishing) varies in food type distribution from year to year and is tracked through the Alaska Department of Fish and Game (ADFG). Figure 3.1.9-6 *Alaska Subsistence Harvest* should be updated to incorporate the most recent 2024 subsistence harvest data.[40]

Changes to Environmental Impacts of the Project (3.2)

No changes identified.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Environmental Justice:

Changes in the Affected Environment (3.1)

Executive Order (EO) 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* established environmental justice policies and guidance. On January 20, 2025, EO 12898 was rescinded. Environmental Justice is no longer considered under NEPA and can be removed from the PEIS.

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[37] https://data.census.gov/table/ACSST5Y2023.S1901?q=median+income&g=040XX00US02_050XX00US02150$1400000_1400000US02150000200
[38] https://data.census.gov/table/DECENNIALPL2020.H1?q=housing+&g=040XX00US02_050XX00US02150$1400000_1400000US02150000200
[39] https://data.census.gov/table?q=home+values&g=040XX00US02_050XX00US02150$1400000
[40] https://www.adfg.alaska.gov/sb/CSIS/

Changes to Environmental Impacts of the Project (3.2)

EO 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* established environmental justice policies and guidance. On January 20, 2025, EO 12898 was rescinded. Environmental Justice is no longer considered under NEPA and can be removed from the PEIS.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

EO 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* established environmental justice policies and guidance. On January 20, 2025, EO 12898 was rescinded. Environmental Justice is no longer considered under NEPA and can be removed from the PEIS.

Cultural Resources:

The following update is recommended to ensure the PEIS cultural resources analysis reflects current conditions. Revisions should incorporate both potentially eligible and listed historic properties using the most recent datasets.

Changes in the Affected Environment (3.1)

1. 3.1.11.3 Cultural Setting
    a. Table 3.1.11-1 *Historic Properties Listed on the NRHP* currently includes the 396 properties/resources which were determined to be eligible for listing on the National Register of Historic Places (NRHP) in the state of Alaska at the time of the PEIS. However, resources that are potentially eligible for listing on the NRHP must also be included, as they are afforded protection under Section 106 of the National Historic Preservation Act. Additionally, the number of listed properties has increased since 2014, as new properties continue to be evaluated. It is recommended that the table be updated using the AHRS Portal[41] to capture potentially eligible resources, and the National Park Service NRHP database to reflect currently listed properties. As of August 2025, there were 457 listed properties/resources in Alaska that should be incorporated into the table.
2. 3.1.11.4 Consultation
    a. The PEIS states that FirstNet engaged 227 Alaska Native tribes and organizations during consultation. However, the official Bureau of Indian Affairs (BIA) list identifies 229 federally recognized tribes in Alaska[42]. Metlakatla - Annette Island Indian Reservation is the only Reservation in Alaska and it was not mentioned in the PEIS. It is recommended that this section be revised to

[41] Home - AHRSPortal
[42] Alaska Region | Indian Affairs

incorporate and ensure that BIA tribal data[43] is included in the PEIS to ensure completeness of Section 106 consultations.

Changes to Environmental Impacts of the Project (3.2)

1. 3.2.11.2 Specific Regulatory Considerations
    a. Section should be revised to include description of the 2017 Advisory Council on Historic Preservation program comment on Federal Communications Commission projects and the subsequent 2024 expansion requested by NTIA to cover any federal agency undertaking meeting the terms of the program comment.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Air Quality:

The following update is recommended to ensure the PEIS air quality analysis reflects current regulatory requirements, including recent amendments to Alaska's air quality standards.

Changes in the Affected Environment (3.1)

1. 3.1.12.2 Specific Regulatory Considerations
    a. All references to the Alaska Air Quality Standards (18 AAC 50) should be updated to reflect the recent rule making amendments which were made in June 2025.[44] In May 2024, the PM 2.5 standard was lowered from 12 µg/m³ to 9 µg/m³ for annual average.

Changes to Environmental Impacts of the Project (3.2)

No changes identified.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Noise and Vibrations:

Changes in the Affected Environment (3.1)

No changes identified.

Changes to Environmental Impacts of the Project (3.2)

No changes identified.

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[43] Alaska Native Villages | opendata-1-bia-geospatial.hub.arcgis.com/
[44] https://dec.alaska.gov/commish/regulations/

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Climate Change:

Changes in the Affected Environment (3.1)

Climate change has been removed from the list of resource considerations. The PEIS should be updated with categories consistent with the Tiered Environmental Assessment Guidance and Template (April 2025)[45].

Changes to Environmental Impacts of the Project (3.2)

Climate change has been removed from the list of resource considerations. The PEIS should be updated with categories consistent with the Tiered Environmental Assessment Guidance and Template (April 2025).

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

Climate change has been removed from the list of resource considerations. PEIS should be updated with categories consistent with the Tiered Environmental Assessment Guidance and Template (April 2025).

Human Health & Safety:

The following updates are recommended to ensure the PEIS reflects current regulatory frameworks and inventories for hazardous materials and site contamination, including state programs and formerly used defense sites.

Changes in the Affected Environment (3.1)

1. 3.1.15.2 Specific Regulatory Considerations
    a. The PEIS makes no mention of the Defense Environmental Restoration Program (DERP) or Formerly Used Defense (FUD) (10 U.S.C § 2700 et seq.).[46] It is recommended that a brief discussion of DERP, which includes the comprehensive environmental response, compensation and liability act of 1980, be added to the bulleted list of federal regulations on page 3.1.15-2.
    b. The PEIS does not address Alaska's state regulations governing hazardous materials and site contamination. A brief discussion should be added to reference Alaska Statute 46.03 and the ADEC Contaminated Sites Program.[47]
2. 3.1.15.4 Summary of Key Health and Safety Conditions for Alaska

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[45] Tiered Environmental Assessment (EA) Guidance and Template

[46] https://www.law.cornell.edu/uscode/text/10/2700

[47] https://dec.alaska.gov/spar/csp/about

a. Hazardous waste/contaminated areas: This section does not mention the ADEC Contaminated Sites Program[48], which includes an inventory of all contaminated sites in Alaska. It is recommended that the PEIS be updated to include a full list of all contaminated sites within the state, as well as an associated figure. Additionally, the text should be updated to clarify that superfund sites listed are not 'active,' but are included in the national priority list. Furthermore, there is no mention of the FUD Site Program[49], which includes an inventory of all FUD sites in Alaska. It is recommended that the PEIS be updated to include a full list of all FUD sites within the state, as well as an associated figure.

Changes to Environmental Impacts of the Project (3.2)

1. 3.2.15.3 Description of Environmental Concerns
    a. Based on the additional inventory information added as recommended above, additional discussion of ADEC contaminated sites and FUDs is recommended to be incorporated into the environmental concerns discussion. It is recommended that the PEIS add new subsection(s) to section 3.2.15.3 to discuss the potential harms to health and human safety associated with both ADEC contaminated sites and FUDs. Including this information is important because broadband installation projects may encounter contaminated soils, groundwater, or historic disposal sites during trenching, excavation, or facility construction, triggering additional state regulatory obligations beyond federal requirements.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices

No changes identified.

Recommendations:

Based on a thorough review of the Non-Contiguous Regional PEIS, Alaska Chapter (Volume 1, Chapter 3), DOWL determined that the analysis requires revisions for completeness and accuracy. Following the incorporation of the recommended revisions above, the PEIS will be valid for use in tiered environmental documents. Special care should be taken to note which datasets are updated regularly and should be reviewed at the time of NEPA document preparation for updated data.

[48] https://www.arcgis.com/apps/mapviewer/index.html?webmap=315240bfbaf84aa0b8272ad1cef3cad3
[49] https://www.usace.army.mil/Portals/2/docs/Environmental/FUDS/FUDS_Inventory/FUDS_Inventory_Alaska.pdf