



U.S. Department of the Interior  
Bureau of Land Management  
U.S. Fish and Wildlife Service

# Coastal Plain Oil and Gas Leasing Program Supplemental Environmental Impact Statement

## *Final Scoping Report*

November 2021

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B	Notice of Intent
C	Scoping Meeting Presentation
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## ACRONYMS AND ABBREVIATIONS

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Full Phrase

2019 FEIS	September 2019 Coastal Plain Oil and Gas Leasing Program Final Environmental Impact Statement
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
Arctic Refuge	Arctic National Wildlife Refuge
BLM	United States Department of the Interior, Bureau of Land Management
BMP	best management practices
CARA	Comment Analysis and Response Application
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EIS	environmental impact statement
EO	Executive Order
HR1	Title II of HR1 of the 115 <sup>th</sup> Congress (HR1)
IPCC	Intergovernmental Panel on Climate Change
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NPR-A	National Petroleum Reserve-Alaska
NSO	no surface occupancy
ORV	outstandingly remarkable values
PCH	porcupine caribou herd
ROD	Record of Decision
ROP	required operating procedure
SEIS	supplemental environmental impact statement
Tax Act	Tax Cuts and Jobs Act of 2017, Public Law 115-97 (December 22, 2017)
U.S.	United States
USFWS	United States Department of the Interior, Fish and Wildlife Service
USGS	United States Geological Survey

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# Chapter 1. Introduction

## 1.1 BACKGROUND

In accordance with United States (U.S.) Department of the Interior Secretary's Order 3401, Comprehensive Analysis and Temporary Halt on all Activities in the Arctic National Wildlife Refuge Relating to the Coastal Plain Oil and Gas Leasing Program (**Appendix A**), the U.S. Department of the Interior, Bureau of Land Management (BLM) Alaska State Office, Anchorage, Alaska, and the U.S. Department of the Interior, Fish and Wildlife Service (USFWS) intends to prepare a Supplemental Environmental Impact Statement (SEIS) to the September 2019 Coastal Plain Oil and Gas Leasing Program Final Environmental Impact Statement (2019 FEIS). The SEIS will provide a comprehensive analysis of the potential environmental impacts of the Coastal Plain Oil and Gas Leasing Program (Program), including addressing the deficiencies identified in Secretary's Order 3401. The Coastal Plain program area is composed of approximately 1.6 million acres in the approximately 19.3-million-acre Arctic National Wildlife Refuge (Arctic Refuge; **Map 1-1**, Program Area). Congress identified the Coastal Plain, pursuant to Section 1002 of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), for its oil and natural gas potential.

The BLM published a Notice of Intent (NOI) in the *Federal Register* on August 4, 2021, announcing a 60-day public scoping period to solicit public comments and identify issues (see **Appendix B**). The comment period ended on October 4, 2021. The BLM has continued to accept comments beyond this date, but comments received after October 4, 2021 are not included in this report, which describes the scoping process and summarizes the comments received during the 60-day comment period only.

## 1.2 PURPOSE OF AND NEED FOR THE SEIS

The purpose of this public scoping process is to determine the scope of issues to be addressed and to identify the significant issues, including any legal deficiencies in the 2019 FEIS, related to an oil and gas leasing program within the Coastal Plain. Information received during this process will influence the development of the SEIS and guide the scope of the environmental analysis. The BLM will work collaboratively with interested parties to identify the management decisions best suited to local, regional, and national needs and concerns.

## 1.3 OVERVIEW OF THE SCOPING PROCESS AND SCOPING REPORT

Public involvement is a vital and legally required component of the National Environmental Policy Act (NEPA) process. It vests the public in the decision-making process and allows for full environmental disclosure. Guidance for implementing public involvement under NEPA is codified in 40 Code of Federal Regulations (CFR) 1506.6.

Scoping is an open and early step in the NEPA process that helps the BLM to determine the scope of issues to be addressed and to identify significant issues related to the proposed program. Information collected during scoping may also be used to develop the alternatives to be analyzed in a NEPA document.

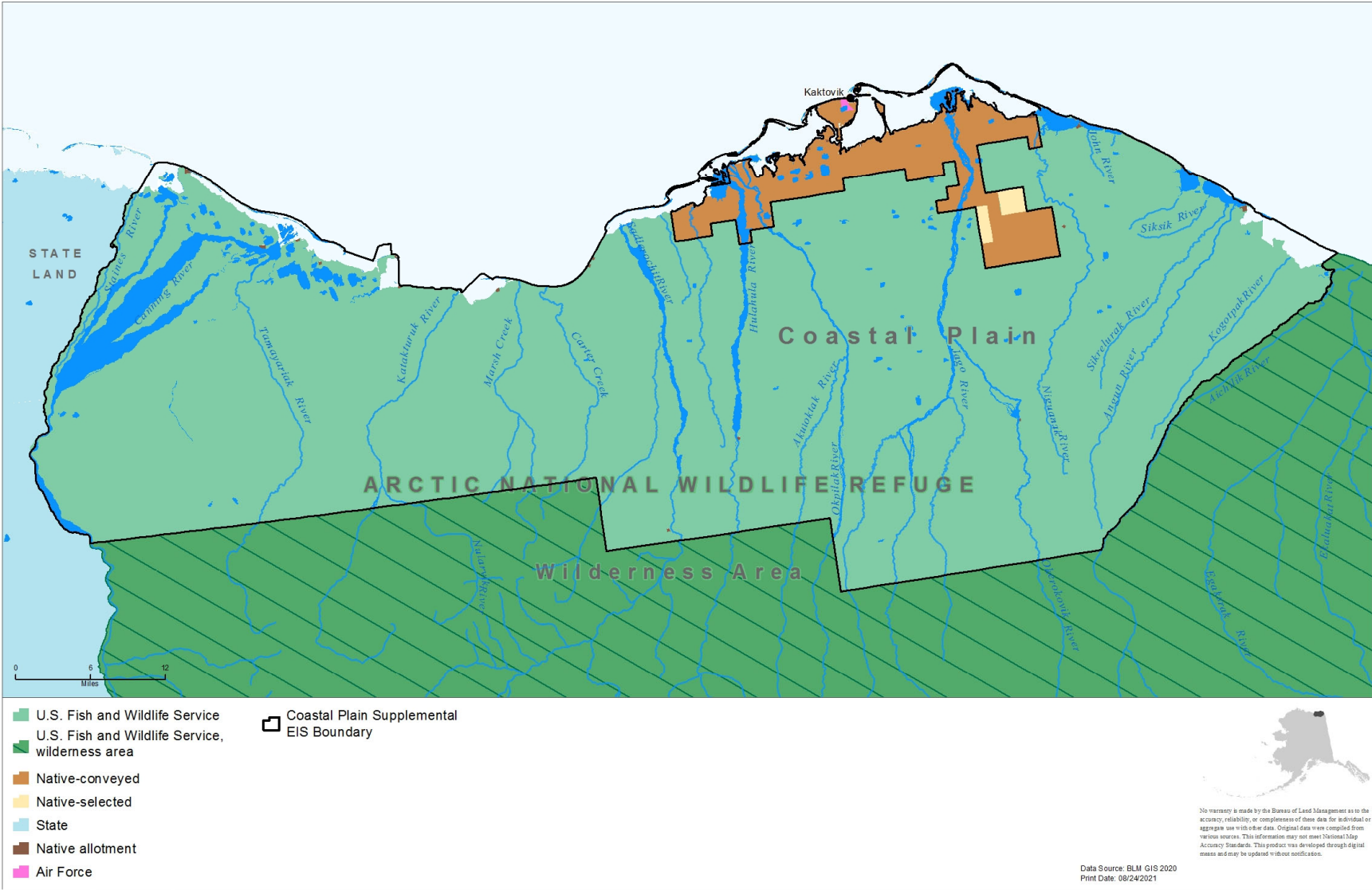
In accordance with the BLM NEPA Handbook, Section 9.1.3 (BLM 2008), the BLM must document the public scoping results. This scoping report summarizes the scoping process and the comments received during the formal scoping period, including those provided during internal and public scoping meetings.

# Map 1-1 Program Area

Program Area



U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | COASTAL PLAIN OIL AND GAS LEASING PROGRAM SUPPLEMENTAL EIS





## 1.4 DESCRIPTION OF THE SCOPING PROCESS

As required by NEPA and its public involvement guidance, the BLM solicited comments from relevant agencies and the public and then organized and analyzed all comments received. The BLM then evaluated the position statement of each comment and extracted the overarching issues that it would address during the NEPA process. These issues define the scope of analysis for the SEIS and are used to develop the proposed program alternatives.

### 1.4.1 Scoping

As defined under NEPA, the scoping period began with the publication of the NOI in the *Federal Register* on August 4, 2021. It was titled Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, Alaska (see **Appendix B**). During the scoping period, the BLM sought public comments to determine relevant issues that could influence the scope of the environmental analysis, including alternatives, and to guide the process for developing the SEIS.

The official comment period ended on October 4, 2021. Comments received or postmarked by this date are summarized and presented in this report. To the extent practicable, the comments received past this date will be considered during the development of the SEIS, but late comments were not summarized in this report.

The BLM maintains a project website with information related to the development of the SEIS: <https://eplanning.blm.gov/eplanning-ui/project/2015144/510>. The website includes background documents, information on public meetings, and contact information.

Duplicate submissions of previously submitted comments on the Coastal Plain Oil and Gas Leasing Program EIS were submitted to the BLM during the SEIS scoping period; these comments were analyzed by BLM and addressed in the 2019 FEIS. All comment submissions for both the previous scoping period and the Draft EIS comment period are publicly available on the project website for the 2019 FEIS: <https://eplanning.blm.gov/eplanning-ui/project/102555/510>.

### 1.4.2 Public Scoping Meetings

Six virtual public scoping meetings were held during the scoping period (**Table 1-1**). In addition to the BLM and USFWS representatives and members of the EIS team, a transcriptionist attended to document comments provided in each meeting. The meeting times shown in **Table 1-1** are in Alaska Daylight Time.

**Table 1-1**  
**SEIS Scoping Meetings**

Date	Time	Venue
September 14, 2021	1:00 p.m.	Zoom virtual meeting
September 14, 2021	6:00 p.m.	Zoom virtual meeting
September 15, 2021	10:00 a.m.	Zoom virtual meeting
September 15, 2021	6:00 p.m.	Zoom virtual meeting
September 16, 2021	1:00 p.m.	Zoom virtual meeting
September 16, 2021	6:00 p.m.	Zoom virtual meeting

Each scoping meeting began with a presentation by the BLM describing the background and purposes of the SEIS, the project schedule, and further public involvement opportunities (see **Appendix C** for the slideshow presented during the meetings). Following the presentation, the meetings transitioned into a public comment format, where attendees could provide their thoughts on the SEIS and the planning process.

## 1.5 METHOD OF COMMENT COLLECTION AND ANALYSIS

All written submissions received on or before October 4, 2021, were evaluated and are considered in this scoping summary report. This report provides an overall summary of the types of comments received related to each issue. Comment submissions will be posted to the project website: <https://eplanning.blm.gov/eplanning-ui/project/2015144/510>.

The BLM received 210 unique written submissions during the public scoping period; the number of substantive comments extracted from these submissions varied between all letters. Overall, 1,555 substantive comments were identified using the Comment Analysis and Response Application (CARA), an ePlanning software of the BLM.

To ensure that public comments were properly registered and that none were overlooked, the BLM used a multiphase management and tracking system. Written submissions were given a unique identifier and were logged into the BLM's CARA database. Each submission was then reviewed, and individual substantive comments were extracted. Each comment was assigned to one of the two following categories:

1. Substantive comments related specifically to the Coastal Plain Oil and Gas Leasing Program SEIS
2. Comments that are nonsubstantive or pertain to issues beyond the scope of the program

All comments in the first category were further classified by commenter affiliation, geographical area, process category, and issue category, as described in **Chapter 2, Comment Summary**. Substantive comments were then entered into the CARA database for analysis. The results of the comment analysis are summarized in **Chapter 2**.

# Chapter 2. Comment Summary

## 2.1 SUMMARY OF PUBLIC COMMENTS RECEIVED

### 2.1.1 Commenters by Affiliation

The BLM categorized all submissions received by the commenter’s affiliation. **Table 2-1** shows the number and proportion of commenters by affiliation. Letters written on business, agency, or organization letterhead or letters where the commenter signed using an official agency title were considered to represent that organization or agency; all other letters were considered to represent individuals. In addition, some commenters made multiple submissions, and some letters had more than one signatory.

**Table 2-1  
Unique Submissions by Affiliation**

Affiliation	Number of Commenters*	Percentage of Unique Submissions*
Government (Federal, State, Tribal, and local)	14	6.7
Organizations (businesses and nonprofits)	40	19.0
Individuals	156	74.3
<b>Total</b>	<b>210</b>	<b>100</b>

\*Calculations do not include form letters. All numbers are approximate.

In addition to unique submissions, there were multiple form letter campaigns sponsored by nonprofit organizations and individuals. Letters that represented slight variations of the form letter without additional substantive comments were treated as form letters. Form letter submissions containing additional substantive comments were categorized as unique submissions. In total, the BLM received 104,908 form letter submissions, based on nine different form letter campaigns.

Analyzing identical submissions as a group did not reduce the comment’s importance. The NEPA regulations on public comments are clear that the public involvement process is not a vote but an opportunity to determine the scope and the significant issues to be analyzed in depth in the SEIS, as well as to “identify and eliminate from detailed study the issues which are not significant, or which have been covered by prior environmental review” (40 CFR 1501.9).

### 2.1.2 Number of Substantive Comments by Issue Category

**Table 2-2** shows the number and proportion of substantive comments received by issue category. The 1,555 substantive comments were categorized into 51 issue categories. **Chapter 3**, Issue Statements and Comment Summaries, provides a detailed analysis of the comments received for each issue category.

**Table 2-2  
Number of Substantive Comments by Issue Category**

Issue Category	Number of Substantive Comments*	Percentage of Total Comments*
NEPA	37	2.4
Public Outreach	13	<1.0
Translation requests	7	<1.0
Lead and Cooperating Agencies	5	<1.0
Purpose of and Need for SEIS	31	2.0
Alternatives – New Alternative Proposed	82	5.3

<b>Issue Category</b>	<b>Number of Substantive Comments*</b>	<b>Percentage of Total Comments*</b>
Alternatives – Change to Existing	25	1.6
Alternatives – Lease Stipulations and Required Operating Procedures (ROPs)	106	6.8
Best Available Information-Baseline Data	34	2.2
GIS Data/Maps and Analysis	2	<1.0
Direct or Indirect Impacts	16	<1.0
Cumulative Impacts	24	1.5
General Consultation	12	<1.0
Government-to-Government Consultation	41	2.6
ANILCA	56	3.6
Alaska Native Claims Settlement Act (ANCSA)	1	<1.0
Other Laws and International Agreements	111	7.1
Climate and Meteorology	128	8.2
Air Quality	30	1.9
Acoustic Environment	9	<1.0
Physiography	3	<1.0
Geology and Minerals	8	<1.0
Petroleum Resources	35	2.3
Reasonably Foreseeable Development Scenario	6	<1.0
Soil Resources	20	1.3
Sand and Gravel Resources	13	<1.0
Water Resources	50	3.2
Solid and Hazardous Waste	5	<1.0
Seismic Testing	46	3.0
Biological Resources	16	<1.0
Vegetation and Wetlands	20	1.3
Fish and Aquatic Species	34	2.2
Birds	98	6.3
Terrestrial Mammals	115	7.4
Marine Mammals	77	5.0
Social Systems	2	<1.0
Landownership and Use	7	<1.0
Cultural Resources	17	1.1
Subsistence Uses and Resources	58	3.7
Sociocultural Systems	8	<1.0
Environmental Justice	18	1.2
Recreation	3	<1.0
Arctic Refuge	2	<1.0
Marine Protected Areas	1	<1.0
Wild and Scenic Rivers	6	<1.0
Wilderness Characteristics, Qualities, and Values	11	<1.0
Visual Resources	6	<1.0
Transportation	10	<1.0
Economy	54	3.5
Public Health and Safety	29	1.9
Irreversible and Irretrievable Commitments of Resources	7	<1.0
<b>Total</b>	<b>1,555</b>	<b>100</b>

\*All numbers are approximate.

< = less than

# Chapter 3. Issue Statements and Comment Summaries

For NEPA analysis, an issue is a point of disagreement, debate, or dispute with a proposed program, based on an anticipated environmental effect. An issue is more than just a position statement, such as disagreement with development on BLM-administered lands. The BLM will use the issues and other information collected during scoping to help formulate a reasonable range of alternatives that will be analyzed in the SEIS.

The issue statements presented below are preliminary and are based on the best information known to date. A summary of the comments received has also been developed that apply to each issue; for the full context of comments, the scoping submissions are posted on the project website <https://eplanning.blm.gov/eplanning-ui/project/2015144/510>.

The process of developing this SEIS will afford opportunities for collaboration with local, State, Federal, and Tribal governments, land management agencies, public interest groups, public land users, and other stakeholders. As a result of ongoing collaboration, the issues and concerns may be updated and supplemented to accurately reflect public comments and concerns.

## 3.1 NEPA

### ***Issue: How will the SEIS address the leases issued as part of the 2020 Coastal Plain Oil and Gas Leasing Program?***

#### *Comment Summary*

Commentors were concerned that the nine leases issued in January 2021 as part of the 2020 leasing program were legally deficient and requested that the BLM either cancel or otherwise amend the leases. Commentors gave two justifications for the unlawfulness of the leases. The first was that the leases were issued as part of the 2020 leasing program process that the BLM has already determined to be legally deficient. Second, commentors were concerned that the leases are an irreversible and irretrievable commitment triggering the need for site-specific NEPA analysis, which the 2019 FEIS does not satisfy. Commentors were concerned that if the leases are not cancelled or amended, they would prejudice the outcome of the SEIS by limiting alternatives, analysis, or decision making. Finally, commentors were concerned about how an SEIS would be used to correct the legally deficient leases because the BLM has already committed those resources. If the BLM intends to use the SEIS process to address these leases, commentors requested that the BLM clearly describe the approach in the context of the SEIS.

### ***Issue: Will the SEIS apply the 1978 or 2020 NEPA regulations?***

#### *Comment Summary*

Commentors were concerned that the application of the 2020 NEPA regulations to the 2020 leasing program resulted in the failure of the 2019 FEIS to adequately analyze cumulative impacts, particularly on greenhouse gas emissions. Commentors encouraged the BLM to apply the 1978 NEPA regulations instead, which require the analysis of cumulative impacts and indirect impacts.



***Issue: What are the legal deficiencies in the 2019 FEIS and 2020 Record of Decision (ROD) that triggered the SEIS process?***

***Comment Summary***

Commentors were concerned that the BLM has not provided adequate justification and legal support in Secretary's Order 3401 to demonstrate the need for an SEIS. Commentors noted that the U.S. Department of the Interior has taken the legal position in challenges to the January 2021 leases that the Coastal Plain Oil and Gas Leasing Program EIS satisfied the requirements of NEPA. Commentors were concerned that the preparation of an SEIS would delay the implementation of the previously approved leasing program, which could have adverse socioeconomic impacts on local Native peoples.

Commentors suggested that the SEIS should be limited in scope to new information unavailable at the time of the 2019 FEIS.

***Issue: Did the 2019 FEIS fail to meet the requirements of NEPA?***

***Comment Summary***

Commentors were concerned that the 2019 FEIS did not consider a range of reasonable alternatives and failed to acknowledge and address missing information, data, and analysis. One commentor mentioned the Public Employees for Environmental Responsibility reports published in March 2019. These reports alleged that the Department of the Interior suppressed internal memoranda written by its scientists which detailed concerns regarding oil and gas development in the Arctic Refuge. In addition, other press reports of emails from BLM scientists alleged about alterations, mischaracterizations, and omissions of key findings of environmental assessments for seismic surveys. Commentors would like the BLM to revise its alternatives analysis and update its analysis of impacts to utilize robust data and accurate scientific analysis in the SEIS.

Commentors were concerned that the Department of the Interior Secretary's Order 3401 did not identify specific deficiencies in the 2019 FEIS and 2020 ROD about which to provide meaningful comments.

Commentors were concerned that the 2019 FEIS had many documents incorporated by reference or as appendices which made it difficult for the public to follow. Additionally, commentors were concerned that the 2019 FEIS had significant information gaps that did not allow for the public to meaningfully understand the baseline conditions and likely impacts; commentors requested that the SEIS address these information gaps. Finally, commentors requested that the BLM provide adequate time to carefully consider and address public comments on the SEIS.

***Issue: What should be included in future NEPA adequacy reviews for development projects that may result from the Coastal Plain leasing program?***

***Comment Summary***

Commentors recommended that the environmental assessments and/or EISs for development projects resulting from the Coastal Plain leasing program include geological and geophysical information that supports the recoverable reserve estimates. Specifically, commentors suggested using development forecasts and production estimates to support the scale, accuracy, and accuracy of potential oil spills, greenhouse gas emissions, and social cost of greenhouse gas estimates and analysis. Commentors additionally recommended that the BLM consider ROPs, such as co-occurring gas reinjected to maintain reservoir pressure or, instead, used to manufacture natural gas liquids to blend and transport with the oil in existing infrastructure.

***Issue: When will site-specific NEPA analysis occur?******Comment Summary***

Commentors were concerned that a programmatic NEPA analysis does not enable site-specific impacts to be properly mitigated. Commentors encouraged the BLM to explicitly condition future oil and gas activities on a requirement that the Department of the Interior prepare EISs at each subsequent project stage and fully mitigate effects under all SEIS alternatives.

**3.2 PUBLIC OUTREACH*****Issue: How will the public and local stakeholders be involved and informed throughout the SEIS process, particularly in the context of the COVID-19 pandemic?******Comment Summary***

Commentors were concerned that there were not enough public scoping meetings and requested additional public meetings to be held outside of Alaska, specifically in Denver, Colorado. One commentor suggested that at least one public hearing be held in each U.S. Environmental Protection Agency region across the country. Commentors requested public meetings in additional Alaskan and Canadian communities.

Commentors had concerns about the internet-based Zoom format of the virtual public scoping meetings held during the COVID-19 pandemic. Commentors requested that virtual public scoping meetings held for the SEIS enable testifiers to turn on their cameras to allow other participants to see the testimony presented. To overcome the technological issues of virtual public meetings, commentors suggested that the BLM provide 24-hour/7-day-a-week telephone commenting option for the SEIS public comment periods. Additionally, commentors requested that the BLM provide demonstrations on how to use the BLM project website to submit comments on the SEIS.

Commentors requested that the BLM re-analyze all public comment submissions from the original Coastal Plain Leasing EIS process to ensure that all key issues are properly captured and addressed.

Commentors requested that the BLM provide a link to the 1980's legislative EIS documents for the public to review.

**3.2.1 Translation Requests*****Issue: How would the SEIS allow for meaningful participation from Gwich'in and Inupiaq peoples?******Comment Summary***

Commentors requested that all published documents related to the SEIS be translated into Gwich'in and Inupiaq, translators are available at all public meetings, and public meetings are not held during subsistence gathering seasons.

**3.3 LEAD AND COOPERATING AGENCIES*****Issue: How are cooperating agencies involved in the SEIS process?******Comment Summary***

Commentors requested that the BLM clarify the USFWS's role as a cooperating agency in the SEIS process. Some commentors suggested that it may be more appropriate for the USFWS to serve as a co-lead agency in SEIS development with the BLM. Commentors noted that neither the USFWS nor the North Slope Borough were included in the NOI and were concerned that this may violate the BLM's duty to coordinate with cooperating agencies in an official capacity.

A commenter expressed concern that the USFWS has not been adequately consulted with for the best available science for resources on the coastal plain.

### **3.4 PURPOSE OF AND NEED FOR THE SEIS**

#### ***Issue: What is the purpose and need for the SEIS?***

##### *Comment Summary*

Commentors stated that the SEIS should refine its purpose and need statement more broadly to include all purposes of the Arctic Refuge. Commentors particularly emphasized that the conservation purposes of the Refuge, and revenue generation purposes as directed by the Tax Cuts and Jobs Act of 2017, Public Law 115-97 (Tax Act), be included in the purpose and need statement.

Other commentors were concerned that the NOI did not provide an adequate purpose of and need for the SEIS because it did not identify the specific legal deficiencies of the 2019 FEIS and 2020 ROD.

### **3.5 ALTERNATIVES – NEW ALTERNATIVE PROPOSED**

#### ***Issue: What new alternatives to the 2019 FEIS should the BLM analyze while preparing the SEIS?***

##### *Comment Summary*

##### Lease Tract Alternative

The BLM should consider an alternative that employs criteria to vary the location, amount, and timing of lease tracts being offered for leasing. The 2020 Coastal Plain Oil and Gas Leasing Program EIS did not analyze the impacts of any proposal for when to offer which tracts of land for leasing, let alone alternative proposals that vary by location, amount, or timing. For example, a logical implementation strategy to mitigate surface resource effects would be to use a phased approach to offering leases starting on the western side of the Coastal Plain.

The BLM should consider an alternative with strategic lease tract locations. The location and size of each lease tract matters even when lease stipulations are identical for any given area of land. Bias tract configurations would lead to actions that would benefit oil and gas development or provide for greater surface resource protection.

##### 2,000-acre Limit Alternative

The BLM should analyze an alternative with a proactive plan for strategic and limited surface development up to 2,000 acres in order to protect surface resource values. The SEIS should require an absolute maximum surface development and not permit a rolling maximum as the previous administration incorrectly set forth. If the BLM does not properly interpret the Tax Act (Title II Section 200001 (c) (3) SURFACE DEVELOPMENT) to define the maximum limit as absolute, one time only, rather than an “at any given time” rolling limit, it is hard for commentors to see that it would make any difference if the restriction were nominally 2,000 or 1,000 or 100 acres that could be rolled over indefinitely.

The BLM should consider an alternative that consists of a total of 2,000 compact and contiguous acres.

The BLM should prohibit development of additional areas based on a vague and likely impossible reclamation standard, thereby limiting the impact of oil and gas activities on the Coastal Plain. This component should be applied across all alternatives. Whether areas can be reclaimed at all, even after decades, is highly suspect. The BLM should also consider a stipulation or some other requirement that will be incorporated into the terms of any leases (including already-issued leases if those are not cancelled) to ensure the BLM fully retains the right to enforce the 2,000-acre limitation and other protective measures to minimize impacts. The existing

leases do not expressly retain this right or recognize the BLM's legal obligation to enforce this limitation, contrary to the Tax Act.

#### Less Than 2,000-acre Surface Disturbance Limit Alternative

The BLM should consider an alternative with a surface infrastructure maximum of less than 2,000 acres. The original EIS included no range of alternatives; all alternatives had the full 2,000 acres of gravel fill placement, just distributed differently. Areas of other types of disturbance, including pipelines, power lines, trails (including seismic trails), and gravel mines should be quantified. The SEIS should include at least one alternative with less than 2,000 acres of gravel fill and a displacement area of less than 25 percent of the total program area.

The BLM should consider an alternative which would include all surface structures and support facilities including pipelines (not just pipeline supports), gravel mines, and runways, as part of the 2,000-acre limit, and remove the rolling limit based on remediation. The analyses should include possible site scenarios for the 2,000-acre limit across the entire coastal plain, including analyses specific to each potential 400,000-acre lease sale. The BLM should also explain how it will track, regulate, and ensure that surface development does not exceed this 2,000-acre limit.

The BLM SEIS should analyze leasing alternatives for approximately 660 and 1,155 cumulative surface acres for development in the Coastal Plain program area. This acreage estimate was developed using ConocoPhillips's Alpine Development as the analytical model, basing the assessment on two factors: reservoir access capability and cumulative recovered reserves. Using the Alpine Development as the analytical model for reservoir access capability, about 4 developments (660 surface acres) would be necessary to reach targets in the whole of the 427,900 acres that are projected to have high potential for petroleum resources within the Coastal Plain program area. By using the reported recoverable reserves and production capacity of the Alpine Development, about 7 developments (1,155 surface acres) would be needed to extract the 3.4 billion barrels of technically recoverable oil that is likely to be produced by 2050 within the Coastal Plain program area.

#### No Action Alternative

The BLM should include and analyze a no action alternative in the SEIS where no leasing is allowed to occur in the Arctic Refuge. This alternative should also include a scenario that voids all leases issued in the January 2021 lease sale, or, in the alternative, the agency should void all leases prior to issuing its Draft SEIS. This will ensure that the agency's alternative analysis meets the requirements of NEPA that a no action alternative consist of the environmental baseline, that is, no current oil and gas activities in the Arctic Refuge. A no action alternative would also include retaining the wilderness and wild and scenic rivers recommendations for the Coastal Plain.

#### Minimum Required Acreage Alternative

Section 20001 of the Tax Act requires the sale of at least two leases by December 22, 2027, and that these leases must be a minimum of 400,000 acres each in areas with the highest hydrocarbon potential. Therefore, the BLM should include a development alternative in the SEIS that is limited to 800,000 acres and no more. This alternative should also provide certainty on which tracts of land will be put up for lease and prohibit seismic activity on tracts of land that will not be considered for leasing.

#### Surface Development Restriction Alternative

The BLM should analyze, as an alternative or mitigation measure, restricting surface development to only development projects. In doing so, the BLM would be able to ensure the protection of quickly diminishing permafrost; acknowledge that revegetation is challenging in arctic environments; and, most importantly,

ensure permitted activities do not create human health risks by contaminating subsistence foods or cause substantive interference with subsistence way-of-life practices.

#### Alternative Sources/Energy Replacement Alternative

The BLM should analyze an alternative that incorporates the potential of large-scale renewable energy projects as an alternative energy source; this would be done by using projects that have permit applications in queue with the State of Alaska or the U.S. federal government.

As an alternative to the proposed action, this NEPA process should evaluate the alternative of meeting the equivalent production demand in areas elsewhere in the U.S.

#### Indigenous Peoples-focused Alternative

The SEIS should analyze an alternative that thoroughly addresses and minimizes the full suite of cultural, traditional, historical, ecological, spiritual, and other impacts of an oil and gas leasing program on Indigenous peoples. This alternative should recognize and account for past Indigenous landownership, past and current Indigenous land stewardship, and historical and present injustices towards Indigenous peoples. The alternative should fully incorporate and create space for traditional Indigenous knowledge, the Indigenous worldview, and future shared stewardship by Indigenous peoples. Key elements of the alternative would include:

1. Minimizing the acreage available for leasing; limiting seismic and other exploration activities to leased areas; and including stringent, non-waivable stipulations for resource protection, developed through government-to-government consultation, and incorporating traditional Indigenous knowledge.
2. Deferring leasing or lease implementation, and any permitting of exploration or other development activities until the following conditions are met:
  - a. A formal apology by the president of the U.S to Indigenous Peoples of the Arctic (Iñupiat and Gwich'in) for historical injustices and a commitment to ongoing dialogue and action aimed at healing and reconciliation
  - b. Co-creation of a plan for future shared stewardship, shared landownership, and co-management of the Arctic Refuge--and the entire Arctic landscape--that centers on the Indigenous worldview and the interconnected and sentient rights of the lands, waters, wildlife, and Indigenous peoples and fully restores Indigenous hunting and fishing subsistence rights
  - c. Free, prior, and informed consent by Indigenous peoples (community members) of the affected area or adjacent to the affected area, based on meaningful government-to-government consultation with federally recognized Tribes (not corporations), to proceed with any federal decision-making impacting the Arctic Refuge
  - d. Completion of a full Class III inventory of cultural resources under the National Historic Preservation Act (NHPA) and listing of the Coastal Plain as a Traditional Cultural Landscape on the National Register of Historic Places
  - e. A showing that all climate impacts - including cumulative impacts - associated with development can be fully eliminated, establishment of a climate mitigation bank for the Coastal Plain, and meaningful federal investment in a just transition for Alaska Native communities to a clean energy economy (including a community conservation impact fund to support alternative energy projects)
  - f. A full accounting of the intergenerational social, cultural, and health costs of fossil fuel development on Arctic Indigenous communities (including the connection to historical trauma), accompanied by a jointly developed plan and federal funding to begin to remedy those costs



- g. Reconstitution of the International Porcupine Caribou Board (or an Alaska-based/United States equivalent), comprised of at least 50 percent Indigenous members, including youth, who utilize and live in proximity to the Porcupine Caribou Herd (PCH) and are committed to the Board's mission of protecting and maintaining the PCH's habitat, and development and adoption of a plan based on Western science and traditional Indigenous knowledge for eliminating impacts on the PCH associated with oil development
- h. Formal recognition and reconciliation of ANCSA land and resource claims and settlements, and the associated stranded Alaska Native corporation assets, frustrated by the designation of the Arctic Refuge

#### Arctic Refuge Purposes Alternative

The BLM should develop an alternative that prioritizes the Refuge's original protective purposes. The alternative would be supported by robust and sound legal and technical analysis, which would sufficiently avoid, minimize, and mitigate environmental harms to assure compatibility with ANILCA and Refuge purposes. Components of such an alternative might include, for instance: concentrating and strictly limiting leasing and development to certain lower-impact areas identified through a visibility analysis and careful examination of recreational use data, including non-waivable stipulations for extensive no surface occupancy (NSO) setbacks around river corridors, height restrictions on infrastructure, mandatory photo simulations of proposed facilities to inform future visual resource assessments, timing limitations during popular recreational months, mandatory development of monitoring and conflict avoidance plans in coordination with recreational groups, guides, and pilots, and other measures designed mitigate aesthetic and other impacts on recreation settings and opportunities.

Commentors believe the BLM erroneously and unlawfully interpreted the Tax Act to mean that it cannot authorize surface development in an amount less than 2,000 acres. This erroneous and unlawful interpretation skewed the alternatives towards maximizing industrial development by: (a) requiring all the action alternatives to provide for at least 2,000 acres of surface development; (b) mandating that facilities counting toward the 2,000 acres must be both "production" and "support facilities"; (c) allowing the exclusion of airstrips, roads, pads, gravel pits and stockpiles, barge landing and storage facilities, and other facilities from the 2,000 acres; and (d) excluding rights-of-way and easements from the 2,000-acre limitation. The BLM should remedy this legal deficiency in the SEIS and incorporate the broader statutory mandates governing the Arctic Refuge into the alternatives analysis.

#### Maximum Protection or Least Impact Alternative

The SEIS should analyze an alternative that maximizes the ecological integrity of the Coastal Plain. A maximum protection alternative should include strict limits on the number of acres leased and subjected to surface occupancy as well restrictions on other activities that may harm ecosystem resources or impair subsistence and recreational uses of the Arctic Refuge. To accomplish this, the BLM should minimize the acres available for leasing, and focus on excluding particularly sensitive areas (such as polar bear denning habitat and caribou calving and post-calving areas).

NEPA requires the BLM to develop alternatives that avoid or minimize harm to the environment. If the BLM determines that it must select an action alternative, it should limit the total, combined acreage offered for sale and limit the cumulative surface area development. The alternative should be designed in a manner that minimizes the lease area and surface development, avoids leasing in particularly sensitive areas, and includes a full range of lease stipulations, restrictions, and mitigation requirements necessary to minimize environmental impacts. Possible requirements include: limiting lease sale tract offerings to the minimum total

combined 800,000 acres for the lease sales specified in the Tax Act, of which there must be at least two, and selecting a preferred alternative that sets the first lease sale at less than 400,000 acres; minimizing lease area and surface development, including by employing a lawful interpretation of the Tax Act's surface area disturbance limit and authorizing less than 2,000 acres of surface area impacts throughout the Coastal Plain; including a full range of mandatory, non-waivable lease stipulations, restrictions, ROPs, timing limitations, best management practices (BMPs), and site-specific mitigation measures to avoid and minimize environmental impacts; prohibiting leasing in ecologically sensitive areas and those important to wildlife, including migratory birds, caribou, and polar bears, to avoid irreversible environmental harm; and allowing delayed or deferred lease sales tied to oil and gas prices reaching price levels near recent historic highs to assure that leasing and any subsequent development will be cost effective and maximize the revenue generation purpose of the Lease Program Congress intended.

The SEIS should consider an alternative that avoids, minimizes, and mitigates to the greatest extent possible harm to sensitive Coastal Plain resources by:

- Limiting lease sale tract offerings to the minimum total combined 800,000 acres for the lease sales specified in the Tax Act, of which there must be at least two, and selecting a preferred alternative that sets the first lease sale at less than 400,000 acres
- Minimizing the lease area and surface development, including by employing a lawful interpretation of the Tax Act's surface area disturbance limit, and selecting a preferred alternative that authorizes less than 2,000 acres of surface area impacts throughout the Coastal Plain
- Including a full range of mandatory, non-waivable lease stipulations, restrictions, ROPs, timing limitations, BMPs, and site-specific mitigation measures to avoid and minimize environmental impacts
- Prohibiting leasing in ecologically sensitive areas and those important to wildlife, including migratory birds, caribou, and polar bears, to avoid irreversible environmental harm
- Allowing delayed or deferred lease sales tied to oil and gas prices that have reached price levels near recent historical highs, to assure leasing and any subsequent development will be cost effective and maximize the revenue generation purpose of the Lease Program, as Congress intended

The BLM should consider an alternative that makes sensitive areas, such as areas the USFWS identifies as having high densities of maternal polar bear dens, unavailable for leasing. Considering these components is particularly important if the BLM carries forward its prior approach that even NSO stipulations do not preclude surface activities, such as seismic surveys, because the decision to lease—or not lease—those areas would be the last point at which the BLM can preclude impacts.

An environmentally protective alternative would not only lease the minimum acreage required in the Tax Act, but it would also assess the ability for stipulations like methane capture, NSO clauses, and others to mitigate the environmental harms from leasing in the Coastal Plain.

#### Phased Leasing Alternative

The SEIS should consider an alternative with phased leasing to make fewer than 800,000 total acres available for leasing. For this alternative, the BLM would only offer 400,000 acres initially and then include any unleased areas from the first lease sale in the second lease sale, along with any additional acres needed to provide a total offer of 400,000 acres. This would meet the Tax Act's requirements to offer 400,000 acres in each lease sale because the BLM could offer overlapping acreage in the two lease sales. This alternative may significantly reduce the leased acreage below 800,000 if not all acreage is leased in each lease sale. For any

leases that are issued, the BLM should consider issuing only NSO leases and should consider imposing such restrictions on existing leases, if those leases are not canceled. These should be non-waivable stipulations, even for access to leases.

#### Carbon Budget/Greenhouse Gases Alternative

Commentors requested that the BLM explore whether and how an alternative could be adopted that is compatible with the urgent need to reduce greenhouse gas emissions. For example, the BLM should consider delaying issuance of any leases following a lease sale. Or, it should consider deferring any exploration or development through lease conditions, until there is room in the carbon budget for new oil.

The already leased and permitted stock of the federal fossil fuel estate leaves no room in the carbon budget for incremental additions of greenhouse gas emissions. The BLM should develop alternatives that add no new greenhouse gas emissions stemming from fossil fuel development, for example, by not leasing or delaying leasing or development to account for option value. The BLM should further consider an alternative that achieves net zero greenhouse gas emissions.

The BLM should consider an alternative that achieves zero emissions and “net-zero” emissions and that would reduce the impacts of greenhouse gas emissions by deferring production. The BLM’s reasons in the 2019 FEIS for failing to consider deferring production were arbitrary and capricious. The SEIS should consider the best available scientific information relevant to climate impacts, including new information that has become available after the leases were issued, such as the 2021 Intergovernmental Panel on Climate Change (IPCC) report<sup>1</sup>, as well as new information regarding the economic irrationality of Arctic oil development.

#### Delayed Leasing Alternative

Commentors stated that the BLM should work with the oil companies to conduct the three-dimensional seismic update before lease sales. This would reduce impacts on the environment by focusing the areas offered for lease to the areas with most probable recoverable oil. In the SEIS, the best way to implement this scenario is as an independent development alternative where the seismic update precedes the first lease sale.

Although the Tax Act directs the BLM when lease sales should occur and the acreage to be offered in those sales, it does not mandate that leases be issued, nor does it limit what protective stipulations may be applied to the leases, or the timing of production. Consequently, the BLM should consider one or more alternatives that would delay leasing and/or lease implementation, such as by constraining the timing of extraction, based on the principles of option value or informational value. This would allow for the BLM to look at the benefits of delaying irreversible decisions. It is well-established that issuance of an oil and gas lease can be an irreversible commitment of resources (See *Pennaco Energy, Inc. v. U.S. Department of the Interior*, 377 F.3d 1147 (10th Cir. 2004)). In the context of the Coastal Plain, there are significant considerations that would support delaying leasing and/or lease implementation (See *Ctr. for Sustainable Economy v. Jewell*, 779 F.2d 588, 610 [DC Cir. 2017]; 30 U.S.C. 21a). Consequently, the BLM should not commit to moving forward with oil and gas leasing on the Coastal Plain when economic and other considerations indicate it is not the right time to do so. To the extent the BLM does move forward with leasing, the Tax Act leaves the BLM with ample discretion to delay issuance of or suspend any leases. Indeed, by suspending leases in the interest of conservation of natural resources, the BLM can toll the terms of leases and obligations of leaseholders to make rental payments. This approach should be considered in the range of alternatives. Delaying exploration and development will avoid immediate harm and provide an opportunity to consider new data and technology.

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<sup>1</sup> The IPCC published the Sixth Assessment Report, titled Climate Change 2021: The Physical Science Basis, in August 2021.

The BLM should consider an alternative in which it retains the authority to delay approvals to conduct activities. Alternatives that delay leasing or development would provide economic benefits in terms of improvements in technology, additional information on risks to other resources in the Coastal Plain and ways to avoid those risks, and additional information on the impacts of climate change and ways to avoid or mitigate resulting changes to the affected environment.

#### Seismic Restrictions Alternative

The SEIS should analyze an alternative that restricts seismic exploration, particularly in areas that will not be leased or where seismic survey damage is likely to be exacerbated because of the topography or other foreseeable resource impacts. Seismic exploration and exploration drilling should be prohibited in areas that would not be offered for lease and the BLM should include timing, geographic, and other restrictions on seismic exploration even in leased areas. The BLM should also consider additional and more protective ROPs for any seismic activities since the minimal provisions incorporated into the 2020 Leasing Program were unlikely to protect sensitive vegetation, permafrost, tundra, and other resources on the Coastal Plain. For example, the BLM should prohibit seismic activities within 1 mile of polar bear maternal denning habitat and prohibit seismic activities in other areas until after den departure.

Allowing leasing and seismic exploration on every acre of the Coastal Plain would not adequately protect polar bears. The BLM should develop an alternative designed to reconcile the competing congressional commands to protect polar bears and also administer an oil and gas program. Such an alternative could minimize the acreage available for lease; keep leasing out of key areas, such as areas the USFWS identified as high-density for denning; limit areas where seismic exploration can occur and/or infrastructure may be constructed, so areas critically important for polar bear life functions are left intact; impose non-waivable buffers around suitable denning habitat; and could impose timing restrictions on oil and gas activities to ensure activities in denning habitat occur later in the winter, when denning bears have already departed from their dens. Moreover, the BLM should clarify its position regarding its authority to preclude or restrict activities on leases to ensure the SEIS accurately analyzes the likely restrictions that would apply to any oil and gas activities on future leases.

#### Kaktovik Gas Supply Alternative

The SEIS should analyze an alternative that provides gas to only the community of Kaktovik, including a scenario focused solely on gas extraction from Alaska Native lands. Such an alternative would provide lower cost, non-diesel, energy to Kaktovik, as is the case for the North Slope communities of Barrow and Nuiqsut. To minimize the costs and environmental impacts of such a development, the gas should be provided from leases located near Kaktovik.

#### Limit Surface Infrastructure Alternative

Commenters requested that the BLM consider an alternative in which there is no central processing facility, production pads, gravel mines, pipelines, or other surface infrastructure allowed on the Coastal Plain. Oil and gas resources could be produced through directional drilling from outside the Coastal Plain and/or transported via pipeline for processing at another location. Such an alternative could decrease impacts on surface resources on the Coastal Plain by limiting surface disturbance and human activity associated with oil and gas activities. Commenters stated that gravel mining should occur outside the Coastal Plain. The Arctic Refuge is withdrawn from all forms of mineral appropriation or disposal under the public land laws, outside of the limited program based on the Tax Act. Thus, the Coastal Plain is withdrawn from gravel mining. Because the Tax Act did not supersede that withdrawal, gravel mining cannot be authorized on the Coastal Plain.

Commenters stated that the BLM should consider an alternative that includes ways to ensure oil and gas development is consolidated and avoids duplicative or unnecessary infrastructure (e.g., excessive gravel road mileage through the lack of coordination among fields, and multiple central processing facilities owned by different companies). Such an alternative should consider a stipulation requiring compact siting of all oil and gas facilities and infrastructure, and mandating that any development must be contiguous, even under the 2,000-acre limitation. The BLM should also ensure there is an administrative means that minimizes the overall footprint of the infrastructure and requires coordination of operators' development plans beyond just the 2,000-acre limit. Additionally, the BLM should consider an alternative that mandates roadless access as the default approach. In the 2019 FEIS, the BLM assumed that the focus of development would occur in the Topset Play, if the BLM carries this assumption forward in the SEIS, it should consider an alternative that looks specifically at leasing and development focused in this area, including considering leasing approaches and protective measures in this geographic focus.

#### Re-analyze Alternative B from the 2019 FEIS

The BLM should re-analyze Alternative B from the 2019 FEIS due to the changes between the 2019 FEIS and the 2020 ROD on key elements, i.e., the 2,000-acre limitation interpretation and the right-of-way provision. To fully understand the impacts, the BLM should engage in a robust analysis of the existing program. This should be the only alternative that considers the existing leasing program and leases if the BLM does not cancel them prior to undertaking the SEIS. Because The BLM has already committed resources in reliance on the 2019 FEIS and ROD by issuing leases, it is unclear how the BLM can use an SEIS to correct the legal deficiencies now. To the extent that the BLM intends to use the SEIS to correct its prior failure to properly evaluate the impacts of Alternative B as adopted (by providing a revised assessment of its impacts as an action alternative, and a revised comparison of its impacts on other alternatives), the BLM should also consider a new sub-alternative for the 2020 Leasing Program that considers imposing stronger stipulations and ROPs. Because the first lease sale will have occurred under the 2020 Leasing Program (and to the extent the leases are not canceled prior to the SEIS), as part of evaluating the existing program, the BLM should consider making available for a second lease sale only 400,000 acres of the remaining unleased areas to reduce the existing program's impacts.

#### Identification of Highest Potential for the Discovery of Hydrocarbons Alternative

The BLM should include an alternative that does not identify NSOs, controlled surface uses, or timing limitations that create unnecessary challenges to future oil and gas activities, including through access limitations. These kinds of administrative limitations would contravene the federal law mandating the Program. The BLM should provide specific protection of surface areas where needed and only after areas that have the highest development potential acreage have been identified. Identifying areas for oil and gas leasing while restricting surface uses necessary to access subsurface resources is functionally equivalent to designating surface areas as unavailable for "development, production, and transportation of oil and gas in and from the Coastal Plain," (Public Law 115-97, Section 20001(b)(2)(A)) and conflicts with Congress's determination of the permissible footprint for the mandated Program and the appropriate balance for protection of other resources. This approach is consistent with the Tax Act, which requires that the Secretary of the Interior manage the Program "in a manner similar to the administration of lease sales under the Naval Petroleum Reserves Production Act of 1976...(including regulations)." (Public Law 115-97, Section 20001(b)(3).). The BLM should recognize that additional stipulations needed to protect surface resources and special areas may be imposed at the time that surface use authorizations and permits to drill are approved, and as the NEPA and permitting processes move forward to review specific development proposals.



### Proposed New Alternative W1

Proposed SEIS Alternative W1 would limit oil and gas exploration and surface development, with the intent being that development actions do not materially interfere with achieving Coastal Plain surface resource purposes. Proposed SEIS Alternative W1 would allow production and support facilities to cover 200 surface acres on the Coastal Plain. The surface development area would be within 6 miles of the Canning River. This alternative would also provide for an oil and gas program in the Coastal Plain through horizontal and extended reach drilling. A seawater treatment plant, barge landing, and central processing facility would not be permitted within the Arctic Refuge. Seismic surveys would not be permitted in the areas that are not available for lease sale. Seismic surveys would be subject to a USFWS compatibility determination. NSO stipulations as identified on the Alternative W1 map would not be waived, modified, or granted an exception. Further development of this alternative would follow the guidance in the BLM regulation 43 CFR 3101.5-3—Alaska Wildlife Areas.

### Proposed New Alternative W2

Proposed SEIS Alternative W2 would limit oil and gas exploration and surface development, with the intent that development actions do not materially interfere with achieving Coastal Plain surface resource purposes. Proposed SEIS Alternative W2 would allow production and support facilities to cover 600 surface acres of federal land on the Coastal Plain. The locations for satellite well pads under this oil and gas development scenario would be limited to locations within a 50,000-acre area on the western portion of the Coastal Plain. This alternative also provides for an extensive oil and gas program in the Coastal Plain through horizontal and extended reach drilling. A seawater treatment plant, barge landing, and central processing facility would not be permitted within the Arctic Refuge. Seismic surveys would be subject to a USFWS compatibility determination. Seismic surveys would not be permitted in areas that are not available for lease sale. Lease Stipulations and ROPs for Alternative W2 would be the same as the 2019 FEIS Alternative D2, where applicable. NSO stipulations as identified on the Alternative W2 map would not be waived, modified, or granted an exception. Further development of this alternative would follow the guidance in 43 CFR 3101.5-3.

### Proposed New Alternative W3

Proposed SEIS Alternative W3 could provide for the collective purposes of the Coastal Plain. A seawater treatment plant, barge landing, and central processing facility would not be permitted within the Arctic Refuge. Seismic surveys would be subject to a USFWS compatibility determination. Seismic surveys would not be permitted in the areas that are not available for lease sale. Lease Stipulations and ROPs for Alternative W3 would be the same as 2019 FEIS Alternative D2 where applicable. NSO stipulations as identified in the Alternative W3 analysis unit and tract descriptions would not be waived, modified, or granted an exception. Further development of this alternative would follow the guidance in 43 CFR 3101.5-3. Further analysis of this alternative may find that the allowed development exceeds surface resource degradation thresholds. If this is the case, the alternative should be modified to reduce the allowed surface acres of federal land on the Coastal Plain to be covered by production and support facilities. The following are specific comments on each of the recommended analysis units and potential lease tracts for Alternative W3:

- Canning River Delta - Tracts 5, 6, 9, and 29. Leasing of these tracts would be subject to a NSO stipulation. An NSO stipulation would protect fish and wildlife natural diversity and water quality and quantity of this biologically rich delta. A NSO stipulation would also help conserve the polar bear.

- Conserving the Polar Bear - Tracts 8, 9, 10, 14, 15, 18, 19, and 32. Leasing of these tracts would be subject to a NSO stipulation. A NSO stipulation would help conserve the polar bear and protect important coastal wetlands and would contribute to protecting PCH habitat.
- Porcupine Caribou Herd and Protecting Natural Diversity - Tracts 4, 7, 16, and 17. Leasing of these tracts would be subject to a NSO stipulation. A NSO stipulation would help protect fish and wildlife natural diversity and water quality and quantity. Not leasing Area 99 would protect PCH habitat and many other species of fish and wildlife, conserve polar bear habitat, and maintain water quality and quantity.
- Providing for a Coastal Plain Oil and Gas Program on Surface Use Areas - Tracts 1, 2, 3, 11, 12, and 13. Controlled surface use of these tracts would provide for the Tax Act's oil and gas purposes. In addition, horizontal drilling from these tracts and state land and water may contribute to a Coastal Plain oil and gas program.

#### General New Alternative Comments

Commenters stated that the BLM should analyze one or more alternatives that impose more stringent and cost-benefit-justified lease stipulations, timing restrictions, and infrastructure limitations.

The SEIS should consider alternatives that restrict leasing, and the associated aircraft activity, to smaller areas of the Coastal Plain. The SEIS should consider that leasing any area of the Coastal Plain will result in associated aircraft activity that will have significant impacts on migratory birds.

From a development impact and economic perspective, at least one specific action alternative should address the scenario that the next Congress or next president could repeal the entire proposed action.

Public Law 115-97, Section 20001(c)(1)(B)(i)(II) mandates that the lease sales include those areas with "the highest potential for the discovery of hydrocarbons" for lease. The BLM should not analyze alternatives that close areas to leasing unless it can determine that the closed areas are not the areas with the highest potential for the discovery of hydrocarbons.

### **3.6 ALTERNATIVES – CHANGE TO EXISTING ALTERNATIVES**

#### ***Issue: What changes should the BLM make to all existing alternatives?***

##### *Comment Summary*

The BLM should add a requirement that sensitive and non-sensitive fish species should be assumed to be present until surveys with 95 percent detection probability have been conducted during the appropriate seasons.

Snow depth and density and vegetation data should be collected where ground operations will actually be occurring. There is a great deal of evidence that shows how variable these conditions are even within the same watershed. The exact dates should be determined by the BLM Authorized Officer in coordination with the USFWS.

For all requirements and standards that need to be approved by the BLM Authorized Officer, the decision on approval should be made in coordination with the USFWS subject matter experts familiar with the area.

The BLM should add a requirement to monitor effectiveness of breaching at crossings to ensure impacts on fish and hydrology do not occur.

Restoration standards need to be set in stipulations in the SEIS. It should also be clearly stated what level of restoration will be required before land is no longer considered part of the infrastructure development cap.

Restoration plans should be required and reviewed prior to issuing a lease and should be approved by the BLM and the USFWS. All alternatives should include the requirement for plans to include ecosystem restoration to restore pre-development stability, visual, hydrologic, vegetation, wilderness, and habitat conditions and wild and scenic river eligibility conditions. Clarity of what is, or is not, counted toward the 2,000-acre limit should be described in the SEIS, and the definition should not change between the Draft SEIS, Final SEIS, and ROD. This includes a clearer understanding of what counts as reclaimed disturbance (that is, the standards of reclamation), versus what would be considered a permanent disturbance (it cannot be reclaimed, or there has been no evidence from the North Slope of successful reclamation).

Commenters stated that when choosing among various leasing alternatives, the BLM should assess the informational value of delaying any lease sales above the 800,000-acre minimum set by the Tax Act. The informational value of delay is known as “option value,” and it has long been considered a relevant factor for federal leasing and mineral decisions by agencies, courts, and economists (see *Center for Sustainable Economy v. Jewell*, 799 F.3d 588, 610-11 [DC Cir. 2015].)

The BLM should include an evaluation of the potential effects of an oilfield supply complex (essentially a “Deadhorse East”) somewhere within the Coastal Plain that would support exploration, drilling, and operational activities should leasing lead to development. Operations likely included in this complex would be drilling contractors, equipment rental contractors, well testing, fuel storage, equipment maintenance facilities, camp facilities, and others that are essential to successfully operating an oilfield. This complex may or may not be located on active leases if it is developed, so resource protection measures should be developed for both on- and off-lease development scenarios. Food storage and handling, and solid waste management, particularly putrescible waste and the attraction of bears and foxes to these wastes, are important issues to be evaluated.

The BLM should evaluate the need for a wildlife oil spill response facility within the Coastal Plain for initial capture, stabilization, and cleaning of oiled wildlife before sending them to a more permanent treatment facility.

The BLM should include the federal land formerly containing production and support facilities to count towards the cumulative 2,000-acre limit. This is because the 2019 FEIS stated that disturbances from seismic testing in 1984 and 1985 remain; this means the disturbance has remained for over 35 years and is now not regarded as fully restored. Returning full habitat function can take longer in the Arctic than elsewhere. Reclamation should be adequate before the disturbed acreage will be available for reuse by facilities. A site may be considered restored to its previous condition when the site condition measurements fall within the range of variability measured at the site before disturbance or at an undisturbed reference site.

The BLM failed to explain how the 2,000-acre limitation would apply to the private lands on in the Refuge (i.e., the Arctic Slope Regional Corporation lands and Native Allotments) under section 22(g) of the ANCSA as well as how it could apply to Arctic Slope Regional Corporation lands under the terms of that Land Exchange Agreement.

***Issue: What changes should the BLM make to all existing action alternatives?***

***Comment Summary***

In order to achieve the full intent of Congress with respect to the oil and gas program on the Coastal Plain of the Arctic Refuge, the BLM should implement the following two conditions, and revise the environmental impacts of Alternatives B, C, D1 and D2, as necessary:

1. A minimum bid requirement should be established for lease sale. Then, a revised minimum bid should be imposed for each subsequent lease sale in order to establish compliance with the \$1 billion budget instruction from Congress.
2. A lease stipulation should be imposed to manage the Coastal Plain of the Arctic Refuge under Alternative A (No Action) until compliance with the \$1 billion budget instruction is certified. If either of these conditions is not met, the budget instruction is violated and there should be no oil and gas program on the Coastal Plain. That was the original intent of Congress and it was never modified, rescinded or revoked. Congress required only that two lease sales be conducted at a minimum acreage each and within a specified timeframe.

The SEIS needs to consider the 2,000 acres of development geographically and spatially, and the impacts that could occur depending on the location of activities and development. The location of development greatly influences the likelihood and extent of habitat preservation. Disturbances on the same total surface acreage may produce wildly different impacts on plants and wildlife depending on the amount of contiguous habitat between them.

The BLM has not explained how it intends to track surface disturbance to ensure that limits are not being neared, then reached and exceeded by multiple projects at the same time. The BLM needs to demonstrate reliable technology, reporting, verification, and monitoring techniques that it intends to use. Moreover, it is unclear when the BLM will grant acreage to companies. These types of decisions are important for project developers and will have implications for their development timelines since ensuring adequate acreage available for development will be essential. The BLM has not elaborated upon how it intends to enforce the surface disturbance limitation once it grants leases to operators. It is not clear if the agency intends to place any limits on individual leases or to simply track the acreage and then send notices to companies to halt activities if acreage limits are reached. The 2019 FEIS lacked specific stipulations that indicate there will be a limitation on surface disturbance or that provide a general notice to the lessors that the BLM may require a cessation of surface disturbing activities should the acreage limits be achieved. The BLM also never included terms to clearly retain its authority to restrict surface use and comply with the 2,000-acre limitation in the issued leases. The BLM should be clear in its lease terms that it is not granting any rights to lessees to conduct any oil and gas activities and that the BLM retains full authority to outright prohibit oil and gas activities on any lease issued at any time during the lease term. Without a clear restriction and reservation of rights, the BLM could be in the position it now finds itself in the National Petroleum Reserve-Alaska (NPR-A), where it has granted leases that, according to the agency, do not allow it to reject proposals and prohibit activities. If the BLM does not identify an enforcement mechanism and clearly retain the authority to prohibit activities on any leases it may grant, the BLM cannot ensure that it will comply with the 2,000-acre limitation.

***Issue: What changes should the BLM make to existing Alternative A?***

***Comment Summary***

Because seismic exploration has the potential to kill polar bears, a listed threatened species under the Endangered Species Act and protected by international treaties, seismic activity should also be included in the management of the Coastal Plain under the no action alternative.

The no action alternative in the SEIS should be the same as the no action alternative in the 2019 FEIS (no leasing program on the Coastal Plain and continuing management under the USFWS Comprehensive Conservation Plan<sup>0</sup>). Analyzing a no leasing alternative as the no action alternative will ensure that the BLM has a clear understanding of the baseline conditions on the Coastal Plain against which it can evaluate the impacts of the action alternatives, as required by NEPA. Setting no-leasing as the no-action alternative is

especially appropriate given that the Secretary acknowledged legal error in the 2020 Leasing Program and committed to undertake a new comprehensive analysis that will result in the adoption of a new leasing program. Considering no leasing as the no-action alternative may also help ensure that the BLM is not improperly constraining itself in considering the components of a leasing program that it may adopt

***Issue: What changes should the BLM make to existing Alternative D2?***

***Comment Summary***

The BLM explored the possibility of reducing the amount of land offered in the 2019 FEIS Alternative D2 to 800,000 acres, which “reflects the total minimum acreage that [the Tax Act] requires to be offered.” However, the SEIS should examine a number of additional restrictions on leasing activities that would further mitigate the environmental harms from oil and gas drilling on the Coastal Plain. It also should assess the value of deferring any lease sales above the mandatory minimums set by the Tax Act in order to gain additional information about market conditions and other critical factors.

### **3.7 ALTERNATIVES – LEASE STIPULATIONS AND ROPS**

***Issue: What lease stipulations and ROPs should the BLM require?***

***Comment Summary***

The BLM should require the following measures to specifically protect permafrost:

- Mapping and modeling of snow patterns to identify areas of maximum and minimum snow cover for routing traffic.
- Detailed terrain mapping to allow optimal trail routing, especially for supply trains and camp moves.
- Mapping of permafrost characteristics to identify areas of ice-rich permafrost and other at-risk areas that should be avoided.
- Minimum snow depth regulation for different terrain types and different types of vehicles. Deeper snow should be required for more sensitive areas (such as ice-rich permafrost) for areas with greater microtopography (such as tussock tundra) and for heavier vehicles and trails that are used by more than one vehicle.
- Defined snow depth and frozen soil measurement methods that adequately quantify the spatial and temporal variability of these factors necessary to minimize the impact of proposed vehicle traffic.
- Explicit standards for maximum disturbance before traffic is halted.
- Required USFWS supervision of traffic, with clear authority to stop traffic if adequate snow is not present or unacceptable disturbance levels occur.
- Bringing exploration equipment to the area over the ocean, not the land. Staging could be done using boats in summer or over the sea ice in winter. An overland route from the road system (Deadhorse) to the Arctic Refuge would unnecessarily damage a large area of tundra both inside and outside the Arctic Refuge.

The BLM should apply stipulations and ROPs from the Alaska Safety Handbook which provides standardized safety procedures, including BMPs, for Alaska oil and gas operations; and the North Slope Environmental Field Handbook, which provides best environmental practices and standardized measures for compliance with environmental regulations. This standardization would ensure that employees and contractors implement a consistent set of safe and responsible practices and procedures.

The BLM should consider requiring more stringent methane capture techniques in oil and gas development and operations. This would prevent wasteful and harmful methane leakage and flaring that contribute to climate change.

The BLM should consider leasing stipulations to better protect the fragile Arctic Refuge ecosystem, such as reducing land use disturbance through more NSO restrictions, limitations on activities such as seismic testing, and more stringent time restrictions with respect to activities on or near critical habitats.

Commenters suggested that the BLM should not rely on limited or outdated subsurface data to determine which acreage of the Coastal Plain to open, close, or limit to surface occupancy. This is because such reliance does not fully allow for identification or development of “those areas that have the highest potential for the discovery of hydrocarbons,” as are required to be included in the upcoming mandatory lease sale (Public Law 115-97, Section 20001(c)(1)(B)(i)). Instead, the BLM should open the total acreage of the Coastal Plain to oil and gas leasing and allow early area-wide exploratory seismic work so that the highest development potential acreage can be identified. The BLM should also recognize that any activity beyond leasing would be subject to additional, robust, site-specific NEPA analyses and permitting processes that establish the terms and conditions and mitigation measures; thus, those considerations are not appropriate at the SEIS stage.

The BLM should consider not locating causeways and docks in river mouths or deltas. Approved causeways should be designed, sited, and constructed to prevent significant changes to nearshore oceanographic circulation patterns and water quality characteristics (e.g., salinity, temperature, suspended sediments) that result in exceedances of water quality criteria, and should maintain free passage of marine and anadromous fish. Extensive review of both marine and terrestrial structures and facilities should be required to evaluate potential effects on both biotic and abiotic resources. Only essential facilities should be located proximal to the coastline to minimize potential effects on polar bears (movements along the coast or denning) and caribou (movements along insect relief habitat). All other facilities including transportation corridors for roads or pipelines should be set back from the coastline. Criteria would need to be developed to determine which facilities are considered essential within a specified distance of the coastline.

The BLM should require the following measures in the SEIS:

- Lateral drilling be required at the time of development to the extent technically feasible.
- Use historical shoreline change rates, permafrost mapping, and permafrost thaw projections to determine vulnerability to coastal erosion and work with the Alaska Division of Geological and Geophysical Surveys to develop protocols to minimize impacts under current and projected climate scenarios.
- Develop mitigation measures to reduce mass wasting of slopes resulting from development activities.
- Develop mitigation measures to reduce riverbank collapse resulting from development activities.
- Develop mitigation measures for development activities in areas of potential riverine and coastal flooding and erosion, permafrost degradation, aufeis, ground failure, and ice push.
- Develop mitigation measures to reduce damage or loss to paleontological resources resulting from development activities. Activities associated with development, such as construction of roads or well pads, could unearth or disturb paleontological resources. Marine and terrestrial mammal fossils are likely to be present in unconsolidated deposits of the Coastal Plain. Transported fossils are likely to be found in Cretaceous and Tertiary deposits along major rivers.
- Consider road and pad design alternatives to mitigate thermal impacts on permafrost stability.
- Develop mitigation measures for sand and gravel extraction and work with the Alaska Department of Natural Resources Division of Mining, Land, and Water and Division of Geological and Geophysical Surveys to develop protocols to minimize disturbance. This includes evaluating the potential volume of sand and gravel needed in development.

- Consider including offshore development of sand and gravel resources as a possible mitigation measure to reduce onshore disturbance and impacts on other resources from sand and gravel mining.
- Consider use of onshore sand and gravel extraction sites as freshwater reservoirs for ice road and pad construction.
- Develop mitigation measures to reduce loss of vegetative cover, removal of topsoil, melting of permafrost, erosion, rutting, and ponding resulting from development activities.
- Work with other agencies such as the Alaska Department of Natural Resources Division of Geological and Geophysical Surveys and Division of Mining, Land, and Water to consider the quality of soils for potential use and to develop protocols for soil use.

The BLM should blend the previously proposed lease stipulations to holistically restrict much of the eastern and middle portion of the Coastal Plain to protect the Southern Beaufort Sea population of polar bears. Combining these protections still allows for exploration and development to occur but minimizes the potential impacts of these operations. Commentors felt it reasonable to protect the known critical habitats as much as possible, instead of making available lands which have unknown, low, or medium petroleum resource potential.

Based on the potential cumulative impacts from the Coastal Plain leasing program and climate change, the BLM should consider leasing lands only in the high petroleum production potential area and analyzing alternatives which protect migratory bird habitats.

The BLM should blend the previously proposed lease stipulations to holistically restrict much of the eastern portion of the Coastal Plain to protect the PCH and its important habitats (i.e., calving, and post-calving areas). Combining these protections allows for exploration and development to occur and minimizes the potential impacts. ANILCA requires areas within the Arctic Refuge, which includes the Coastal Plain, be managed for the specific purpose of conserving fish and wildlife populations and their habitats.

To minimize or avoid environmental harms caused by greenhouse gas emissions that exceed previous estimates, the BLM should consider a mitigation measure that requires a NEPA adequacy review be completed if the barrels per day gross annual average is greater than 10 percent of the original barrels per day production target (disclosed in the development's most recent NEPA document) over a 2-year period; or when the cumulative recovered reserves are greater than 10 percent of the original estimated recoverable reserves (disclosed in the development's most recent NEPA document).

For areas that are leased, the BLM should include NSO stipulations. Such a requirement is necessary to limit gravel mines, facilities, pipelines, and other surface structures that would disturb caribou, polar bears, birds, and other animals, and cause permanent degradation of the tundra and permafrost. This is also consistent with the Tax Act, which prohibits the BLM from authorizing surface use of more than 2,000 acres of the Coastal Plain.

The SEIS should consider mitigation for habitat losses due to changes in hydrology caused by Leasing Program activities. The SEIS should include discussion of measures that would adequately protect water supplies and mitigate water-related impacts on migratory birds. While ROP 9 is intended to place limits on water withdrawals, the 2019 FEIS acknowledges that withdrawals could exceed recharge even with ROP 9 in place.

Commenters suggested that a lease sale stipulation should be implemented that no development of any kind, including exploratory testing or drilling, can be permitted until full compliance with the budgetary

requirements of Title II of HR1 of the 115<sup>th</sup> Congress (HR1) is confirmed. Statutorily, if the lease sales do not generate the required revenue, the specific basis under which HR1 was passed would be violated. This is because there would be no HR1 without a minimum bid price (budget reconciliation allowed passage of HR1 on a simple majority in the Senate only if the budget instruction—the generation of \$1 billion from the two lease sales—was met. HR1 effectively created a minimum bid price for both required lease sales which was certified by the Congressional Budget Office. Therefore, the SEIS and any subsequent lease sales should establish a minimum bid price requirement as a prerequisite for each lease sale, resulting in the rejection of all bids that do not meet the minimum.

The SEIS should clarify the BLM’s authority to order oil companies to stop additional development when the 2,000-acre cap is reached. The SEIS should also address the need to keep an accurate record of the accumulated developed acreage, as well as how compliance should be monitored and enforced for the restriction.

The ROD asserted the position that the BLM lacks discretion to deny rights-of-way for lease holders, but also for any request for “access” deemed necessary to carry out the leasing program. As a result, the leases issued in the first lease sale included a broad right of access and use of the Coastal Plain - going far beyond what is normally granted as part of an oil and gas lease. Those provisions and rights never should have been included as part of the leases. The leases need to be rescinded on this basis alone and the provision granting an essentially unrestricted right of access as part of the leases needs to be removed from all future leases.

Waivers, exceptions, and modifications should only be granted from NSO stipulations after a 30-day public notice and comment period. The USFWS should have the opportunity to submit information for consideration prior to granting waivers, exceptions, or modifications to address its expertise, surface management obligations, and potential impacts on any listed species. If the BLM proposes to grant a waiver, exception, or modification, the BLM should provide a written justification and explanation for doing. Finally, it is critical that the BLM track waivers, exceptions, and modifications requested and those granted, and make that information available to the public on a quarterly basis. These records will provide important insight into how the stipulations and ROPs are being applied and the potential impact of waivers, exceptions, and modifications on the overall function of the EIS. This information will also allow the BLM to determine if the availability of or criteria for granting waivers, exceptions and modifications needs to be further narrowed in order to ensure sufficient protection for affected species.

The SEIS should consider lease stipulations or ROPs to mitigate significant impacts on streams and aquatic habitats from gravel mining. The 2019 FEIS failed to analyze the impacts from this type of activity. In the 2019 FEIS, the BLM provided lease stipulations which applied to gravel mining, including ROP 24 and ROP 30(a), but they are not protective. None of these “mitigation measures” actually meaningfully avoid and minimize the significant impacts gravel mining poses to sensitive floodplains and habitats. The SEIS should formulate new and additional protections that are expressly applicable to gravel mining activities on the Coastal Plain.

The BLM should formulate mitigation measures, including stipulations and ROPs, that are protective of water resources. Protecting water resources is a purpose of the Arctic Refuge. The existing lease stipulations and ROPs are not sufficiently protective, are based on outdated information, and were not adequately analyzed to show that they would in fact protect the Arctic Refuge purposes. The percentages of water allowed to be used under ROPs 8 and 9 were unsupported by scientific information and analysis.



The BLM should design enforceable lease stipulations, ROPs, and other measures to avoid, minimize, and mitigate impacts on fish and aquatic species. The stipulations and ROPs in the 2020 Leasing Program were arbitrary, lacked scientific support and necessary detail, and would likely be ineffective in preventing or mitigating adverse impacts. The SEIS alternatives should include robust and mandatory monitoring protocols to detect and address short-term and long-term negative impacts on fish species, with particular focus on important subsistence species including Dolly Varden and Arctic cisco.

***Issue: What additional information or clarification should be provided regarding lease stipulations and ROPs?***

***Comment Summary***

The SEIS should identify how likely it is that additional stipulations or other protections will be added later as part of an adaptive management plan. If there is to be an adaptive management plan, it should be specified what actual statistically relevant monitoring will occur and what level of impact will monitoring be able to detect because without this information adaptive management is not possible.

The BLM should follow the Council on Environmental Quality (CEQ) and other guidance to ensure information gaps related to existing BMPs and mitigation measures are filled prior to the release of the SEIS, or the BLM needs to indicate why these information gaps cannot be filled due to resource limitations:

- How effective are existing BMPs and mitigation measures used in the NPR-A at ensuring protection of habitat?
- Will the BMPs and mitigation measures ensure protection of habitat in the program area, where there are considerable differences in hydrology, terrain, and management purposes compared to the NPR-A?
- What habitats or areas need additional protection due to their vulnerability or high-value to fishes, waterbirds, other wildlife, recreation, and subsistence?
- What is the status and natural variability in water quality and quantity of rivers and lakes? This information is necessary to allow for impact assessments and adaptive management practices.

The BLM should provide greater clarity in Lease Stipulation 1 on the justification between the required setback distances and protection of terrain, habitat or floodplain features, and those setbacks should not be arbitrary but instead based on the presence of such features.

To more concretely inform the impacts of mitigation, the BLM should provide a review of a reduction in the discretionary authority to vary stipulations and ROPs (as noted in the U.S. government accountability report GAO-17-307).

The BLM should provide evidence that proposed mitigations will be effective. Any proposed mitigation or monitoring plan should be designed for the entire duration of the project from pre-construction to reclamation, provide information for effective mitigation and adaptive management, and be inclusive of all parties with a management authority.

The current snow stipulations should specify where, when, how often, and at what spacing the snow measurements need to be made. Snow stipulations should be tied to tundra and permafrost damage to be useful as a management tool, and they currently are not. Additionally, snow depth is a very poor indicator of the protective properties of the snow; the proper basis for these stipulations is a snow water equivalent measurement. The issue of sampling protocols needs to be addressed in the SEIS. Research efforts related to snow should have been scientifically and adequately addressed in the original EIS but were not. These include:

- Re-examining and improving current snow stipulations.
- Designing better and less confusing protocols for snow measurements.
- Introducing much needed new tools (coring tubes and aerial snow mapping) for optimal route selection as part of the stipulations.
- Using historical snow patterns and snow climatology to guide management and allow advance planning by industry and management agencies.

To the extent that the BLM considers alternatives where there could be waivers, exceptions, and modifications to stipulations and ROPs, the BLM should analyze the impacts of the program based on granting these exemptions. The additional impacts from waivers, exceptions, and modifications were not adequately analyzed in the 2019 FEIS. The BLM should also include more protective stipulations and ROPs.

The 2019 FEIS failed to provide sufficient detail about the stipulations and ROPs being contemplated, or to analyze their effectiveness. This is because the approach to analyzing the mitigation measures was fundamentally flawed: it considered the amount and purported benefit of the measures, instead of analyzing the adverse effects that are still likely to occur and how to address them. This resulted in the 2019 FEIS failing to disclose the effects that will occur despite mitigation. Additionally, the BLM did not describe or analyze the difference between the stipulations and ROPs, and if they are treated by the BLM differently or will have different impacts. For example, lease stipulation 6 refers to ROP 23 for its requirements and does not provide any additional protections; because the stipulation and ROP are the same, it is unclear what the BLM envisioned the difference would be between the ROP and lease stipulation or how the ROP provides any additional protections. The BLM's SEIS should better explain the agency's approach to stipulations and ROPs, particularly where one references the other to clarify the agency's process and avoid confusion. The BLM should analyze the effectiveness of the measures to comply with NEPA.

The BLM should identify specific conditions for waiver, modification and exception for lease stipulations for each stipulation and ROP in the SEIS. Without detailed criteria for granting waivers, exceptions, and modifications specific to the stipulations, there is not reliability or foreseeability as to how and when the stipulations will be applied, resulting in little certainty that the stipulations will protect fish, wildlife, water, air, vegetation, or wilderness. The lack of sideboards on granting waivers, exceptions and modifications also renders a NEPA analysis that relies on their effectiveness deficient, since their continued application depends on the unfettered discretion of the BLM Authorized Officer.

The SEIS should provide more consistent and details analysis of reclamation and the related impacts on tundra and vegetation. In the 2019 FEIS, the BLM stated it would rely on reclamation to allow further expansion of impacts beyond just the 2,000-acre limitation in the Tax Act. In the ROD, the BLM changed its interpretation of the 2,000-acre limit, which made it unclear to what extent the BLM is still relying on reclamation in general and to allow exceedance of the 2,000-acre limit. The BLM also stated it has the authority to grant exceptions to reclamation requirements to satisfy unspecified environmental or public purposes.

The caveat in the timing limitation description stating, “unless approved by the BLM Authorized Officer,” should be removed in the SEIS. As written, no guidelines are given for when approval might be allowed, beyond “in consultation with the appropriate federal, state, and NSB regulatory and resource agencies.” Absent measurable standards and specific guidelines for when approval might be granted (for example, no caribou detected within 12 miles of facilities by both telemetry data and aerial surveys, and telemetry records from collared caribou do not show caribou heading in the general direction of the program area), this caveat should be removed. Whatever guidelines are provided they should be clearly supported by the best available scientific information.

***Issue: How effective will lease stipulations and ROPs be, and how will the BLM monitor these strategies?******Comment Summary***

Residual risk after application of mitigation strategies should be clarified in the SEIS. To properly assess residual risk, there is a need verify that mitigation strategies are effective. There are no statistically valid studies that document the effectiveness of these stipulations, so tiering off of NPR-A documents does not provide with an adequate impact analysis for the Arctic Refuge Coastal Plain.

The SEIS should provide additional detailed analyses on the effectiveness of the prescribed mitigations. The BLM should present quantitative analyses or proof of the effectiveness of the proposed mitigations. Many mitigations have never been properly assessed (even when data could be made available for analyses). The BLM should also detail what new research that is being completed or is currently underway that could help inform the effectiveness question once it is completed, and consider requiring certain pre-development data collection for effectiveness testing. The latest science should be applied to analyze potential environmental and cultural impacts and the effectiveness of mitigations before the program is permitted to continue. Recent studies and ongoing research should be carefully considered before impacts are thought to be effectively mitigated by existing but unproven strategies.

The BLM should explain and analyze the effectiveness of mitigation measures it considers in the SEIS considering the interpretation of the Tax Act's right-of-way provision presented in the 2019 FEIS. The SEIS cannot repeat the 2019 FEIS's mistakes by assuming stipulations and ROPs would reduce or preclude impacts if the BLM believes it lacks authority to preclude roads, pipelines, and other damaging activities in areas purportedly protected by these measures.

The SEIS should revisit the reliance on reclamation to mitigate potential impacts, and there no exceptions should be granted to reclamation requirements. The BLM itself acknowledged that it is not realistic or even feasible to restore these areas to their original condition or anything close to it. The BLM stated in the EIS that “[r]eclamation has not been proven for gravel removal in the arctic environment once operations have ceased.” (2019 FEIS vol. 1 at 3-71). The BLM's own acknowledgement that reclamation has not been proven in arctic environments raises substantial questions about the BLM's legally questionable reliance on these unproven, vague reclamation measures as a mechanism for further expanding the footprint of development beyond the 2,000-acre cap. The BLM should not rely on unproven rehabilitation standards to allow for even greater damage than that allowed by Congress in the Tax Act, or use standards that are known to be unachievable and will thus require exemptions to the reclamation requirements. The BLM should also remove the provision that allows it to grant exceptions to any reclamation requirements. The circumstances under which the BLM could potentially waive this requirement are unclear in the 2019 FEIS and appear to completely negate the meaningfulness of any reclamation requirements.

***Issue: What changes to the 2019 FEIS and 2020 ROD lease stipulations and ROPs should the BLM implement in the SEIS?******Comment Summary***

For setbacks affecting pipeline crossings, commenters stated that the BLM should include clear scenarios under which crossings would be permitted; thereby providing permittees greater certainty and not requiring waivers. The frameworks relating to river deltas from rivers and streams could be separated for clarity.

The NSO stipulations and broad setbacks as contemplated under Leasing Stipulations 1-5, 7, and 9 are inconsistent with the plain language of the Tax Act. For example, Leasing Stipulation 10 for Alternative D

would prohibit surface occupancy within 3 miles of the southern and eastern boundaries of the Coastal Plain near the Mollie Beattie Wilderness Area. This presumptive setback is inconsistent with the Tax Act and the purpose and need, as identified. In its place, an additional NEPA review for case-specific projects can consider additional measures if needed.

ROP6(a): the language of this ROP should be modified to limit site-specific air monitoring at locations without existing infrastructure to extraordinary circumstances in which existing baseline concentrations are known to be materially different from regional measurements. This modification is appropriate because over 30 years of baseline data collection shows uniform baseline background conditions at or below measurement thresholds across the Coastal Plain, except in cases of localized wind-blown fugitive dust and wild land fires.

ROP 6(c): To remove ambiguity, this ROP should be revised to clarify the scope of indirect emissions sources or to allow indirect sources to be addressed qualitatively, consistent with the most current practice on the North Slope.

ROP (7): This ROP should be removed. It requires a proponent of a permanent oil and gas development to design and implement a monitoring study of contaminants in locally used subsistence foods. Potential contaminants from oil and gas operations are already prevented from entering subsistence foods due to the applicability of numerous monitoring and release prevention requirements. Requiring this type of sampling can be intrusive on the users and likely to be met with skepticism. If deemed necessary on a case-by-case basis, this type of sampling is best conducted by a regulatory agency.

ROP 8: This ROP should be removed. It would prevent the withdrawal of unfrozen water from springs, rivers, and streams during winter. This ROP would have significant adverse impacts on oil and gas operations, particularly given that rivers and streams comprise most of the water resource available in the lease areas. Moreover, the ROP is unnecessary and inconsistent with proven existing regulation of water withdrawals on the North Slope. If retained, the BLM should consider modifying this ROP to be similar to stipulations protecting anadromous fish, including the use of fish screens and limitations on the amount of liquid water under ice that could be removed.

ROP 9: – Based on some commenters' experience with this ROP in NPR-A, its language should be modified to delete paragraph (d) and adding a clause to paragraphs (a) and (b) that allows up to 20 percent total lake volume to be used when both ice and water are being withdrawn. This would be protective of hydrology and habitat, and consistent with state regulations.

ROP 10: The sound source verification required under Alternative D may be difficult to attain in shallow waters and may not provide reliable data. Instead, language should be added that operators will work closely with regulators to ensure that mitigation measures are developed that are consistent with the Marine Mammal Protection Act and agency marine mammal guidelines, and consider practicability, site-specific information, and project activity details.

ROP 11(e): This component of the ROP should be deleted. It requires an undefined offset to avoid portions of previous ice road routes. This is not warranted because, as recognized in the GMT2 SEIS, “[a] study by Yokel et al. (2007) suggests that seasonal ice roads and pads constructed within the same footprint each year do not have additive effects over years.” Moreover, constructing an ice road in the same location as subsequent years is considered best practice and may be necessary to avoid difficult terrain, archaeological sites or sensitive environmental resources.

ROP 34: The BLM should provide clarification in this ROP on the need to fly lower for some required activities (such as archaeological clearance, spill response equipment staging and demobilization). Rather than providing for “possible suspension of all flights” for “disturbance determined to be unacceptable,” this ROP should be modified to provide for “adjustments, including redirection, modified scheduling, or temporary suspension of specific flights . . .” Finally, the ROP provision that takeoffs and landings to support oil and gas operations would be limited “to the maximum extent possible” should be revised to limit takeoffs and landings “to the extent practicable and consistent with prudent operation of facilities.”

ROP 41(a): This ROP should be revised to clarify that vehicles already approved by the Alaska Division of Mining, Land and Water for summer off-road travel would be considered authorized and would not require additional process or approvals.

Requirement/Standard A: In the SEIS, snow-water equivalent should be used in the standard rather than just snow depth, because it is much more directly related to protection of the tundra from damage. The ROD included text for this standard that the snow depths would be measured along the vehicle travel routes rather than across the whole area. There needs to be much more information in the SEIS about how snow would be measured. If the 9-inch rule for snow depth remains, it should be enforced. Including an option of 3 inches over the highest tussocks injects too much subjectivity; there could be a scenario where 3 inches of snow over some tussocks could be measured but snow depth never reached 9 inches.

ROP 11(b): Clarify if heavier vehicles are allowed to start making ice roads several weeks before the 9 inches standard is met.

Requirement/Standard E and F: These requirements should have included requirements for snow trails along with ice roads.

Requirement/Standard H: Monitors from the USFWS and the BLM should travel with the seismic operators and have access to daily briefings on operations and access to vehicles to carry out some sampling scheme for snow depth and surface disturbance and to visit reported problem areas.

Requirement/Standard J: This standard should be included under all alternatives.

ROP 35: The objective for this ROP uses the term “ongoing” when talking about reclamation, but the ROPs for Alternatives B and C say nothing about ongoing. Operators will likely put off reclamation indefinitely if allowed to, as has been done in the North Slope oil fields. In order to prevent operators going bankrupt and leaving the government/taxpayers responsible for the costs of reclamation the following ROP should be added to all alternatives: Oil and gas infrastructure, including gravel pads, roads, airstrips, wells and production facilities, would be removed and the land restored on an ongoing basis, as extraction is complete.

ROP 35: The language in the 2019 FEIS for this ROP is unobtainable and too vague to give any indication of where and how areas will be restored, over what timeframe, and to what standards. These standards need to be specific, measurable, achievable, reasonable, and time-bound in the SEIS. To justify relying on reclamation as lessening environmental impacts in a NEPA document, the BLM needs to incorporate standards into the lease terms to ensure there are clear, achievable obligations for companies to undertake restoration of any impacted areas. The BLM should incorporate far more detailed criteria related to restoration standards, including information on the timing of implementation, monitoring methods that will be used to determine success, how any contamination issues will need to be addressed, how companies will restore adjacent areas that have been impacted by dust or other contaminants, and more.

ROP 35: The BLM should include formal criteria governing the financial assurances necessary to ensure sufficient funding for restoration and reclamation. The BLM should mandate bonding at the time it issues the leases to cover reclamation and abandonment. The BLM mentions the bonding requirements at 43 CFR 3104 in the 2019 FEIS as applying to oil and gas activities on the Coastal Plain. Its discussion of the subject is vague and inadequate. First, it is unclear why the 2019 FEIS references Mineral Leasing Act regulations. Generally, the Mineral Leasing Act does not apply to the Arctic Refuge. The Tax Act noted that the BLM should manage the oil and gas program similar to how it manages leasing in the NPR-A under the Naval Petroleum Reserves Production Act and its regulations, which include bonding requirements. The BLM should clearly explain what bonding requirements apply in the Coastal Plain and why. The BLM should clarify how the generic reclamation bonding requirements will apply to the Coastal Plain Leasing Program in the SEIS. For instance, the 2019 FEIS failed to explain whether new bonds should be filed by operators who have already satisfied the national blanket bond requirement or whether existing bonds are sufficient. The 2019 FEIS also failed to address how the various amounts secured by the current bonding regimes will be adequate to cover the likely cost of necessary reclamation measures on the Coastal Plain specifically. Crucially, the 2019 FEIS also failed to specify when in the leasing process the bonding requirements go into effect. The BLM should estimate actual, likely reclamation costs of reasonably foreseeable development projects and consider alternatives that impose corresponding bonding amounts. Additionally, the BLM should require that bonds be adjusted for inflation at regular intervals to ensure that they remain sufficient to cover any necessary reclamation activities after operations eventually conclude.

ROP 24(d): This ROP should be modified. to include gravel mine reclamation specifications. Gravel mine reclamation and associated land rehabilitation can be particularly difficult. Many mines on the North Slope are reclaimed by turning the former pit into deep water fish habitat. Not only does this result in a rather unnatural looking lake but offers little in the way of replacing the habitat loss displaced by the mine. Gravel mines are one of the few available sources of tundra sod. The BLM should require that tundra sod be cut and preserved using the most current techniques and should be reused on tundra rehabilitation sites.

ROP 11: This ROP was not adequately analyzed and is not protective of Coastal Plain permafrost and soil resources. The SEIS needs to do a better job of incorporating in measures to address potential impacts on these resources. ROP 11 relies on only an average snow depth and ignores the variable snow conditions on the Coastal Plain. Nor does ROP 11 explain how and where these measurements will be taken, and how often. ROP 11 also does not adequately account for different vegetation types with these default depths. Allowing ground operation at an average of 9 inches of snow depth puts vulnerable tussock tundra habitat at risk of damage. ROP 11 contains additional provisions related to the types of vehicles and the manner in which they operate. These provisions do not go far enough to address the unique range of terrain, snow conditions, permafrost, hydrology, vegetation community types, and other concerns that could lead to significant damage to the Coastal Plain. Sensitive and easily damaged tundra is often located along stream banks where shrubby vegetation is common. Allowing ice road construction across shrubby stream bank vegetation for practicability risks damaging and/or killing vegetation in a location where soils are especially vulnerable to subsidence and erosion. Standard g in ROP 11 indicates snow fences may be used in areas of low snow to increase snow depths within an ice road or snow trail route. However, snow fences have the potential to cause significant changes to surface hydrology, permafrost thermal stability, and to vegetation communities.

Stipulation 1: The 2019 FEIS added gravel mines to the list of exceptions allowed in NSO areas around rivers and streams under all alternatives and the ROD adopted this stipulation. This means NSO protections may not protect as many acres as are indicated in the 2019 FEIS due to gravel mine impacts. No analysis was conducted about the consequences of fewer NSO acres for caribou. Instead, the acreages reported in the 2019 FEIS

appear to assume all NSO and other restrictions remain intact. This analysis should be updated in the SEIS or, the exception for gravel mines in NSO areas should be removed.

Stipulation 6: The timing limitation under this stipulation should be applied under all alternatives if they are truly important to restrict activities that would disturb caribou during calving and insect-relief periods. Such restrictions also should be applied across the entire Coastal Plain, not just within designated timing limitation areas, given that all lands in the Arctic Refuge Coastal Plain are recognized as habitat of . . . caribou and would be managed to allow for unhindered movement of caribou through the area.” (2019 FEIS vol. 1 at 2-12). In alignment with this recognition, the SEIS should apply these protections across the entire program area and under all alternatives. The BLM should demonstrate spatially and based on the best-available science where large areas sufficiently far away from infrastructure and activity where cows and calves are unlikely to be affected will occur, considering that displacement effects from development will not stop at the boundary of an NSO or no leasing area.

Stipulation 7: The timing limitations should be applied across the entire program area under all alternatives. This stipulation specifies that the Authorized Officer can waive the stipulation if it can be demonstrated that “calving is not occurring in the lease area.” Constraining this assessment to just the lease area is insufficient. Depending on the lease configuration and location of infrastructure, it is possible that calving caribou could be outside of the lease yet still within this 5 km buffer. At a minimum, this exception should be updated to say “...calving is occurring in the lease area, or within 5 km of infrastructure, whichever is larger.” Even this, however, may be insufficient to prevent broader patterns of displacement. This is of special concern for the PCH, as the narrower Coastal Plain between the Arctic Ocean and the Brooks Range mountains severely constrains opportunities for displacement. If development proceeds, careful monitoring should be conducted and waivers should be rescinded if there is any sign of similar widespread calving displacement. The SEIS should add NSO protections for caribou calving grounds to all action alternatives considered.

Stipulation 7: The traffic restrictions in Stipulation 7 include speed limits when caribou are within 0.5-mile of the road. This boundary should be extended and multiple monitoring methods should be used to manage vehicle activities. These should include: 1) daily review of location data from collared caribou to examine general movement patterns long before caribou contact roads, 2) daily or alternate day aerial reconnaissance flights in buffer areas near roads to provide more detailed location information, including of non-collared individuals, and 3) road-based surveys to detect caribou proximity to roads. Traffic alteration should be started early and increasingly restricted as caribou near roads. The BLM should include limits on traffic volume and restrict traffic to below 15 vehicles per hour based on impacts identified in the 2019 FEIS. Even these mitigation measures are unlikely to be ultimately effective, however, as the 2019 FEIS noted that “Some level of displacement of calving caribou has been shown to occur even with low levels of traffic.” (2019 FEIS vol. 1 at 3-154). The inability of this mitigation measure to limit the impacts of oil and gas activities needs to be thoroughly analyzed in the SEIS.

Stipulation 8: Details of this stipulation need to be more clearly defined in the SEIS. For example, what qualifies as “appears to be imminent?” Science-based guidance should be clearly stated. Also, what needs to be done for “evacuation?” Is this simply removing people and stopping vehicle movement or actually removing vehicles from the area? If the latter, how will vehicle removal be accomplished without further disturbing caribou? It is unclear who will make the evacuation decision, what the consequences will be of not following the protocol, and who will enforce consequences. These things need to be clarified to increase confidence in the ability of this stipulation to reduce impacts on caribou. Furthermore, it is unclear what rationale was used to choose “approximately 100 or more” caribou as the trigger for road evacuation. In both

the 2013 and 2020 NPR-A Integrated Activity Plan stipulations traffic is to be stopped “to allow a crossing by 10 or more caribou.” Nor does the BLM provide a rationale for why the date range for evacuating roads begins June 15. This does not align within the post-calving period, which starts earlier based on the 2019 FEIS. Stipulation 8 should also be updated to include language similar to that in Stipulation 6 that allows the applicable dates to be adjusted in response to the presence of caribou within the program area. This is especially critical in light of predictions of earlier calving and post-calving seasons and increased use of the Program Area by caribou. Finally, the BLM did not explain why road evacuation standards are only applicable to the timing limitation areas. Inclusion of road evacuation standards is common-sense and in line with past BLM action in the NPR-A. The BLM should apply this standard across all action alternatives and across the entire program area.

Stipulation 9: Additional details are needed in the SEIS about standards and requirements for a conflict avoidance and monitoring plan to ensure effective adaptive management. The SEIS needs to state standards for monitoring plans, including use of measurable, science-based indicators, clear and scientifically supported requirements for the frequency of data collection, and clear triggers for defining necessary conflict avoidance measures. Conflict avoidance measures should also be specified and include BLM authority to disapprove or delay permitting decisions. Responsibility for developing and implementing the monitoring plan for effects of infrastructure and activities on the coastal habitats and subsistence should be assigned to the USFWS, as the surface management agency, rather than to the lessee. The BLM should specify that prior to implementation, this plan should be reviewed and approved by the relevant state, federal, and North Slope Borough wildlife and subsistence officials. It should also require that the results and data from the report be made publicly available.

ROP 21: Requirement (h) in this ROP calls for “Locating facilities and other infrastructure outside areas identified as important for wildlife habitat.” The BLM needs to clearly identify in the SEIS which areas are important for each species across each season to ensure this otherwise generalized ROP can be meaningfully implemented and to ensure the public has adequate information to assess its efficacy. The definition given in the 2019 FEIS for important caribou calving habitat is insufficient and should be updated to conform with prevailing scientific knowledge.

ROP 23: The requirements in ROP 23 may help reduce impacts from infrastructure on caribou but are insufficient. Documented displacement and continued avoidance of areas near roads by Central Arctic Herd cows and calves indicate that the measures in ROP 23 are unlikely to provide sufficient protection during the calving and post-calving periods. Discretionary language related to exceptions, waivers, and modifications should be clarified and made mandatory. For example, the ROP states that ramps or buried pipelines “may be required by the BLM Authorized Officer.” Under what conditions would this decision be made? What circumstances would trigger use of buried pipelines or ramps? This needs to be made clear and scientifically justified. Furthermore, the BLM needs to explain how such features will be accounted for within the 2,000-acre limit on surface disturbance. However, it is important that studies of caribou movement prior to authorization of construction, as well as creation of an overarching plan for research and monitoring, be carried out by the USFWS instead of industry. Requirement (g) states that “traffic may be stopped throughout a defined area for up to 4 weeks, to prevent displacement of calving caribou,” but it does not give more specific instances of less than a full closure, such as those seen in Stipulation 8. No justification is given for why a 4-week maximum is listed for closure either. This should be changed to read: “. . . throughout a defined area whenever necessary to prevent displacement of caribou.” Furthermore, the language should be changed from “a monitoring plan could include collection of data on vehicle counts and caribou interaction” to “must include.” While there is some indication that traffic levels influence the degree of caribou disturbance, data



are rarely collected to study these issues in Alaska. By requiring such data and making the results publicly available, the BLM will facilitate scientific analysis that can better determine if impacts are occurring and what sorts of effective mitigation measures should be employed in future permitting decisions.

ROP 33: To fully achieve the objective of this ROP, the BLM should specify in the SEIS that the provided geospatial data will be made publicly available. Additionally, the BLM should specify how it will integrate the resulting data with any of the USFWS management and monitoring activities. This should include how monitoring will inform management decisions, such as through establishing impact thresholds beyond which permitting will be stopped or mitigation requirements increased.

ROP 34: ROP 34 should be amended to align with Federal Aviation Administration guidance under all alternatives by increasing the minimum altitude to 2,000 feet over the entire program area at all times. This will help meet the Department of Interior's mandate to adopt a program that is protective of the Refuge's original purposes. It will also be consistent with the importance of the entire Coastal Plain for calving and post-calving habitat over time. However, even incorporating this minimum requirement is unlikely to prevent impacts on caribou. Flight ceilings often are lower than 1,500 feet above ground level, particularly during calving, so there is concern that weather exceptions will increase the impact of aircraft on caribou despite the guidance of this ROP. This should be analyzed in the SEIS. The requirements under Alternative D expand the altitude and landing restrictions to include the post-calving period. These provisions should apply consistently across all action alternatives in the SEIS. Provisions should also be expanded to include the period where cows arrive on the calving ground. If animals are deflected and unable to reach the calving ground, the consequences may be as severe as if they were displaced from the calving ground. The start date should be extended to May 1st to accommodate this and language should be included, as is done in some places with traffic effects, to provide flexibility if migration timing alters with a changing climate. Requirement (a) mentions a plan with strategies that include aircraft types, flight altitudes and routes. To enable more detailed and spatially explicit studies of aircraft impacts in the Arctic Refuge, the BLM should add a requirement to ROP 34 that specifies collection of geospatial aircraft data reporting the location, time, altitude, and aircraft type of each permitted flight within the program area. These data should be housed by the USFWS, United States Geological Survey (USGS), or another designated federal repository and made available to researchers to enable more complete analysis of aircraft use within the Coastal Plain and its effects on wildlife, subsistence hunters, and surface resources.

ROPs 10 and 46: ROP 10 requires operators to employ a protected-species observer after May 1 for on-ice operations to ensure that vehicles avoid basking seals by at least 500 feet. However, seals are now basking earlier in the season and sometimes well before May 1. The SEIS should clarify this point and the BLM should require protected-species observers at an earlier date driven by that new understanding. Also, the BLM should require multiple protected-species observers because one protected-species observer will be unable to scan in multiple directions from a moving vehicle for difficult-to-detect seal lairs within a 500-foot radius. The BLM should evaluate the likelihood of success in this difficult task and factor that likelihood into its impact assessment for seals. For example, any vehicle will have blind-spots that will increase the difficulty of obtaining accurate observations. The BLM should also require that if weather conditions prevent reliable visibility to 500 feet, then vehicles cannot operate.

ROP 46: The SEIS should more fully explore the function, best practices, and likelihood of success for different levels of protected-species observer deployment. The BLM should clarify that protected-species observers are to be on watch for all marine mammals, including polar bears, seals, sea lions, and walrus in addition to whales and the SEIS should evaluate protected-species observer requirements and standards for

polar bears, seals, sea lions, and walrus. It should assess potential adaptive mitigation responses that operational and vessel support crews would perform once protected-species observers have notified the crew of the presence of marine mammals. It should analyze how many protected-species observers are required as a practical matter by different vessels, noting that larger vessels may require additional protected-species observers to effectively scan in multiple directions and from different vantage points. It should evaluate the likely marine mammal detection rate given the challenging weather conditions often present in the relevant area and include that evaluation in assessing the overall risks of impacts on marine mammals. Requirements in the 2019 FEIS for operations within the vicinity of whales are not feasible. The BLM should include National Marine Fisheries Service’s requirement for protected-species observers to document a “minimum, maximum, and best guess” for the number of whales. Likewise, even the most skilled marine mammal experts will not always be able to differentiate among whale species especially from distances such as 800 and 900 feet, meaning that vessel operators should assume the maximum precautions prescribed for right whales, unless a protected-species observer can conclusively determine the whale is another species through repeated sightings. Finally, it is unclear why the BLM required vessels to avoid right whale critical habitat but not critical habitat designated for other species. Right whales are perhaps the most critically endangered of the whales impacted by the oil and gas program, but the SEIS should evaluate the benefits and feasibility of avoiding designated critical habitat areas for whales more generally.

### **3.8 BEST AVAILABLE INFORMATION-BASELINE DATA**

***Issue: Will the data and information utilized in the 2019 FEIS be revisited and supplemented for the SEIS?***

#### *Comment Summary*

The SEIS should be updated to incorporate the best available current science and information, including (but not limited to) the following specific topics:

- Birds
- Climate and Meteorology
- Fish and aquatic species
- Geology and Minerals
- Ocean acidification
- Preservation of the Arctic Refuge Ecosystem
- Soil Resources
- Subsistence
- Terrestrial Mammals
- Vegetation

Various commenters provided suggested best available science and information literature for the BLM to consider while preparing the SEIS. The full citations of these references have been organized by resource topic and are provided in **Appendix D**.

### **3.9 GEOGRAPHIC INFORMATION SYSTEM DATA, MAPS, AND ANALYSIS**

***Issue: Will the BLM create new maps or figures for the SEIS?***

#### *Comment Summary*

The SEIS should be updated to include (but not limited to) the following specific requests:

- A high-resolution ground ice map in the transportation corridors

- A map or diagram (to scale) depicting the reasonably foreseeable extent and location of development and associated infrastructure under each alternative

### **3.10 DIRECT AND INDIRECT IMPACTS**

#### ***Issue: Will the BLM revisit the analysis of direct and indirect impacts in the SEIS?***

##### *Comment Summary*

Commenters suggested the analysis of direct and indirect impacts was inadequate for wildlife (including the PCH), wilderness, cultural resources, climate change, social cost of carbon, water resources, and air quality that were included in the 2019 FEIS.

##### *Comment Summary*

Commenters expressed concern that the 2019 FEIS failed to properly analyze the direct and indirect impacts on Canadian communities, and the transboundary impacts identified by Canadian governments and First Nations.

##### *Comment Summary*

Commenters stated that the analysis of direct and indirect impacts resulting from oil and gas infrastructures not in direct contact with the ground should be included in the SEIS.

##### *Comment Summary*

A commenter stated that the BLMs analysis is deficient because the 2019 FEIS had inadequate ANILCA section 810 evaluations, which resulted in insufficient stipulations in the ROPs.

#### ***Issue: Will the SEIS be updated to include a finding about using a tiered approach to analysis?***

##### *Comment Summary*

When a NEPA document uses a tiered approach in accordance with 40 CFR 1508.28, it should include a finding that conditions and environmental effects in the broader NEPA document are still valid and address any remaining expectations or items. Commenters did not feel that 2019 FEIS met this requirement.

### **3.11 CUMULATIVE IMPACTS**

#### ***Issue: Will the SEIS include a more robust cumulative impact analysis, including expanded geographic and temporal boundaries?***

##### *Comment Summary*

The BLM should expand the program area geographic scope for cumulative impacts outside of the program area and include activities on non-federal and state lands. Additionally, the timeline for the cumulative analysis is insufficient; it should be moved to an 85-year scope as opposed to 50 years.

The SEIS should evaluate the impacts of all past, present, and reasonably foreseeable future actions on federal, state, and Native Corporations lands and waters. Commenters requested that the State's approval of leasing in the Beaufort Sea be considered in the SEIS cumulative impact analysis.

Commenters expressed that the BLM should consult with the USFWS to create a more robust cumulative analysis that creates effective standards for monitoring and stipulations designed with monitoring plans. The BLM should consult with the USFWS to enhance the cumulative analysis.

Commenters stated that the SEIS should include data that the issuance of permits would reduce cumulative impacts.

Commenter stated that the 2019 FEIS cumulative analysis does not adequately analyze noise-sensitive resources from oil and gas operations and fails to disclose the potential cumulative impacts on vegetation and permafrost from oil spills.

***Issue: Will the SEIS include an ecological risk assessment?***

*Comment Summary*

Commenters recommended that the BLM should draft an ecological risk assessment to better understand cumulative effects.

***Issue: Will the BLM revisit the cumulative impacts analysis associated with air quality and greenhouse gases in the SEIS?***

Commenters expressed concern that the cumulative impacts from air quality was insufficient and relied on other projects analysis. The analysis in the 2019 FEIS was not site-specific; the cumulative impact discussion in the SEIS should be expanded to include additional greenhouse gas emissions.

### **3.12 GENERAL CONSULTATION**

***Issue: How will general consultation including Section 7 Endangered Species Act consultation and Section 106 consultation occur, and which agencies will be consulted during this NEPA process?***

*Comment Summary*

Commenters noted that by reopening the NEPA process, the BLM is obligated to re-initiate the NHPA Act Section 106 consultation process early in the NEPA process. In the Section 106 consultation, the BLM should consider effects of the Leasing Program on historic properties, sacred sites, and all other cultural resources.

Commenters noted that the BLM should consult with the National Marine Fisheries Service and the USFWS on potential impacts on Endangered Species Act-listed species and their critical habitat, and impacts from increased greenhouse gas emissions.

Commenters noted that the BLM should consult with the Alaska Department of Environmental Conservation to understand how the State of Alaska ensures environmental standards while developing resources.

### **3.13 GOVERNMENT-TO-GOVERNMENT CONSULTATION**

***Issue: How will government-to-government consultation occur, and which interested parties will be consulted during this NEPA process?***

*Comment Summary*

Commenters noted that the BLM has an obligation to reach out to every tribal council of the Iñupiat and Gwich'in communities to host public meetings and to include them and their traditional Indigenous knowledge early in the NEPA process. Commenters suggested the BLM set a schedule and a format to provide time and access to fully engage these communities. Commenters requested that the BLM extend consultation invitations to Canadian communities that depend on the PCH.

Commenters expressed disdain at the lack of consultation with the Native Village of Kaktovik and Kaktovik Inupiat Corporation ahead of the NOI for the SEIS. Commenters felt the BLM was fair and diligent in their consultation on the 2019 EIS, yet they express frustration at the current lack of Tribal consultation leading up to the SEIS.

### 3.14 ANILCA

***Issue: How should the BLM manage an oil and gas program on the Coastal Plain given the provisions of ANILCA and the Tax Act?***

*Comment Summary*

Commenters noted that, in establishing the Arctic Refuge, Congress set aside the 1002 Area and instructed the BLM to study the effects of an oil and gas leasing program on the resources in the area. The Tax Act required the BLM to hold lease sales in the Coastal Plain. Some commenters pointed out that any oil and gas leasing program should meet the conservation purposes of the Arctic Refuge identified in ANILCA. Commenters also suggested that oil and gas activities include compatibility determinations by the USFWS in order to ensure such activities are conducted in a manner compatible with the conservation purposes of the Refuge.

***Issue: To what extent will an oil and gas leasing program constrain subsistence uses conducted in accordance with Section 810 of ANILCA?***

*Comment Summary*

Commenters noted that the Section 810 findings of the 2019 FEIS do not adequately describe the impacts on subsistence use by communities that use the area for subsistence purposes. Commenters stated that the Section 810 analysis was too strictly limited to four communities and did not appropriately consider the full extent of the impact. Similarly, the analysis was narrowly focused on fish, marine mammals, and caribou; the BLM should expand it to include waterfowl, polar bears, bowhead whales, and other marine mammals.

The BLM also did not consider the impacts of the full extent of leasing activities and infrastructure. The BLM did not consider best available data regarding the impacts of oil and gas development activities on caribou and the resulting effects on subsistence use.

### 3.15 ANCSA

***Issue: How should the BLM apply stipulations to nonfederal land within the Coastal Plain of the Arctic Refuge?***

*Comment Summary*

Commenters stated that the BLM should clarify that stipulations and restrictions developed to protect Arctic Refuge values and resources are applicable to private lands in accordance with ANCSA Section 22(g).

### 3.16 OTHER LAWS AND INTERNATIONAL AGREEMENTS

***Issue: How will the BLM respect and adhere to the agreements with Canada, particularly those regarding migratory and transboundary species?***

*Comment Summary*

In the SEIS, commenters want the BLM to recognize and address how this program will comply with agreements and treaties with Canada in the EIS, including the following:

- Agreement Between the Government of Canada and the Government of the United States on the Conservation of the Porcupine Caribou Herd (1987)
- Memorandum of Understanding Between the United States and Canada on Conservation and Management of Shared Polar Bear Populations (2008)
- Agreement on the Conservation of Polar Bears (1973)
- Convention for the Protection of Migratory Birds in the United States and Canada (1916)

Commenters stated that the U.S. government is required by the 1987 agreement to take appropriate action to conserve the PCH and its habitat. Commenters asked the BLM to further consider Canadian interests in deliberations and management actions. Commenters emphasized that the SEIS should address trans-boundary impacts of development on the Coastal Plain and how management actions may affect the conservation of the PCH, US-Canada relations, and the Alaskan, Canadian, Gwich'in, and Iñupiat people.

***Issue: How will the BLM adhere to requirements outlined in applicable federal, tribal, state, and local plans, laws, and statutes?***

***Comment Summary***

In the SEIS, commenters requested that the BLM recognize and address how this program will follow federal, tribal, state, and local plans, laws, and statutes, including but not limited to:

- ANILCA
- ANCSA
- Arctic National Wildlife Refuge Comprehensive Conservation Plan
- Bald and Golden Eagle Protection Act
- Clean Air Act
- Clean Water Act
- Endangered Species Act
- Federal Land Policy and Management Act
- Fish and Wildlife Coordination Act
- Marine Mammal Protection Act
- Migratory Bird Treaty Act
- NEPA
- National Wildlife Refuge System Administration Act
- Naval Petroleum Reserves Production Act
- Porcupine Caribou Management Agreement
- Tax Act
- Refuge Administration Act
- United Nations Declaration on the Rights on Indigenous Peoples
- Wild and Scenic Rivers Act
- Wilderness Act

Many commenters were concerned with the interpretation of the Tax Act in the 2019 FEIS. The Tax Act mandates that no more than 2,000 acres of the Arctic Refuge be used for production and support facilities; however, the BLM interpreted this to include easements and rights-of-way within leased or unleased land. Commenters are requesting that this interpretation be clarified and re-evaluated to a total of 2,000 acres.

### **3.17 PHYSICAL ENVIRONMENT**

#### **3.17.1 Climate and Meteorology**

***Issue: Will the SEIS include an in-depth analysis of impacts that oil and gas activities in the Arctic Refuge could have on climate change?***

***Comment Summary***

Commenters requested that the BLM examine how climate change may directly affect the Coastal Plain, particularly rising average temperatures, melting sea ice, permafrost loss, and coastal erosion. They expressed concern for how oil and gas exploration will impact not only the local populations, but also the global populations with additional climate change impacts. They stated that the BLM should include an analysis of

current regional climate trends on the North Slope in the SEIS, along with projections of regional climate trends. Commenters requested that the BLM assess and quantify the climate impacts of both the extraction and eventual use of oil and gas from the Coastal Plain.

***Issue: How will the BLM include an analysis of direct, indirect, and cumulative impacts from greenhouse gas emissions?***

***Comment Summary***

Commenters requested that the SEIS fully analyze and quantify the oil and gas alternatives' direct, indirect, and cumulative impacts resulting from greenhouse gas emissions. They suggested the BLM complete a life cycle analysis on the greenhouse gas emissions through the stages of exploration and development, transportation, and the refining processes. They also requested that the BLM consider the state and federal climate change targets and mandates, as well as the international targets, when evaluating greenhouse gas emissions.

Commenters suggested that the BLM did not reasonably assess the impact of greenhouse gas emissions in the EIS by not considering the social costs of greenhouse gases.

Commenters also expressed concern with the market simulation model that the BLM used to model greenhouse gas emissions for the alternatives. Commenters suggested that the model was not fully accurate because it failed to analyze consumption in foreign markets.

**3.17.2 Air Quality**

***Issue: How will the BLM monitor and protect air quality from the proposed program impacts?***

***Comment Summary***

Commenters requested that the BLM monitor the impacts of oil and gas-related activities on air quality. They stated there is a need for the BLM to collect baseline air quality data. Commenters noted concerns for air quality impacts on nearby communities and wildlife. Specifically, they expressed concerns about localized emissions of nitrogen oxides, carbon monoxides, carbon dioxides, volatile organic compounds, and particulate matter.

Commenters recommended that the BLM evaluate current air quality conditions and trends in the program area for each of the criteria pollutants relevant to the proposed program. Also, commenters recommended the BLM identify direct, indirect, and cumulative impacts from potential development for each alternative in the SEIS. Commenters stated the BLM should also develop a reasonably foreseeable range of air quality scenarios.

Commenters requested that the BLM conduct near-field and far-field modeling analyses of air quality to assess impacts on sensitive locations and populations. Commenters also stated that the BLM should complete a Prevention of Significant Deterioration increment analysis to determine how much of the available increments have already been consumed in the affected area and how much additional increment is available for consumption up to the level set by the National Ambient Air Quality Standards.

### 3.17.3 Acoustic Environment

***Issue: What will be the impacts of underwater noise from shipping activities, construction of shipping-related facilities offshore, and icebreaking noise and disturbance on sea ice habitat loss and alteration, subsistence activities, and wildlife?***

*Comment Summary*

Commenters would like to see the SEIS address the impacts of noise resulting from shipping activities, including construction of shipping-related facilities offshore and icebreaking noise and disturbance. They requested that the SEIS address impacts from shipping noise along the entire 1,600-nautical mile marine barge route, and not just near the program area. They requested a more detailed analysis of such impacts on sea ice habitat loss and alteration, subsistence activities, and wildlife. They are concerned that these activities would have both short and long-term negative consequences on marine life, especially marine mammals, as identified in the International Maritime Organization guidelines for protection of marine life from the harmful impacts of noise from commercial shipping.

***Issue: What will be the impacts of noise on the natural soundscape and resources that may be sensitive to noise, such as wildlife, wilderness, and recreation, and what will the BLM do to ensure preservation of natural soundscapes?***

*Comment Summary*

Commenters are concerned about impacts on the natural soundscape in the Arctic Refuge. They request that the SEIS address the importance of preserving natural soundscapes for achieving the Arctic Refuge's purposes of conserving wildlife, habitat, wilderness, and recreation, and that the BLM fully analyze the foreseeable acoustic impacts of oil and gas development on the natural soundscape. Commenters also requested that the BLM identify appropriate mitigation measures and fully analyze all options for avoiding, minimizing, and mitigating adverse impacts on natural soundscapes.

***Issue: How will the BLM assess the potential effects of noise on birds?***

*Comment Summary*

Commenters expressed concern about noise impacts on birds, such as behavioral modifications and reduced nesting success, and requested the SEIS catalog the existing noise in the program area, explain the changes in noise that will occur with the development of an oil and gas program, describe impacts that will occur for birds, and provide a method for addressing and monitoring this issue.

***Issue: What methods will the SEIS use to identify background ambient noise levels, conduct acoustic modeling of development scenarios to forecast foreseeable noise impacts, and meaningfully analyze impacts of increased human-caused noise on wildlife?***

*Comment Summary*

Commenters requested that the BLM identify background ambient noise levels, conduct acoustic modeling of development scenarios to forecast foreseeable noise impacts, and meaningfully analyze impacts of increased human-caused noise, including from increased air traffic, seismic exploration, and other development activities. The commenters stated that the BLM should use best available scientific information, such as models and methodologies, for conducting soundscape modeling, and based on the results of the modeling, acoustic ecologists and wildlife biologists should fully assess the reasonably foreseeable direct, indirect, and cumulative impacts of increased anthropogenic noise on various wildlife species.

Commenters stated that documentation of sound conditions by season, including winter, is needed to reflect baseline conditions and impacts under leasing and development. Methods for obtaining background data could be adapted from other acoustic studies in northern Alaska.



### **3.17.4 Physiography**

#### ***Issue: How will the BLM access and account for potential changes to physiography?***

##### *Comment Summary*

Several commenters recommended that the BLM consider the impact of geology and physiography on landscape disturbance, including consideration of how geologic units and processes in different physiographic provinces impact disturbances.

Commenters suggested that it is unrealistic to expect reclamation to return a site on the North Slope to pre-program conditions in a human-significant time frame and that dust can cause irreversible long-term impacts. The commenter requested that the SEIS include an adequate analysis of the full range of these impacts and how they could be mitigated.

### **3.17.5 Geology and Minerals**

#### ***Issue: Will leasing be limited to oil and gas leasing only? How will oil and gas exploration and production activities impact potential mineral development, including opportunities for nonenergy leasable mineral exploration and extraction in the program area?***

##### *Comment Summary*

Commenters recommended that the BLM clarify whether leasing will be limited to oil and gas leasing only. The program area could contain opportunities to explore and extract nonenergy leasable minerals such as gold, “basalt-hosted copper,” phosphate and the rare-earth elements yttrium and ytterbium. Commenters suggested there is load potential for several of these minerals and notes the location of specific mineral records. Given the practical need for mineral resources and a federal mandate for a robust sale to be conducted in approximately the next 3 years, the SEIS should fully assess the geologic potential of the Coastal Plain, and development scenarios that enable production of resources based on prospective acreages.

#### ***Issue: Will the SEIS consider potential impacts of seismic earthquake activity?***

##### *Comment Summary*

The SEIS should include a thorough analysis of the potential impacts of seismic earthquake activity because the Coastal Plain is so seismically active. The analysis should include the following: 1) how spills may increase due to earthquake activity, 2) how drilling and injection of fluids and waste could induce earthquake activity, 3) how resulting earthquake activity could affect groundwater.

### **3.17.6 Petroleum Resources**

#### ***Issue: Will the BLM consider restricting the leasing of certain tracts of land based on its use by key wildlife species?***

##### *Comment Summary*

Commenters requested that certain tracts of land should be restricted from leasing based on known and projected use of the area by key wildlife species, including the PCH and polar bears.

#### ***Issue: Will the BLM look for ways in which leasing and development could directly benefit local communities?***

##### *Comment Summary*

Commenters suggested that local clean energy development would be a likely outcome of leasing and development. The BLM should collaborate with local communities, such as the North Slope Borough and the City of Kaktovik, to identify ways in which the communities may directly benefit from access to any energy resources identified within the program area.

***Issue: Will the SEIS analyze the impacts of activities that will result from leasing, such as infrastructure, transport, shipping, combustion of petroleum products, and offshore development? What is the plan for the eventual replacement of the Trans-Alaska Pipeline System with a new pipeline?***

***Comment Summary***

Commenters recommended the SEIS include an analysis of activities related to leasing activities, such as global transportation, shipping, and combustion. They suggested that the analysis discuss potential transport to global markets, by pipelines, ships, as well as offshore leasing and development. Commenters expressed concern that both transport and combustion of hydrocarbons produced from the program area will contribute to pollution and environmental risks on local and global scales.

They also recommended analyzing the cumulative impacts of heavy fuel oil used to fuel ships, including anticipated shipping trends, black carbon emissions, and effects on climate change. They noted that burning and carrying heavy fuel oil has been banned in Antarctic waters since 2011, suggest analyzing a mitigation measure that prevents its use on any vessels associated with the development or export of petroleum hydrocarbons that originate from the Coastal Plain.

Commenters expressed concern that the Trans-Alaska Pipeline System is beyond its design life and would need to be replaced if significant hydrocarbon resources are developed in the program area. They are concerned that, if not replaced with a new pipeline, the Trans Alaska Pipeline System would eventually fail and create a massive environmental and economic disaster as it might reasonably terminate all North Slope fossil energy development and production. They requested the SEIS address alternatives of transport to market of any hydrocarbon resources found under leases in the program area, including replacement of the Trans-Alaska Pipeline System.

Commenters recommended that the SEIS include a thorough analysis of the impacts associated with infrastructure under all development scenarios being considered, including estimates of surface acreage disturbance. They were concerned that exploratory and production-related drilling infrastructure could potentially exceed the development area provided for in the Tax Act. A commenter recommended an analysis and development of mitigation measures for sustainable construction practices to reduce impacts on specific environmental resources.

Commenters expressed concern that unnecessary or duplicative infrastructure could result and exacerbate environmental impacts and recommended the BLM include an administrative mechanism to allow the agency to force consolidated infrastructure and ensure the terms of the leases expressly retain the BLM's right to restrict the footprint of development and account for the 2,000-acre limitation. Commenters requested that BLM consider the risks from infrastructure failing as a result of melting permafrost and earthquakes. Commenters were also concerned that the limited range of directional drilling makes it ineffective in avoiding, minimizing, and mitigating the impacts of vertical well drilling.

***Issue: How will the SEIS analyze the impacts of oil spills, including shipping spills, worst-case reservoir blowout scenarios, guillotine ruptures, and pipeline spills, and what background information will be used to predict spill scenarios?***

***Comment Summary***

Commenters recommended that the SEIS include a thorough and accurate spill analysis based on the most up-to-date information of the effects of potential oil spills in marine waters, including effects on ecosystems and wildlife. They suggested the analysis include a worst-case scenario and the risks and consequences of

spills in or reaching nearshore waters in the Beaufort Sea or occurring in rivers during times when there is running water not covered by ice.

Commenters requested that the SEIS clearly present spill rates, average sizes, the expected numbers of spills, and expected spill volumes in the main text of the document, and not in an appendix. They suggested the SEIS explicitly and consistently define the spill size classes based on their potential impacts, and they suggested that spill rates should be calculated for all the hazardous material substance classes that are associated with oil exploration and production, not just crude oil. One commenter suggested the BLM calculate the expected numbers and volumes of spills for the lower and upper bounds of the expected production, at a minimum, and potentially for all the specifically mentioned estimates of expected production. Commenters also requested that descriptions and discussions of spill impacts, mitigations, and clean-up efforts should reflect the expected number and volumes of the spills in each size-substance class.

Commenters recommended the BLM analyze worst-case reservoir blowout scenarios for different areas that may be potentially offered for leasing due to the unknown nature of the petroleum reservoirs contained within the Coastal Plain program area. They suggested using the worst-case discharge information for analysis of potential exploration and development drilling. They cited the model used in the 2018 Alpine Field and Satellites and Alpine Pipeline System Oil Discharge Prevention and Contingency Plan and suggested that the BLM use analogous North Slope field information to determine a reasonable daily rate of an uncontrolled flow of natural gas and oil and support more thorough oil spill analysis, particularly regarding the duration of potential events and potential surface impacts on surrounding lands. They requested specific consideration be given to the impacts on polar bears, caribou, and migratory birds.

Commenters recommended that the BLM analyze the impacts associated with a guillotine rupture of the potential pipelines that may be developed under the leasing program as a low-probability, high-impact scenario. They suggested that this analysis include potential emissions impacts as well as ecosystem impacts, including potential degradation of hydrological, vegetation, and habitat conditions.

Commenters requested that the SEIS provide information on pipelines, specifically the relative rate of occurrence for spills from main sources, to improve the understanding and disclosure of potential environmental impacts associated with the program area, and better inform the mitigation and planning measures necessary for monitoring and control of the proposed pipelines during regular and emergency operations. They cited the Alaska Department of Environmental Conservation's 2013 North Slope Spills Analysis report as a source of information for pipeline spills.

### **3.17.7 Reasonably Foreseeable Development Scenario**

***Issue: Will the SEIS consider the effects of reasonably foreseeable developments, including total projected water use, total projected ice road use, and increased accessibility of the program area?***

#### ***Comment Summary***

Commenters expressed concern that the proposed action would greatly increase the use of water and ice roads as well as accessibility of the program area. They suggested the BLM should include detailed projections of these factors be included in the reasonably foreseeable development scenarios in order to adequately analyze impacts of development on sensitive resources.

***Issue: Will changes to the future oil market be included in the reasonably foreseeable development scenario?******Comment Summary***

Commenters recommended that the SEIS consider the reasonably foreseeable development scenario in which exploration and production is abandoned due to failing hydrocarbon markets. They noted that fossil fuel use will likely decrease in the near future, and that the SEIS should evaluate the environmental and socioeconomic costs of this potential market failure. They also suggested that the BLM update the entire economic analyses of the fossil fuels markets be updated considering the movement of global governments away from fossil fuels due to climate change-related impacts.

***Issue: Will the BLM develop reasonably foreseeable development scenarios for each alternative, and how will they be developed?******Comment Summary***

Commenters recommended that the BLM develop specific reasonably foreseeable development scenarios for each alternative. The scenarios should be accurate and based on the best available science, and all assumptions should be clearly established to ensure that the resulting impacts analysis is legally sound. Commenters were concerned that the interpretation of “production and support facilities” for purposes of the 2,000-acre limitation adopted in the ROD was different from what was included and analyzed in the EIS, and that this discrepancy resulted in a program that is different, and potentially more impactful, than that which was analyzed.

Commenters also suggested that the analysis in the SEIS should be based on an oil production amount that reflects the most recent information for the Coastal Plain for the life of the Leasing Program, and that this value may vary across the alternatives. Likewise, they suggested that because the amount of oil produced will likely vary across alternatives, the analysis should consider differing infrastructure development based on the likely production amount under each alternative. They suggested that the SEIS analyze reasonably foreseeable development scenarios in which the development footprint varies under each alternative and includes assumptions about development on already issued leases.

Commenters recommended that the reasonably foreseeable development scenarios include scenarios that accurately reflect different potential ways of developing oil fields, such as through smaller and more numerous fields that could have very different levels and types of impacts. They requested that the BLM also include a development scenario based on a petroleum estimate that represents potential maximum impacts.

**3.17.8 Soil Resources*****Issue: How will the SEIS analyze the impacts of soil disturbance on the landscape, including impacts on permafrost and ice?******Comment Summary***

Commenters recommended the BLM fully quantify and analyze the direct, indirect, and cumulative impacts on soil and permafrost resources, including impacts from the placement of gravel fills and vertical support members, infrastructure, dust, seismic exploration, and development outside the program area. Commenters were concerned that the Coastal Plain's tundra is highly sensitive to surface disturbance, and they recommended the SEIS include an alternative that prohibits surface activity. They requested a robust analysis that accounts for conditions unique to the Coastal Plain as well as heterogeneity in soil conditions and sensitivity across the program area.

Commenters presented concerns about the effects of seismic exploration and exploratory drilling on the stability of permafrost soils in the program area. They suggested seismic exploration and exploratory drilling could increase thermal erosion and thermokarst.

***Issue: What background information will the BLM use to evaluate the effects on soils and permafrost?***

***Comment Summary***

Commenters recommended that the analysis of potential impacts on soil resources should be based on more robust background data such as accurate mapping and an analysis of surficial geology, snow depth, wind speed, and permafrost/ice distributions. They would like to see the analysis incorporate conditions unique to the Coastal Plain and account for differences in permafrost and soil resources across the program area rather than drawing parallels between the Coastal Plain and other areas. This is because conditions and effects can differ greatly based on *in situ* conditions. Commenters also recommended the analysis include more accurate estimates of development based on the best available data that include where development will occur and the probability of oil yields.

***Issue: Will the BLM consider cumulative effects on soils and permafrost beyond the footprint of the program area, including the potential magnification of effects due to climate change?***

***Comment Summary***

Commenters were concerned that cumulative effects on soils and permafrost have the potential to extend well beyond the footprint of the program area. They recommended the analysis consider broader impacts and degradation of permafrost and soil resources across the North Slope and northwest Canada. Commenters also expressed concerns about the cumulative effects of the proposed program in conjunction with ongoing climate change effects. They requested that the analysis discuss how the proposed program could impact the climate of the North Slope considering current rising temperatures and increasing discontinuity of permafrost, including a discussion of carbon emissions from thawing permafrost.

***Issue: What measures will be taken to avoid or minimize damage to pipelines and other structures due to increasingly unstable permafrost?***

***Comment Summary***

Commenters expressed concerns about damage to structures built on permafrost soils, which current research indicates are degrading in some areas due to increasing Arctic temperatures. Commenters were specifically concerned with pipelines such as the Trans-Alaska Pipeline System, which could experience fugitive leaking if built on thawing permafrost or taliks, and they would like to see the analysis address the probability and consequences of spills due to this risk. A commenter suggested that a comprehensive survey of permafrost underlayment for areas of concern with respect to potential pipeline routes that could be destroyed by melting permafrost would benefit the analysis. In addition, commenters noted that increased impermeable surfaces could negatively affect soil resources.

### **3.17.9 Sand and Gravel Resources**

***Issue: Where will gravel be extracted in the program area for the proposed program?***

***Comment Summary***

Commenters questioned the BLM's legal authority to permit gravel mining on the Coastal Plain and ask for thorough justification of such authority.

Commenters requested that the BLM consider the impacts of extracting gravel for the proposed program and ask that the SEIS analyze where gravel extraction would occur in the program area.

***Issue: What will the long-term and short-term impacts of gravel extraction be on the environment?***

***Comment Summary***

Commenters requested that the BLM develop a strategy for the disposal of gravel removed during field closure and reclamation of the proposed program.

Commenters requested that the BLM analyze the impacts of gravel mines and associated overburden piles on permafrost, ecology, and hydrology in the program area.

**3.17.10 Water Resources**

***Issue: How will the BLM address impacts on water quantity associated with water withdrawal methods used for the proposed program? How would the BLM address the impacts on water quality within the program area?***

***Comment Summary***

Commenters expressed concern about the degradation or contamination of potable water sources and the potential effects on wildlife and humans in the Coastal Plain. They are especially concerned with wastewater disposal practices, noting that oil and gas development requires a large quantity of water diversions and withdrawals. Commenters express concern that the Arctic Refuge does not have readily accessible or available water in high quantities.

Commenters stated that degradation of water quality and quantity on the Coastal Plain could negatively affect species including overwintering fishes, caribou, polar bears, and other fauna that consume or inhabit water in the program area. Commenter states that identified salmon habitats should be entered into the Alaska Department of Fish and Game Sport Fish Division Anadromous Waters Catalogue.

Commenters state that the BLM should address instream flow reservation water right applications pending before the Alaska Department of Natural Resources in its analysis of waterbodies on the Coastal Plain. Commenters requested that the BLM consider the presence of unique winter water flows, springs and taliks, formation of aufeis, and the presence of isolated water reservoirs beneath ice mounds or hummocks in braided stretches of major rivers in assessing environmental impacts and water quantities.

Commenters question how seasonal flooding may impact surface water quality and how it may increase the potential risk of accidental spills during flood events.

***Issue: Will the SEIS analyze the hydrological repercussions of ice and snow roads?***

***Comment Summary***

Commenters presented concerns about the long-term impacts of ice roads on hydrology and the program area's natural thermal regime and recommended further study before their approval. Commenters noted the lack of sufficient snow in the Coastal Plain for vehicle travel. They mentioned that liquid water is scarce for use in ice road development and that lentic and lotic environments should be avoided due to the potential for adverse aquatic impacts. Additionally, commenters requested that effects associated with the construction of ice roads and other surface disturbances related to hydrologic processes within river corridors as well as lake recharge dynamics be analyzed. Commenters expressed concern about impacts from gravel road development in lieu of ice road development. Commenters stated ice road development is not feasible in the program area.

Aufeis is an important habitat feature which helps sustain streamflow in summer, and provides insect relief for caribou. Commenters were concerned that the 2019 FEIS does not explain why the Preferred Alternative is less protective of springs or aufeis than Alternative D, or why this lower level of protection would be adequate.

#### **3.17.11 Solid and Hazardous Waste**

***Issue: How will the SEIS analyze the potential impacts on water quality, human health and safety, and wildlife from the proposed program, including planning for potential oil spills and waste produced?***

##### *Comment Summary*

Commenters expressed concerns regarding the storage of fuel in floodplains and near waterbodies. Commenters stated that the spill analysis should also encompass toxic chemical spills, including potential spills into the marine environment from shipping activities.

Commenters stated that solid waste management, particularly adequate handling, storage, and disposal (incineration) of putrescible wastes can attract bears, foxes, and scavenging birds. Commenters suggested that impacts on wildlife from solid and hazardous waste should be analyzed and mitigation measures and BMPs be developed.

Commenters expressed the need to obtain information to perform adequate analysis of deep subsurface injections of hazardous wastes. Commenters stated that the BLM should work with the Alaska Oil and Gas Conservation Commission to assure high environmental standards for underground injection of wastes.

#### **3.17.12 Seismic Testing**

***Issue: Will the SEIS analyze the effects of seismic exploration and exploratory drilling on wildlife, tundra, permafrost, and impacts on water quality?***

##### *Comment Summary*

Commenters presented concerns about the effects of seismic exploration and exploratory drilling on the stability of permafrost soils in the program area and insisted that a thorough investigation of impacts be conducted. Commenters suggested that seismic exploration could increase thermal erosion and leave scars on the tundra landscape as has been documented from earlier seismic exploration efforts in the region. Commenters recommended further studies to analyze methodologies to prevent scarring and other seismic exploration impacts on vegetation.

Commenters noted that seismic exploration may affect terrestrial and marine wildlife as well as wildlife corridors. Commenters stated that three-dimensional seismic exploration technology is not significantly less impactful than older technologies (2-D). Commenters expressed significant concern that seismic exploration would crush many denning polar bears and disrupt an even larger quantity of polar bear dens.

### **3.18 BIOLOGICAL RESOURCES**

***Issue: How will the SEIS address impacts on wildlife from exploration, drilling, road construction, operations, and pollution from potential leaks?***

##### *Comment Summary*

Commenters were concerned that construction, management and operation of equipment, and the potential for leaks would result in local ecosystem damage and pollution and harm local wildlife, waters, and plants.

Commenters requested that the SEIS evaluate all impacts of the proposed lease sale on wildlife including impacts from exploration (including seismic exploration), drilling, and operations (including pipelines, transportation corridors, and access).

Commenters requested that the SEIS fully analyze potential impacts on wildlife and wildlife habitat and develop appropriate and adequate mitigation measures to ensure preservation of the Arctic Refuge in accordance with the purpose for which it was established.

Comments requested that the SEIS use the best available science in making determinations and acknowledge data gaps and missing and unavailable information.

Commenters expressed concern that all alternatives would have significant long-term effects on the Arctic Refuge ecosystems and requested that the SEIS include a complete analysis of the long-term effects of habitat alteration.

***Issue: How will the SEIS assess the effects of the proposed action and alternatives on fish and wildlife populations and habitats and their natural diversity?***

***Comment Summary***

Commenters requested that each resource impacts discussion address the effects of oil development activities and facilities on the conservation of the natural interactions, dynamics, cycles, and processes within and between species.

Commenters were concerned that the impacts described in Section 3.4.3-Subsistence Uses and Resources of the 2019 FEIS indicate that oil and gas development would significantly degrade fish and wildlife habitats and their natural diversity.

Commenters requested that the SEIS address interrelationships between physical and biological components including how development affects predator-prey relationships, connectivity and habitat fragmentation, vegetation distribution, ecological integrity, and other ecosystem dynamics and changes.

Commenters were concerned that the direct, indirect, and cumulative effects of the proposed action and alternatives on the Coastal Plain would be significant and materially interfere with or detract from the Arctic Refuge purposes of conserving fish and wildlife populations and habitats in their natural diversity (including conserving the polar bear).

***Issue: How will the proposed action and alternatives impact culturally significant species, migratory species, and present and future terrestrial and marine conservation measures in Canada including species-specific measures and plans for polar bears, grizzly bears, the PCH, muskoxen, Dolly Varden, and other special species?***

***Comment Summary***

Commenters were concerned that impacts on these species from oil and gas exploration and development, as well as on their habitats and the communities that depend on these resources, will be very significant.

Commenters requested that the SEIS use site-specific data and analysis to analyze the impacts on migratory species on the Coastal Plain from oil and gas leasing activities and reasonably foreseeable development.

Commenters requested that the SEIS address how the proposed action and alternatives would affect present and future terrestrial and marine conservation measures in Canada, including: species-specific measures and



plans in Canada for polar bears, grizzly bears, the PCH, muskoxen, Dolly Varden, and any/all of the species listed in Section 1.1 - protected areas, conservation areas and special use areas of the EIS.

Commenters requested that the SEIS fully address the potential impacts on culturally significant species such as upland birds, waterfowl, moose, grizzly bear, polar bear, and muskoxen.

Commenters requested that the SEIS establish management and policy guidance on how remediation of disturbed lands and water affect whole ecosystems and the interconnectedness with traditional activities.

Commenters requested that the SEIS establish management and policy guidance for remediation of disturbed lands and waters to create suitable habitat for caribou (especially at calving and post calving) and other wildlife.

### **3.18.1 Vegetation and Wetlands**

***Issue: How would the SEIS address impacts on vegetation from seismic activities and development? How would the BLM monitor and reduce or mitigate these impacts?***

#### ***Comment Summary***

Commenters were concerned about the direct, indirect, and long-term effects on tundra, wetlands, and vegetation from seismic activities including pre-leasing seismic activities and off-lease seismic exploration and development including impacts from snow and ice roads, dust, and oil spills.

Commenters requested that the SEIS analyze additional mitigation measures aimed at preventing damage to vegetation and wetlands from seismic activities and development.

Commenters requested that the SEIS quantify and convey how development in different areas is likely to impact the specific tundra, vegetation, and wetland resources in different areas and the range of potential impacts likely to occur in different snow conditions, terrain types, and vegetation types.

Commenters requested that the SEIS remove waivers, exceptions, and modifications for NSO provisions in the 2019 FEIS or, if they are not removed, assess the way in which the waivers, exceptions, and modifications could lead to impacts greater than those analyzed in the SEIS.

Commenters requested that the SEIS evaluate riparian habitats and develop mitigation measures that allow for maintenance of these habitats in the event muskoxen expand into formerly occupied habitats.

***Issue: How would vegetation be quantified and categorized in the SEIS?***

#### ***Comment Summary***

Commenters requested that the SEIS quantify the total area of tundra, vegetation, and wetlands that is likely to be impacted by the oil and gas program and discuss the relative importance of each type.

Commenters were concerned that the vegetation and wetland mapping in the 2019 FEIS was available only at a coarse scale and requested that 2020 land cover and wetland data be used to quantify and categorize vegetation and wetland types in the SEIS.

Commenters requested that the SEIS include one table of vegetation types that compares impacts between all the alternatives with one column for each alternative rather than having each alternative with its own table, with different columns for high-medium-low oil potential and with columns for different categories of standard terms-surface occupancy- timing limits.

Commenters requested that the SEIS include one table of vegetation types that compares impacts between all the alternatives with one column for each alternative rather than having each alternative with its own table, with different columns for high, medium, and low oil potential and columns for different categories of standard terms, surface occupancy, and timing limits.

Commenters requested that the SEIS document riparian vegetation diversity, including diversity of mosses and aquatic bacteria at Sadlerochit Spring Creek, Hulahula Fish Hole Springs, and other springs in the program area to ensure adequate protection of priority resources of concern.

### **3.18.2 Fish and Aquatic Species**

#### ***Issue: How would aquatic habitat and fish be quantified/categorized in the SEIS?***

##### *Comment Summary*

Commenters requested that an invertebrate community assessment be completed that incorporates site-specific information across all streams within the Coastal Plain.

#### ***Issue: How would the SEIS assess the effects of the proposed action and alternatives on fish and aquatic species, their habitats, and natural diversity?***

##### *Comment Summary*

Commenters were concerned about the watershed-scale impacts that river-connected gravel mining pits would have on fish populations.

Commenters requested that the impacts of all phases of oil and gas development on fish species, their habitat, and subsistence be fully analyzed in the SEIS, including impacts from construction and maintenance of gravel roads, increased fishing pressure, hydrocarbon contamination, traffic, habitat fragmentation, temporary and permanent fish passage restrictions, and the removal and fill of aquatic habitats.

#### ***Issue: How will industrial water use including extracting water and ice from lakes, rivers, springs, and groundwater affect fish and fish habitat and other aquatic species?***

##### *Comment Summary*

Commenters requested that the SEIS analyze the biological impacts and consequences of altering streamflow or water quantity, including an evaluation of the potential impacts of exploration and development, on overwintering habitats, on fishes (particularly Dolly Varden and Arctic grayling), and on other aquatic species.

Commenters requested that the SEIS identify all water withdrawal sites (lakes and rivers) and analyze how winter fish presence will be accurately detected and adverse impacts avoided, minimized, and mitigated.

Commenters requested that the SEIS include protection measures for overwintering habitats to protect water quantity and quality, to maintain the natural diversity of fish and wildlife, and to protect subsistence resources.

Commenters were concerned that ice bridges would have negative impacts on fish populations, including large spring flooding events that can impede fish passage, cause direct loss of overwintering habitat, reduce dissolved oxygen concentrations, and increase stress on and mortality of Dolly Varden and other Arctic fishes.

Commenters requested that the SEIS utilize the Alaska Department of Fish and Game to understand potential impacts from and mitigation measures for ice infrastructures that cross fish-bearing streams.

***Issue: Will the SEIS analyze the economic, subsistence and cultural importance of fishes?******Comment Summary***

Commenters were concerned that the development of the Coastal Plain lands would impact important subsistence food resources in Alaska and Canada, including five species of whitefish including Arctic cisco and Dolly Varden.

Commenters highlighted that open water areas fed by perennial springs during winter are important Dolly Varden fishing areas, such as areas along the lower reaches of the Hulahula River, particularly “Fish Hole 1.”

**3.18.3 Birds*****Issue: How will the proposed program affect migratory bird nesting, breeding, and foraging habitat at the individual and population levels? Will the BLM analyze the effects on migratory birds from increased aircraft traffic, potential oil spills, and alterations to the hydrological regime, as well as the potential for increased populations of predators? How will the BLM monitor and reduce or mitigate these impacts?******Comment Summary***

Commenters were concerned that impacts from aircraft traffic, including lead emissions and noise from aircrafts, would harm migratory birds, particularly snow geese and molting black brant.

Commenters were concerned that impacts from the proposed program will negatively impact special status species such as spectacled eider, Steller’s eider, yellow-billed loon, and red-throated loon and request that the impacts of development on these species be fully addressed in the SEIS.

Commenters requested that the SEIS address a least-impactful alternative with lower impacts on migratory birds. Commenters were concerned that the preferred alternative, Alternative B in the 2019 FEIS, opens the largest amount of territory to leasing and is the least protective alternative with respect to migratory birds.

Commenters were concerned that the surface occupancy limits of 2,000 acres per project, rather than in total throughout leasing and development, would lead to significant habitat fragmentation.

Commenters requested that protective measures be implemented to protect nesting habitat by restricting surface and aerial activities that may affect birds or their nesting habitat. They requested that these measures be designed to limit the proposed program’s direct and indirect effects on birds, including oil spills, collisions, predation, increased noise, and other effects.

Commenters requested that the SEIS provide a more thorough discussion of how impacts on migratory birds can be reduced or otherwise mitigated.

Commenters requested that the discussion in the oil spill analysis section include impacts on birds using more accurate spill volumes as well as the potential long-term impacts an oil spill would have on migratory birds.

Commenters were concerned that the EIS does not contain adequate information regarding bird populations and habitat use.

Commenters requested that the SEIS include a catalog of the species of terrestrial, aquatic, and marine birds that use the Coastal Plain of the Arctic Refuge at various life stages and include details on each species’ status, distribution, abundance, and available conservation resources. Specific species requested include brant, greater scaup, king eider, American golden-plover, whimbrel, dunlin, buff-breasted sandpiper, pectoral

sandpiper, ivory gull, Ross's gull, yellow-billed loon, snowy owl, spectacled eider, golden eagle, snow goose, red-throated loon, two phalaropes, and nine species of shorebirds.

Commenters requested that the SEIS fully evaluate direct, indirect, and cumulative impacts on migratory birds from oil spills, collisions, traffic, habitat loss or alteration, changes in hydrology, disturbance due to human presence, and aircraft noise and pollution and consider alternatives that would eliminate or minimize impacts.

Commenters requested that potential impacts on migratory birds from seismic surveys and oil and gas development be fully analyzed in the SEIS and include data on site-specific impacts and potential mitigation measures.

Commenters requested that the SEIS analyze how alterations in the hydrological regime due to gravel mining, water extraction, and blockage of water flow would impact migratory birds and discuss the implications of large, local water demands.

Commenters requested the SEIS analyze plans for avoiding aircraft impacts on migratory birds, including standards by which aircraft-use plans would be evaluated and mitigation measures developed for lead and noise impacts.

***Issue: Will the SEIS analyze effects of climate change on migratory birds?***

***Comment Summary***

Commenters requested that the SEIS assess the impacts of the Lease Program alternatives on migratory birds under all likely future climate scenarios, considering both direct changes in impacts in the Refuge and altered stressors arising elsewhere that affect responses to such direct impacts.

Commenters requested that the SEIS explain how the Lease Program is consistent with the Migratory Bird Treaty Act and consider less impactful alternatives that would fulfill the requirement to protect migratory birds.

Commenters requested that the SEIS include a mitigation measure that restricts leasing in wetland habitats within the Coastal Plain program area for the purpose of avoiding or reducing impacts on migratory birds by the means of habitat conservation in the face of climate change.

***Issue: Will the SEIS analyze the economic, subsistence and cultural importance of birds?***

***Comment Summary***

Commenters requested that the SEIS analyze the subsistence and cultural importance of birds including a discussion of the importance of birds for communities within and directly around the Refuge and the importance of birds originating or migrating from the Coastal Plain to other communities within Alaska and Canada.

Commenters requested that the SEIS incorporate traditional Indigenous knowledge into the analysis of impacts on migratory birds.

Commenters highlighted the economic value of bird and wildlife watching.

***Issue: How will the Lease Program comply with the United States' treaty obligations, laws, and policies to protect migratory birds?***

***Comment Summary***

Commenters requested that the SEIS explain how the Lease Program is consistent with the Migratory Bird Treaty Act and consider less impactful alternatives that would fulfill the requirement to protect migratory birds.

Commenters requested that the SEIS explain how the Lease Program will comply with the following treaties, laws, and policies:

- Convention between the United States of America and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environment, signed Nov. 19, 1976.
- Convention between the Government of the United States of America and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction, and Their Environment, signed Mar. 4, 1972.
- Convention for the Protection of Migratory Birds and Game Mammals, signed at Mexico City on Feb. 7, 1936.
- Convention between the United States and Great Britain for the Protection of Migratory Birds, signed Aug. 16, 1916. 315.
- *Standing Rock Sioux Tribe v. Army Corps of Engineers*, 255 F. Supp. 3d 101, 131 (D.D.C. 2017).
- Executive Order 13186 on “Responsibilities of Federal Agencies to Protect Migratory Birds.”
- Fish and Wildlife Conservation Act and specifically its language on “Federal Conservation of Migratory Game Birds” (16 U.S.C. 2912).
- Endangered Species Act (specifically its language on “Wildlife Preservation in the Western Hemisphere” (paragraph e in 16 U.S.C. 1537a).
- Migratory Bird Treaty Act, 16 U.S.C. 703-712.

Commenters requested that the SEIS explain how any action alternative reviewed for the Lease Program would be compatible with the purposes of the Arctic Refuge and ANILCA and how any leases would be conditioned to protect migratory birds.

### **3.18.4 Terrestrial Mammal**

***Issue: How will the SEIS incorporate additional data and quantitative analyses of impacts on caribou in general and the PCH in particular?***

***Comment Summary***

Commenters expressed concern regarding the 2019 FEIS analysis of the PCH, particularly analysis of oil and gas development impacts on calving grounds, critical habitat, and habitats in general (especially along the coast), and the disturbance and displacement of caribou resulting from human activities and infrastructure development.

Commenters provided examples and references supporting potential impacts on the PCH, along with some additional baseline data to consider in future analyses. Additionally, commenters identified data gaps (such as radio collar information, emigration to other herds) and requested additional analyses to support the analysis of indirect, direct, and cumulative effects. Some of the additional analyses requested by commenters include:

- Modeling population level impacts on the PCH due to oil and gas development.
- Consideration of habitat use, particularly the geographically restricted habitat of the Coastal Plain versus other Arctic areas and how they restrict caribou use, especially in calving areas.

- Consideration of larger or multiple displacement distances (given other studies and findings) and more detailed analysis of impacts from disturbance/displacement.
- Reevaluation and definition of primary calving habitat to conform to best available scientific information and consideration of historically used areas.
- Quantitative analysis of potential impacts on caribou and incorporation of quantitative analyses related to caribou habitat selection and values of habitat across different seasons, use of energetic models to estimate consequences of displacement from prime forage areas, identification of ranges in habitat loss under alternatives, and impacts resulting from displacement, among others.
- Consider impacts on caribou resulting from elevated pipeline development.

Commenters noted a concern with the lack of analysis of seismic exploration impacts on caribou as well as confusion over where seismic exploration would be allowed in NSO zones related to PCH calving areas.

Commenters expressed concern regarding displacement of caribou as a result of oil and gas activities and how displacement would impact caribou behavior, populations, and habitat use.

***Issue: How will the SEIS incorporate traditional indigenous knowledge regarding caribou use of the Coastal Plain, as well as impacts resulting from oil and gas development?***

***Comment Summary***

Commenters noted the importance of the PCH to indigenous peoples, both as a subsistence source and also its intricate connections to the spiritual and cultural well-being of Native peoples. Commenters also noted that Native peoples are fundamental sources of information regarding the PCH, including locations commonly used as calving and post-calving habitats, migrations, and caribou responses to disturbances. Commenters stated that the BLM failed to incorporate traditional indigenous knowledge regarding the PCH into the 2019 FEIS.

***Issue: How will the SEIS incorporate monitoring, mitigation, and adaptive management actions for the PCH?***

***Comment Summary***

Commenters requested additional mitigation and protective measures for the PCH, including additional protections for calving areas, transportation corridor setbacks from the coastline to allow for caribou movement, and consideration of insect relief habitat. Commenters stated that mitigation measures in the 2019 FEIS were not based on best available science or were based on incorrect assumptions or both.

Commenters requested a complete evaluation of facility siting to develop mitigation measures for the PCH.

Commenters noted a need for monitoring and adaptive management options to be included in the SEIS to identify thresholds that would prompt mitigation efforts.

***Issue: How will the SEIS address caribou habituation in relationship to oil and gas development?***

***Comment Summary***

Commenters stated that the BLM did not adequately recognize that a herd's reaction to oil and gas development may lessen with habituation, as suggested by other studies. They noted that the PCH has habituated to oil and gas development in other areas, such as the Mackenzie River Basin, and other activities on the Coastal Plain (including tourism and motorized vehicle use). Several studies supporting habituation were provided by commenters.

Commenters noted that the idea that caribou habituate to people and development is not supported by current studies, including a recent study of the central Arctic caribou herd by the USGS. Studies indicate variations in avoidance but not necessarily clear evidence of habituation.

***Issue: How will the SEIS address transborder issues and incorporate existing agreements and participating parties into the process?***

*Comment Summary*

Commenters expressed concern regarding transboundary impacts on the PCH from oil and gas development on the Coastal Plain. They cited numerous agreements and collaborative efforts between the government, Canada, and indigenous people to protect caribou and the PCH in particular. Commenters were concerned about continuation of the stipulations/responsibility outlined in agreements, as well as how potential impacts on the PCH might translate across the border with Canada and impact Native communities. Commenters requested involvement of the Porcupine Caribou Management Board, Native peoples, and other governments in the SEIS process to determine potential impacts on the PCH, including transborder concerns.

***Issue: How will the SEIS address the cumulative effects of climate change and oil and gas development on PCH?***

*Comment Summary*

Commenters expressed concern regarding cumulative effect analysis for the PCH in general and, specifically, concerns related to climate change coupled with impacts from proposed oil and gas development. Commenters noted that climate change was not incorporated into the 2019 FEIS despite studies indicating that it is not only occurring but also impacting wildlife species, including caribou. Commenters requested a more robust analysis of climate change and its potential impacts on caribou.

***Issue: How will the SEIS incorporate quantitative analyses of impacts on wildlife?***

*Comment Summary*

Commenters expressed general concern at the lack of quantitative analyses for wildlife in general, including potential impacts from disruption of breeding wildlife, spills and water contamination. There was concern regarding lack of specific information for carnivore species and potential impacts from oil and gas development.

***Issue: How will the SEIS incorporate more quantitative analyses for carnivore species and grizzlies in particular?***

*Comment Summary*

Commenters stated that the SEIS should adequately address impacts of oil and gas development on carnivore species in general but also on grizzlies and wolverines in particular. Concerns related to grizzlies included impacts on denning areas, disruptions from oil and gas activities, habitat area fragmentation and loss, and human-bear interactions.

Commenters noted a need for additional consideration of human-bear interactions, particularly how solid waste would be managed near oil and gas facilities to prevent/minimize the potential for interactions.

***Issue: How will the SEIS address additional analyses for muskoxen?***

*Comment Summary*

Commenters stated that the 2019 FEIS did not adequately address muskoxen, particularly in light of population declines. They state the BLM should better present baseline conditions to better understand impacts from oil and gas development. Additionally, commenters indicated that the analysis of impacts on

muskoxen did not consider all potential impacts from oil and gas development, such as seismic activities, oil spills and contaminates.

***Issue: How will the BLM address Dall sheep and potential impacts from the oil and gas program presented in the SEIS?***

***Comment Summary***

Commenters stated that the 2019 FEIS failed to consider the impacts of oil and gas development on Dall sheep. Dall sheep occur in the southern edge of the program area and there is the potential for direct, indirect, and cumulative impacts on the regional populations. The sheep are also a major subsistence resource for the Kaktovikmiut and Gwich'in peoples.

### **3.18.5 Marine Mammals**

***Issue: How will the SEIS develop and incorporate additional mitigation and protection measures for polar bear populations, particularly, for their denning areas and critical habitat?***

***Comment Summary***

Commenters expressed concerns regarding potential impacts on polar bears, noting their increased use of the Coastal Plain, concerns with sea ice melt, and increasing use of terrestrial habitats. The Southern Beaufort Sea population of polar bears is already under stress from the loss of summer sea ice and related food limitation.

While some commenters noted that the analysis of impacts on polar bears identified the potential negative impacts, including take, they did not think that the mitigation measures in the 2019 FEIS were adequate to protect polar bears and their habitat. Multiple commenters requested the incorporation of more or different mitigation measures to better protect the species.

Commenters expressed particular concern over polar bear denning areas and areas designated as critical habitat under the Endangered Species Act. Commenters requested that the SEIS identify alternative areas for denning and methods for their protection. Commenters requested a maximum protection alternative for polar bears and their habitat.

Commenters stated that using forward-looking infrared radar is an inadequate approach for detecting polar bear dens for impact avoidance. Studies have shown that this method is not reliable as it locates just over 45 percent of known dens.

***Issue: How will the SEIS further analyze potential impacts on polar bears from oil and gas development in the Coastal Plain?***

***Comment Summary***

Commenters expressed concern over the analysis in the 2019 FEIS and need for additional analysis.

Commenters requested a more robust analysis of impacts on polar bears, particularly the Southern Beaufort Sea polar bear population, from increased motor vehicle traffic, aircraft, spills, and coastal development.

Commenters also requested additional analysis of human/polar bear interactions, including industry hazing. They also noted the potential for human/polar bear interactions, particularly interactions near the Kaktovik bowhead whale bone disposal area and potential oil and gas facilities (if located nearby).

Commenters were concerned that the 2019 FEIS underestimated the impacts of oil and gas development on polar bear habitat and requested consideration of habitat fragmentation as a result of oil and gas development.



Commenters requested a more robust analysis of the impact on polar bear habitat, specifically on barrier islands.

Commenters asked the BLM to be cautious in using the USFWS recently developed model of incidental polar bear take as it may have inflated predictions of take. Some commenters requested that the SEIS assess the impact of current and anticipated levels of take.

Commenters noted a need for a more robust consideration of climate change and the combined cumulative effects of climate change and potential oil and gas development impacts on polar bears.

***Issue: How will the SEIS address Native Alaskan use of marine mammals as well as traditional Indigenous knowledge of the species and habitats?***

*Comment Summary*

Commenters stated that the SEIS needs to address the importance of marine mammal species, particularly the importance of polar bears to Native communities (including existing agreements that allow for the harvest of polar bears). They also noted that traditional Indigenous Knowledge of the species and its habitats could be better incorporated into the SEIS.

***Issue: How will the BLM acknowledge and incorporate existing agreements and treaties, along with their respective obligations, into the SEIS?***

*Comment Summary*

Commenters cited the numerous existing agreements and treaties regarding polar bears and requested consideration of key aspects of these agreements, such as commitments to ensuring protection of essential habitat, consideration of habitat components like denning and feeding sites, and migration patterns.

***Issue: How will the SEIS address baseline conditions for ice seals and potential impacts on seals from oil and gas development?***

*Comment Summary*

Commenters requested additional analysis of impacts on ice seals, particularly potential impacts on the population trends of ringed seals. They noted that the potential for cumulative impacts, such as reduction in sea ice and snow because of climate change, would be coupled with impacts from oil and gas development.

Commenters stated that the baseline conditions for ice seals, and ringed seals in particular, were mischaracterized, as was the presentation of data from the National Marine Fisheries Service's Biological Opinion that addressed those conditions in the 2019 FEIS. The SEIS should consider climate-driven impacts on available seal habitat and likely behavioral responses as part of the baseline conditions.

A commenter stated that the 2019 FEIS did not adequately address impacts on ice seals because of human-caused noise such as seismic activity, helicopters, and snowmachines.

***Issue: How will the BLM assess potential impacts on whale species, both listed and unlisted, as a result of oil and gas development on the Coastal Plain?***

*Comment Summary*

Commenters stated that the 2019 FEIS failed to adequately assess potential impacts on whales, including the potential for ocean acidification and vessel strikes. They requested that the SEIS fully consider impacts on all whale species resulting from vessel traffic, oil and hazardous materials spills, noise, and climate-driven changes.

***Issue: How will the SEIS provide a scientifically based analysis of potential ship strikes on whales and other marine mammals?***

*Comment Summary*

A commenter requested that the 2019 FEIS section on ship strikes should be revised given there are no leasing stipulations or ROPs that would mitigate the potential for ship strikes (i.e., required vessel speed limits). Commenters ask that the analysis be more scientifically based and include risks of and potential impacts from vessel strikes at the individual and populations levels, based on overlap between habitat and shipping routes and the actual speeds of vessel traffic.

***Issue: How will the SEIS address ocean acidification and changes in marine mammal habitats?***

*Comment Summary*

Commenters stated that the 2019 FEIS did not adequately account for changes in habitat as a result of ocean acidification and noted the potential impact of ocean acidification on numerous marine mammal species.

### **3.19 SOCIAL SYSTEMS**

***Issue: How will the SEIS address the health and cultural importance of the Coastal Plain, in particular the PCH, and the interconnected relationship Native communities have with this area?***

*Comment Summary*

Commenters noted that Native villages (specifically Arctic Village, Venetie, and Old Crow) should be included as meaningful co-managers of the PCH and lands that sustain the herd. They also requested a more comprehensive analysis of the impacts of the proposed oil and gas leasing program on PCH health and impacts on the health, subsistence, spiritual, and cultural dimensions of the Gwich'in traditional lifeways.

#### **3.19.1 Landownership and Use**

***Issue: How will the BLM address ongoing legal action regarding the Arctic Refuge boundary and Tract 29 specifically?***

*Comment Summary*

A commenter noted that there is an ongoing boundary dispute between the BLM and State of Alaska regarding Tract 29 and the northwestern-most boundary of the Arctic Refuge. Recent legal proceedings determined that Tract 29 falls within the Arctic Refuge (Interior Board of Land Appeals, November 9, 2020). The state maintains that this tract falls outside the Arctic Refuge and is considering further legal action.

***Issue: How will the SEIS address transboundary impacts and existing agreements and treaties?***

*Comment Summary*

A commenter requested that the SEIS address transboundary impacts and how the BLM will uphold existing agreements and consultation requirements, specifically the 1987 agreement between the U.S. and Canada on the conservation of the PCH, as well as treaties and agreements involving migratory birds and polar bears.

***Issue: How will the SEIS analyze direct, indirect, and cumulative impacts on private lands and allotments within the Arctic Refuge?***

*Comment Summary*

Commenters stated that the BLM has not sufficiently analyzed the impacts of oil and gas development on private lands and allotments within the Coastal Plain. Activities on these private lands were not adequately incorporated into the cumulative effects analysis.

***Issue: How will the BLM address the legal status of Arctic Slope Regional Corporation subsurface lands and potential impacts on those lands from oil and gas development?***

***Comment Summary***

Commenters stated that the BLM has not adequately explained the legal status of Arctic Slope Regional Corporation subsurface lands and the potential impacts on the Coastal Plain from oil and gas activities that may occur on private corporation lands. A commenter noted that that impacts on these lands from oil and gas development needs to be considered.

**3.19.2 Cultural Resources**

***Issue: How will the BLM consider Indigenous or Traditional Knowledge in the SEIS?***

***Comment Summary***

Commenters stated that Indigenous or Traditional Knowledge needs to be included in the SEIS and given the same weight as western knowledge. They noted that there is an existing body of recorded Indigenous or Traditional Knowledge related to the PCH that should be considered in the analysis of impacts on the species as a result of oil and gas development.

A commenter noted the need for recognition that Inuvialuit use of the North Slope and coastal lands exceeds the map representation, and Inuvialuit Indigenous or Traditional Knowledge should be incorporated into the evaluation of impacts.

***Issue: How will the BLM meet the requirements for identification of cultural resources, as required by NHPA Section 106 (36 CFR 800.4), including inventory of cultural resources significant to Indigenous peoples?***

***Comment Summary***

Commenters expressed concern over the identification of historic properties as required by NHPA section 106. Archaeological surveys in the Coastal Plain are limited, and commenters stated that the BLM cannot assess effects or protect historic properties without additional identification efforts. Commenters requested additional cultural resource inventories, including identification of archaeological sites but also ethnographic resources and historic properties of religious and cultural significance to Indigenous peoples. Many felt there were significant data gaps related to cultural resource identification and that baseline data presented in the 2019 FEIS were not adequate. Commenters questioned the use of the attitude and heading reference system as a primary source for resource identification.

Commenters stressed the need for consultation with Indigenous peoples to identify significant resources and adequately analyzed impacts on those resources. Several commenters requested that deference be given to Traditional and Indigenous Knowledge during identification efforts.

Commenters noted a need to inventory all cultural resources, including sites, structures, and locations, but also plants, animals, fishes, and cultural relationships with the natural environment.

Commenters stated that the 2019 FEIS failed to adequately address submerged cultural resources, particularly in relationship to barrier islands where there is an increased potential for their occurrence.

***Issue: How will the BLM address locations with Indigenous place names and incorporate them into the SEIS?***

***Comment Summary***

Commenters requested the use of Indigenous place names in the SEIS, particularly for locations with known place names within the Coastal Plain.

***Issue: Will re-initiation of the NHPA Section 106 process result in a new or amended Programmatic Agreement?******Comment Summary***

Commenters stated that re-initiation of the NHPA Section 106 process necessitates a new Programmatic Agreement or, at a minimum, an amendment to the existing Programmatic Agreement.

**3.19.3 Subsistence Uses and Resources*****Issue: How will the BLM revise the analysis of subsistence uses and resources to address impacts on Alaska Natives and Canadian First Nations, including impacts on cultural practices and health?******Comment Summary***

Commenters expressed concern over the analysis of subsistence use and practices by Native peoples, stating that the 2019 FEIS did not fully account for the impacts on Native communities resulting from changes to subsistence species and emphasizing specific impacts on the PCH and Native peoples. They stated that the analysis did not provide enough specificity on impacts on subsistence use, incorporate Traditional Knowledge on subsistence species and practices, or address how impacts from climate change, coupled with oil and gas development, could impact long-term subsistence strategies. The analysis focused on a small set of communities—four of the fourteen Gwich'in communities—without providing similar detail for other Native communities.

Commenters were concerned about how impacts on wildlife species would in turn impact Alaska Natives and Canadian First Nations' subsistence use and cultural practices. Native populations, such as the Gwich'in and Iñupiat, have relied on subsistence resources for generations, particularly the PCH but also other species such as migratory waterfowl, fishes, and bowhead whales. Commenters stated that reduction in populations, particularly of caribou, would have significant impacts on both cultural practices and lifeways, potentially changing subsistence strategies altogether, but would also impact the overall health and well-being of Native peoples.

Commenters stated that the SEIS needs to address potential impacts on health, food availability, and food security as a result of oil and gas development potentially decreasing availability of subsistence species, particularly caribou. They also noted concerns with increased pollutants entering the food chain via harvested species and airborne particulates. Additionally, they noted that a shift from subsistence food sources to more commercial products could have health consequences for these communities.

Commenters recommended using the replacement cost method to quantify the monetary cost of replacing subsistence foods that could be lost because of oil and gas leasing activities with consideration given to the most similar, commercially available product that would replace the subsistence product.

Commenters were concerned about the long-term repercussions on Native communities as subsistence practices are interconnected with cultural identities and practices, from providing food and clothing to connections with the land, communities, and ancestors. The harvest and trade (fluidity) of subsistence resources maintains relationships between communities and conveys not only the resources themselves but also Traditional Knowledge from generation to generation.

Commenters noted that the 2019 FEIS did not adequately address potential transboundary impacts on subsistence use and practices by Canadian First Nations. Several Canadian First Nations rely on resources connected to the Coastal Plain area, namely, the PCH that migrate across the border. Multiple agreements

exist to protect the PCH and subsistence use across Alaska and Canada. Commenters noted that oil and gas leasing in the Coastal Plain has potential transboundary issues that should be included in the SEIS.

***Issue: How will the SEIS analyze the impacts on all subsistence species from the full range of oil and gas development activities?***

***Comment Summary***

Commenters expressed concern that the 2019 FEIS did not evaluate the full range of impacts on subsistence uses and resources. Several species were not addressed, including waterfowl, moose, sheep, and a particular population of Dolly Varden. For example, the 2019 FEIS focused on post-leasing activity impacts but did not always address pre-leasing activity impacts, particularly seismic exploration, by species.

Commenters noted that visual impacts from oil and gas development on subsistence use, including potential displacement of species resulting from infrastructure development and operation and related noise. Hunting activities may be displaced by development due to restrictions on firearm use as well as the movement of animals to avoid infrastructure.

***Issue: How will the SEIS address the analysis of new roads and access to subsistence resources?***

***Comment Summary***

Commenters stated that infrastructure investments associated with oil and gas development, such as the creation of new roads, would increase connectivity and access to subsistence resources, providing some positive benefits to local communities.

***Issue: How will the BLM incorporate Traditional Indigenous Knowledge regarding subsistence resources and use into the SEIS?***

***Comment Summary***

Commenters noted the importance of Traditional Indigenous Knowledge for understanding subsistence resources and use. Commenters requested meaningful engagement with and use of Traditional Indigenous Knowledge in preparing baseline data and analyses.

***Issue: How will the SEIS address the cumulative impacts of climate change and oil and gas development on subsistence resources and use in the Coastal Plain?***

***Comment Summary***

Commenters requested a comprehensive cumulative effects analysis to include impacts on subsistence from oil and gas activities and climate change. Climate change is already impacting lands and wildlife species in the Coastal Plain and leading to changes in subsistence practices. Commenters note that decreasing sea ice as a result of climate change and oil and gas development could lead to increasing shipping through the Arctic Ocean, further impacting species and changing subsistence practices.

### **3.19.4 Sociocultural Systems**

***Issue: How will the BLM address this potential United Nations investigation into the NEPA process and SEIS?***

***Comment Summary***

Commenters reference the United Nations call for an investigation into allegations that proposed oil and gas development in the Coastal Plain violates the human rights of the Gwich'in. The Gwich'in Steering Committee and its allies have submitted information to the United Nations to support the investigation of

human rights violations. Commenters request the completion of this investigation prior to issuing a ROD and SEIS.

***Issue: How will the BLM incorporate traditional indigenous knowledge into the SEIS and recognition of sacred nature of the Coastal Plain?***

***Comment Summary***

Commenters stated that the 2019 FEIS did not adequately address the transmission of Traditional Indigenous Knowledge, particularly the role of fluidity of resources between communities in the transmission of Traditional Indigenous Knowledge. Commenters noted that the lack of inclusion of Traditional Indigenous Knowledge in the 2019 FEIS resulted in some deficiencies in the sociocultural analysis, mischaracterization of impacts (e.g., not posing significant restrictions on Gwich'in subsistence hunting activities), and a failure to acknowledge the sacred nature of the entire Coastal Plain. Commenters requested meaningful incorporation of Traditional Indigenous Knowledge, acknowledgement that the Coastal Plain is sacred, and that disturbances would have profound impacts on Gwich'in people.

***Issue: How will the BLM incorporate a robust sociocultural analysis inclusive of all Gwich'in communities?***

***Comment Summary***

Commenters state that the 2019 FEIS applied broad generalizations regarding potential sociocultural impacts on communities and did not adequately address all affected communities, instead focusing on a subset of 14 Gwich'in communities. Thus, the 2019 FEIS failed to consider sociocultural impacts on all communities that rely on the PCH (and Central Arctic caribou herd, to an extent). Additionally, the analysis of effects, particularly cumulative effects, applied generalizations across communities based on a subset of villages that cannot be used to represent all communities, diminishing impacts in some cases and overstating positive impacts in others. Commenters request a robust assessment of sociocultural impacts that is inclusive of all communities.

### **3.19.5 Environmental Justice**

***Issue: How will the BLM define minority and low-income populations in the SEIS?***

***Comment Summary***

Commenters noted that there are various ways to measure and/or define minority and low-income communities and that, in some cases, it may be appropriate to use a threshold for identifying low-income populations. Commenters recommend that the BLM analyze block groups to best illustrate presence of minority populations and consider low-income thresholds.

***Issue: How will the SEIS address environmental justice impacts on minority and low-income populations and comply with relevant Executive Orders and guidance for identifying disproportionately adverse effects on the human health and environments of minority or low-income groups?***

***Comment Summary***

Commenters noted the need for the BLM to comply with multiple Executive Orders (EO) including EO 12898, EO 139990, and EO 140008, of which the latter two direct agencies to identify and address disproportionately high and adverse human health and environmental effects of actions on minority and low-income populations. Commenters stated that the BLM should use the definition of disadvantaged community as presented in EO 140008. Commenters noted a need to fully address impacts on human health and environments and identify disproportionate effects.

Commenters expressed concern regarding the analysis in the 2019 FEIS, stating it did not adequately address environmental justice and potential impacts on Native peoples, including the Gwich'in. Commenters stated the 2019 FEIS did not adequately address direct, indirect, and cumulative environmental justice impacts on Native communities. Commenters stated the 2019 FEIS underrepresented potential impacts on minority and low-income populations from oil and gas development. Commenters requested reconsideration of impacts on these groups.

Commenters noted that the BLM should consider using the EPA's EJSCREEN and American Community Survey to identify minority and low-income communities as a basis for considering adverse human health and environmental impacts, particularly disproportionate impacts. Recommended future analyses in the SEIS should address air quality and subsistence food sources.

Commenters noted a need for coordination with affected communities to provide input into the NEPA process.

### **3.19.6 Recreation**

#### ***Issue: How will the SEIS analyze impacts on recreational activities in the Coastal Plain?***

##### *Comment Summary*

Commenters requested that the BLM fully analyze how all phases of oil and gas development would affect visitor experience, recreational setting and opportunities, and wilderness-dependent recreation. Specific recreation topics noted for analysis included:

- Visitor experiences including viewsheds and aesthetics, night skiing, soundscapes, and special designation areas (Wild and Scenic Rivers, Wilderness, and lands with wilderness characteristics).
- Access to wildlife-related recreational opportunities.
- Economic impacts of recreational opportunities, including those associated with potential degradation of recreational uses and experiences, and existing and potential wildlife and wilderness tourism.
- Monitoring visitor use and adapting to changes in use.

Commenters noted the need for accurate and up-to-date visitor use and recreational data, including economic data, to provide a baseline for the analysis.

### **3.19.7 Arctic Refuge**

#### ***Issue: How will the SEIS analyze impacts of oil and gas leasing on the conservation and subsistence purposes of the Arctic Refuge, including measures to safeguard these purposes?***

##### *Comment Summary*

Commenters requested that the BLM consider and discuss how oil and gas leasing would impact the overarching conservation and subsistence purposes of the Arctic Refuge, as detailed in Public Land Order 2214 and ANILCA.

Commenters noted that the conservation purposes of the Arctic Refuge take precedence over oil and gas leasing and the BLM should explain what measures would be enacted to safeguard the conservation purposes of the Arctic Refuge.

### **3.19.8 Marine Protected Areas**

#### ***How will the SEIS analyze the impacts of the proposed program on Marine Protected Areas and associated habitats?***

##### *Comment Summary*

Commenters noted that the BLM should consider how development would impact the function of these offshore areas, such as how equipment brought into the Arctic Refuge by barge could impact water quality or shoreline use, or how changes in predator use of these areas could negatively impact nesting waterfowl.

#### ***Issue: How will the SEIS address impacts on polar bear populations and habitat?***

##### *Comment Summary*

Commenters noted that the Coastal Plain of the Arctic Refuge is an important denning area for the Southern Beaufort Sea polar bear population. The population of these polar bears is on the decline, with take already exceeding potential biological removal, which is a Marine Mammal Protection Act threshold intended to maintain marine mammal stocks at maximum productivity. With climate change resulting in decreased sea ice habitat, the Coastal Plain could become more important for this species.

### **3.19.9 Wild and Scenic Rivers**

#### ***Issue: How will the BLM address issues with the 2015 Arctic Refuge Comprehensive Conservation Plan and Wild and Scenic Rivers Act in the SEIS?***

##### *Comment Summary*

Commenters stated that the 2019 FEIS incorrectly cites the 2015 Arctic Refuge Comprehensive Conservation Plan as obligating the USFWS to apply protections to all study rivers in the Coastal Plain but the Wild and Scenic Rivers Act limits protections for rivers to 3 years following submittal to Congress for consideration.

The 2015 Arctic Refuge Comprehensive Conservation Plan only found the lower portion of the Hulahula River as suitable for recommending to Congress as a Wild and Scenic River. Therefore, interim management prescriptions were only applied to that portion of the river. The 2019 FEIS incorrectly applies protections to the Canning, Okpilak, and Jago rivers.

Commenters felt that the 2015 Arctic Refuge Comprehensive Conservation Plan violated ANILCA Section 1326 (b) and requested that the BLM not carry forward the results of the 2015 study or apply blanket NSO protections to the rivers instead.

#### ***Issue: How will the BLM address conflicts between Wild and Scenic River designations and protections and the ANILCA?***

##### *Comment Summary*

Commenters identified conflicts between the Wild and Scenic River administrative actions taken by the USFWS, under ANILCA, and through Congressional direction. The ANILCA includes numerous allowances for access and use, including a process for site-specific consideration of proposed transportation and utility systems. Commenters state that the BLM cannot include restrictions that have the potential to interfere with the Department of Interior's ability to carry out directions in the oil and gas leasing program and requests all such designations and protections be removed in the SEIS.



***Issue: How will the SEIS address and analyze impacts on Wild and Scenic Rivers and their associated Outstandingly Remarkable Values (ORVs)?******Comment Summary***

Commenters stated that the BLM failed to adequately consider impacts of oil and gas development on Wild and Scenic Rivers. The BLM's prior analysis of Wild and Scenic Rivers did not follow required procedures and failed to adequately protect ORVs. Commenters stated that the 2019 FEIS identified ORVs and associated buffers but did not explain how those buffers protected ORVs. Without an associated visual resource analysis, the buffers cannot be considered sufficient to protect ORVs.

**3.19.10 Wilderness Characteristics, Qualities, and Values*****Issue: How will the SEIS analyze impact on the wilderness values and characteristics of the Coastal Plain?******Comment Summary***

Commenters noted the importance of maintaining wilderness values and characteristics and the potential impacts on those values and characteristics as a result of oil and gas development. Commenters noted incongruity between wilderness values and oil and gas development. Commenters also highlighted the importance of visual and aesthetic resources in relationship to wilderness, as well as the intersection of wilderness and other resource areas such as waters, wildlife, and vegetation.

Commenters stated that the 2019 FEIS failed to identify and sufficiently analyze the wilderness values and characteristics of the Coastal Plain. The Coastal Plain has been recognized by the USFWS for its exceptional wilderness characteristics and, as such, the degree and magnitude of impacts from oil and gas development need to be considered.

A commenter suggested that lands identified by the USGS as lower potential areas (i.e., lands east of the Marsh Creek anticline) should be considered for wilderness designation.

Commenters requested a comprehensive analysis of impacts on wilderness characteristics from oil and gas development within the Arctic Refuge.

***Issue: How will wilderness buffers and protections be carried forward in the SEIS?******Comment Summary***

Commenters stated that the wilderness buffers applied in the EIS extend boundaries into the Coastal Plain, which applies protections (such as NSO zones) to lands outside the wilderness boundaries. This management approach is inconsistent with the ANILCA and should not be carried forward in the SEIS.

**3.19.11 Visual Resources*****Issue: How will the BLM incorporate visual resources and an analysis of those resources into the SEIS?******Comment Summary***

Commenters expressed concern over the lack of a visual resource impact analysis in the initial EIS. Specific concerns and considerations from commenters included:

- The potential incongruence between oil and gas development and the original purposes of the Arctic Refuge (wilderness and recreation coupled with untouched character and aesthetics).
- Visual impacts on visitor use and recreation, particularly in commonly visited areas like river corridors.

- Identifying unique aesthetics of the Coastal Plan and analyzing/depicting impacts on those unique aesthetics from oil and gas development.

Commenters requested that the BLM complete a thorough analyses of viewsheds and visual resources or consider incorporating the viewshed analysis completed by others. Visual analysis should include simulations of potential oil and gas developments from key observation points.

### **3.19.12 Transportation**

***Issue: For the SEIS, will the BLM coordinate with additional agencies to determine navigability to potential development sites?***

#### ***Comment Summary***

Commenters asked that the BLM coordinate with the National Oceanic and Atmospheric Administration and the Alaska Department of Natural Resources to gain guidance on navigability and environmentally friendly winter tundra travel to and from development sites.

***Issue: How will the SEIS address cumulative impacts due to increased sea vessel traffic and shipping of materials to development sites?***

#### ***Comment Summary***

Commenters stated that the BLM's 2019 FEIS narrowed the scope of impacts inappropriately and failed to adequately describe shipping activities associated with the Coastal Plain oil and gas program area and along the marine barge route. Commenters stated that the cumulative analysis area did not include a discussion of shipping to and from the program area, which includes the 1,600-nautical mile marine barge route from Dutch Harbor to Kaktovik, Alaska.

Commenters asked that the SEIS discuss and analyze what kinds of vessels will be used, how many vessel transits are expected, what cargo and materials they will carry, and how fast they are expected to travel. Commenters stated that the BLM has underestimated the volume of ships traveling to and from the program area.

Commenters also stated that shipping of bulk materials by barge, including hazardous fuels, is likely to increase due to the lack of a road or proposed road between Kaktovik and Deadhorse. Commenters asked that the SEIS describe and analyze oil- and gas-related shipping associated with the proposed development of the Coastal Plain, including a discussion of cumulative impacts resulting from increased shipping activities over the next 50 years. The SEIS should contain a comprehensive section devoted to an analysis of the impacts from shipping activities that will result from the leasing program. Commenters asked that the BLM analyze a collision, grounding, or other fuel barge accident scenario resulting in the discharge of 1 million gallons of fuel, which would be 10 times greater than the BLM's threshold for a "very large" spill.

### **3.19.13 Economy**

***Issue: How will the SEIS analyze the impacts of the leasing program on state and local economies, local communities, native populations, and nonmarket values?***

#### ***Comment Summary***

Commenters asked that the SEIS disclose and analyze the cost of transportation to get crude oil from the program area to refineries and the costs to get personnel and equipment to and from the program area to support development. Commenters asked that the SEIS include an analysis of the economic impact of failures and accidents during transport and development. Commenters also asked that the SEIS include an economic

analysis of the loss of infrastructure and additional costs associated with the thawing of permafrost, such as maintaining roads.

Commenters stated that the SEIS should consider a scenario where oil from the program area is not sold domestically. Commenters noted that oil produced from the program area is likely to be distributed to the global market, which may result in globally increased oil consumption. Commenters asked that the SEIS analyze an increase in domestic supply and the impact on global oil consumption and market value. Commenters stated that the 2019 FEIS overestimates the market for oil and economic viability of development in the program area. Commenters asked that the SEIS include an appraisal of the Lease Program's ability to displace oil imports, lower domestic gas prices, raise revenue, and create jobs.

Commenters stated that the SEIS should analyze the global effect of the Coastal Plain Oil and Gas Leasing Program by modeling the global oil market and assessing the program's indirect impacts on global energy consumption. Commenters asked that the SEIS provide evidence to support the assumption that the oil produced in the Coastal Plain will displace other oil production in the U.S. or globally, as well as the assumption that global oil production and consumption will continue to increase. Commenters stated that the SEIS should consider the indirect economic impacts of global emissions from foreign consumption of oil as a reasonably foreseeable effect of oil and gas development and production.

Commenters stated that the 2019 FEIS substantially overestimated the revenue generated from lease sales, and this should be incorporated into the economic analysis in the SEIS. Commenters noted that the 2019 FEIS overestimated the impact of lease sales and oil and gas leasing on the federal deficit, including the assumption that the program would generate significant bonus bids within 10 years. Commenters asked that the SEIS incorporate the considerable time lag before any royalty payments would reach the U.S. Treasury into its analysis.

Commenters stated that the SEIS should include a cost-benefit analysis of development on the program area. Commenters noted that the 2019 FEIS did not undertake a "hard-look" when addressing its analysis of non-market values and overestimated the economic benefit of oil and gas development in the program area. Commenters stated that the SEIS should monetize non-market values and show a comparison of the effects of leasing, exploration, and development on non-market values by alternative to fulfill this hard-look analysis.

Commenters also asked that the BLM incorporate a quantitative economic benefit analysis of ecosystem services, recreation, cultural tourism, and ecotourism into the SEIS to ensure that the loss of ecosystem services resulting from oil and gas development is considered alongside the economic benefits that development would generate.

Commenters stated that the SEIS should consider the economic loss to and the viability of the standard of living of local communities without development occurring in the program area. Commenters stated that development revenues would support and protect the residents' cultural and subsistence resources in the context of proposals to develop oil and gas resources and other activities. Commenters asked that the SEIS include economic multipliers in its analysis, including increased household income for residents.

Commenters asked that the SEIS analyze the costs of plugging and abandoning wells, as well as dismantlement and removal of wells, and restoration of the developed area. Commenters stated that there would be significant damage and the potential for dismantlement, removal, and restoration efforts are minimal given the declining prices of oil and increasing number of oil company asset transfers and bankruptcies.

Commenters stated that the SEIS should analyze the costs of well abandonment by primary producers, bankruptcy of operators, and costs deferred to the State and local communities.

#### **3.19.14 Public Health and Safety**

***Issue: How will the SEIS supplement the 2019 FEIS analysis of the potential impacts on human and wildlife health and safety from the proposed program, including planning for potential oil spills and waste produced?***

##### *Comment Summary*

Commenters stated that the BLM should complete a Health Impact Assessment of the potential impacts of development under an oil and gas program. Commenters asked that the SEIS disclose and analyze the impacts of oil and gas development-related climate change on human health and safety. Commenters noted that the BLM should address impacts on human health and well-being that would result from degraded air and water quality, noise pollution, and subsistence access due to oil and gas exploration and development and clearly explain how these impacts will be mitigated.

Commenters asked that the SEIS analyze the impacts of subsistence food contamination and proximity of communities to piston-engine aircraft traffic, which use lead-based gasoline. Specifically, commenters recommended analysis of particular mitigation measures that would ensure that permitted activities do not create human health risks by contaminating subsistence foods.

Commenters asked that the SEIS utilize the Social Determinants of Health in its analysis, which includes eight components: (1) accidents and injuries, (2) exposure to potentially hazardous materials, (3) food, (4) nutrition and subsistence activity, (5) infectious disease, (6) water and sanitation, (7) non-communicable and chronic diseases, and (8) health services infrastructure and capacity.

Commenters stated that the analysis in the 2019 FEIS relies on information incorporated by reference from the North Slope Borough Baseline Community Health Analysis Report, and since the NPR-A is a different geographic region, it has different community concerns. Commenters asked that the SEIS analysis account for communities that rely on Coastal Plain resources but are not on the North Slope, such as the Gwich'in or other communities outside the program area, which harvest migratory species that rely on the program area. In addition, commenters suggest that the data used for the 2019 FEIS analysis is outdated and likely does not accurately represent current public health conditions. Commenters asked that the SEIS incorporate more up-to-date vital statistics, census data, behavioral risk factor surveillance results, and epidemiology trends.

#### **3.20 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES**

***Issue: Do oil and gas lease sales in the program area represent a commitment of irretrievable resources with irreversible impacts?***

Commenters stated that the Lease Program has committed irretrievable resources as oil and gas leases confer “the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold,” and, thus, the SEIS should include a site-specific analysis of these impacts. Commenters stated that the BLM should either fully retain the authority to preclude all activities pending submission of site-specific proposals or conduct a more robust, site-specific analysis.

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# Chapter 4. Future Steps

## 4.1 FUTURE STEPS AND PUBLIC PARTICIPATION OPPORTUNITIES

The next phase of the BLM’s SEIS process is to develop draft leasing program alternatives for the SEIS, based on the issues presented in **Chapter 3**. This includes the areas that will be offered for sale and the lease stipulations and ROPs to be applied to leases and associated oil and gas activities. These alternatives will address issues identified during scoping and will meet goals and objectives to be developed by the BLM’s interdisciplinary team in coordination with cooperating agencies. In compliance with NEPA, the CEQ regulations, and the BLM regulations and guidance, alternatives should be reasonable and implementable. The BLM will also meet with cooperating agencies and interested tribes and ANCSA Corporations to seek their input on the development of the alternatives.

The analysis of the alternatives will be documented in the Draft SEIS. Although the BLM welcomes public input at any time during the environmental analysis process, the next official public comment period will begin when the Draft SEIS is published, which is anticipated in June 2022. The availability of the draft document will be announced via a Notice of Availability in the *Federal Register*, and a public comment period of at least 45 days will follow. Public meetings will be held during the Draft SEIS comment period.

At the conclusion of the public comment period, the BLM will revise the draft SEIS, which will be followed by publication of the Final SEIS. The Final SEIS will identify the BLM’s preferred alternative. The availability of the Final SEIS will be announced in a Notice of Availability in the *Federal Register*. The date that the notice appears in the *Federal Register* will begin the required 30-day waiting period before a ROD may be issued.

The BLM will prepare the ROD to document the selected alternative and any accompanying additional mitigation measures, and the approving official will sign it. No action concerning the proposal will be allowed until the ROD has been issued, except under conditions specified in CEQ regulations 40 CFR 1506.1.

## 4.2 CONTACT INFORMATION

The public is encouraged to participate throughout the environmental analysis process for the Coastal Plain Oil and Gas Leasing Program SEIS. Those wanting to be added to or deleted from the distribution list, change their contact information, or request further information may email a request to [BLM\\_AK\\_CoastalPlain\\_SupplementalEIS@blm.gov](mailto:BLM_AK_CoastalPlain_SupplementalEIS@blm.gov) or mail a request to the following address:

Bureau of Land Management, Alaska State Office  
Coastal Plain Oil and Gas Leasing Program EIS  
222 West 7th Avenue, #13  
Anchorage, AK 99513

Please provide your name, mailing address, and email address, as well as your preferred method for receiving information. Before submitting written comments on a NEPA action, be advised that your entire comment—including personally identifiable information (such as your address, phone number, and email address)—may be made publicly available at any time. While you can request that your personally identifiable information be withheld from public review, we cannot guarantee that we will be able to withhold it.

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## Chapter 5. References

- BLM (United States Department of the Interior, Bureau of Land Management). 2008. Handbook H-1790-1-Scoping. BLM, Washington, DC. January 30, 2008.
- \_\_\_\_\_. Coastal Plain Oil and Gas Leasing Program Final Environmental Impact Statement. 2019. Internet website: <https://eplanning.blm.gov/eplanning-ui/project/102555/570>.
- \_\_\_\_\_. Coastal Plain Oil and Gas Leasing Program Record of Decision. 2020. Internet website: <https://eplanning.blm.gov/eplanning-ui/project/102555/570>.



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# Appendix A

Secretary's Order 3401

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THE SECRETARY OF THE INTERIOR  
WASHINGTON

ORDER NO. 3401

**Subject:** Comprehensive Analysis and Temporary Halt on all Activities in the Arctic National Wildlife Refuge Relating to the Coastal Plain Oil and Gas Leasing Program

Sec. 1 **Purpose.** This Order is taken in furtherance of Section 4(a) of Executive Order (EO) 13990, entitled, “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis” (January 20, 2021).

Sec. 2 **Authorities.** This Order is issued under the authority of Section 2 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262), as amended, and other applicable statutory authorities.

Sec. 3 **Background.** Section 4(a) of EO 13990, provides, in full:

*In light of the alleged legal deficiencies underlying the program, including the inadequacy of the environmental review required by the National Environmental Policy Act, the Secretary of the Interior shall, as appropriate and consistent with applicable law, place a temporary moratorium on all activities of the Federal Government relating to the implementation of the Coastal Plain Oil and Gas Leasing Program, as established by the Record of Decision signed August 17, 2020, in the Arctic National Wildlife Refuge. The Secretary shall review the program and, as appropriate and consistent with applicable law, conduct a new, comprehensive analysis of the potential environmental impacts of the oil and gas program.*

My review of the Coastal Plain Oil and Gas Leasing Program (Program) as directed by EO 13990 has identified multiple legal deficiencies in the underlying record supporting the leases, including, but not limited to: (1) insufficient analysis under the National Environmental Policy Act (NEPA), including failure to adequately analyze a reasonable range of alternatives in the environmental impact statement (EIS); and (2) failure in the August 17, 2020, Record of Decision (ROD) to properly interpret Section 20001 of Public Law 115-97 (Tax Act).

Sec. 4 **Directive.** Based on those identified deficiencies, the Department of the Interior (Department) will conduct a new, comprehensive analysis of the potential environmental impacts of the Program and address the identified legal deficiencies. While that analysis is pending, I direct a temporary halt on all Department activities related to the Program in the Arctic Refuge.

**Sec. 5 Implementation.** Consistent with EO 13990 and governing laws and regulations, I direct the following actions:

- a. Within 60 days of the issuance of this Order, the Assistant Secretary for Land and Minerals Management will, in coordination with the Assistant Secretary for Fish and Wildlife and Parks and the Solicitor's Office, publish a notice of intent in the Federal Register to initiate the process to conduct a comprehensive environmental analysis, complete necessary consultation, and correct the identified legal deficiencies.
- b. Until the analysis in Sec. 5(a) above is complete, the Directors of the Bureau of Land Management (BLM) and the U.S. Fish and Wildlife Service shall not take any action to authorize any aspect of the Program, including, but not limited to, any leasing, exploration, development, production, or transportation, and shall not process any pending or future applications for such activities.
- c. The Assistant Secretary for Land and Minerals Management and the Director of the BLM shall, as appropriate and consistent with applicable law, take appropriate action with respect to existing leases in light of the direction provided herein. To the extent not already redelegated, I hereby redelegate the authority to take such action or to exercise any authority granted to the Secretary of the Interior by Section 20001 of Pub. L. No. 115-97 (December 20, 2017) to the Assistant Secretary for Land and Minerals Management, the Principal Deputy Assistant Secretary for Land and Minerals Management, the Director of the BLM, and the Deputy Director for Policy and Programs for the BLM.
- d. The Solicitor's Office will work with the Department of Justice to seek additional stays on litigation until the analysis in Sec. 5(a) is complete.

**Sec. 6 Effect of the Order.** This Order is intended to improve the internal management of the Department. This Order and any resulting report or recommendations are not intended to, and do not, create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities or entities, its officer or employees, or any other person. To the extent there is any inconsistency between the provisions of this Order and any Federal laws or regulations, the laws or regulations will control.

**Sec. 7 Expiration Date.** This Order is effective immediately and will remain in effect until it is amended, superseded, or revoked, whichever occurs first.



Secretary of the Interior

Date: June 1, 2021

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# Appendix B

Notice of Intent

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*America v. State of Alaska*, Civil Action No. A91–081 CV.

The EVOS PAC meeting agenda will include the FY22 Work Plan. An opportunity for public comments will be provided. The final agenda and materials for the meeting will be posted on the EVOS Trustee Council website at [www.evostc.state.ak.us](http://www.evostc.state.ak.us). All EVOS PAC meetings are open to the public.

#### Public Input

Interested persons may choose to make oral comments at the meeting during the designated time. Depending on the number of people wishing to comment and the time available, the amount of time for oral comments may be limited. Interested parties should contact the Designated Federal Officer (see **FOR FURTHER INFORMATION CONTACT**) for advance placement on the public speaker list for this meeting.

#### Submitting Written Information or Questions

Interested members of the public may submit relevant information or questions for the Committee to consider during the public meeting. Written statements must be received by September 22, 2021, so that the information may be made available to the Committee for their consideration prior to this meeting. Written statements must be supplied to the Designated Federal Officer via email at [philip\\_johnson@ios.doi.gov](mailto:philip_johnson@ios.doi.gov).

#### Public Disclosure of Comments

Before including your address, phone number, email address, or other personal identifying information in your comments, please be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

*Authority:* 5 U.S.C. appendix 2.

#### Philip Johnson,

*Regional Environmental Officer, Office of Environmental Policy and Compliance.*

[FR Doc. 2021–16570 Filed 8–3–21; 8:45 am]

**BILLING CODE 4334–63–P**

## DEPARTMENT OF THE INTERIOR

### Bureau of Land Management

[21X.LLAK930100.L1610000.PN0000]

#### Notice of Intent To Prepare a Supplemental Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, Alaska

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice of intent.

**SUMMARY:** In accordance with Secretary's Order 3401, *Comprehensive Analysis and Temporary Halt on all Activities in the Arctic National Wildlife Refuge Relating to the Coastal Plain Oil and Gas Leasing Program*, the Bureau of Land Management (BLM) Alaska State Office, Anchorage, Alaska, intends to prepare a Supplemental Environmental Impact Statement (EIS) to the September 2019 Coastal Plain Oil and Gas Leasing Program EIS. The Supplemental EIS will provide a comprehensive analysis of the potential environmental impacts of the Program, including by addressing the deficiencies identified in Secretary's Order 3401.

**DATES:** This Notice initiates the public scoping process for the Supplemental EIS. Comments on issues, impacts, and potential new alternatives to be analyzed may be submitted in writing until October 4, 2021. The BLM will announce on its website any additional venues for commenting during scoping.

**ADDRESSES:** You may submit comments by any of the following methods:

- *Website:* <https://eplanning.blm.gov/eplanning-ui/project/102555/510>.
- *Mail:* BLM, Alaska State Office, Attention—Coastal Plain Supplemental EIS, 222 West 7th Avenue, #13, Anchorage, AK 99513–7599.

#### FOR FURTHER INFORMATION CONTACT:

Serena Sweet, Project Lead, via email at [blm\\_ak\\_coastalplain\\_supplementalEIS@blm.gov](mailto:blm_ak_coastalplain_supplementalEIS@blm.gov), or via telephone at 907–271–5960; or by mail at Bureau of Land Management, 222 West 7th Avenue, #13, Anchorage, Alaska 99513–7599. You may also request to be added to the mailing list for the Supplemental EIS. Additional background information and supporting documents may be found at the <https://eplanning.blm.gov/eplanning-ui/project/102555/510>.

Persons who use a telecommunications device for the deaf (TDD) may call the Federal Relay Service (FRS) at 1–800–877–8339 to contact the above individual during normal business hours. FRS is available 24 hours a day, 7 days a week, to leave a message or question with the above

individual. You will receive a reply during normal business hours.

**SUPPLEMENTARY INFORMATION:** The area comprising the Coastal Plain includes approximately 1.6 million acres within the approximately 19.3 million-acre Arctic National Wildlife Refuge. In September 2019 and in connection with Public Law 115–97, Dec. 22, 2017, the BLM completed the Coastal Plain Oil and Gas Leasing Final EIS. The BLM then issued a Record of Decision (ROD) for the Coastal Plain Oil and Gas Leasing Program on August 8, 2020 (85 FR 51754). The ROD approved a program to implement Section 20001 of Public Law 115–97, which directed the BLM to manage the oil and gas leasing program on the Coastal Plain in a manner similar to lease sales under the Naval Petroleum Reserves Production Act of 1976 (including regulations).

On June 1, 2021, the Secretary of the Interior issued Secretary's Order 3401, Section 4 of which directed “a temporary halt on all Department activities related to the [Leasing] Program in the Arctic Refuge” pending “a new, comprehensive analysis of the potential environmental impacts of the Program” to “address . . . identified legal deficiencies.”

The purpose of this public scoping process is to determine the scope of issues to be addressed and to identify the significant issues, including any legal deficiencies in the Final EIS, related to an oil and gas leasing program within the Coastal Plain. Information received during this process will influence the development of the Supplemental EIS and guide the scope of the environmental analysis. The BLM will work collaboratively with interested parties to identify the management decisions best suited to local, regional, and national needs and concerns.

The purpose and need of the Supplemental EIS is bound by statute and remains the same as for the September 2019 Final EIS, *i.e.*, to implement Section 20001 of Public Law 115–97. Potential new alternatives to be considered in the Supplemental EIS include, but are not limited to, those that would: Designate certain areas of the Coastal Plain as open or closed to leasing; permit less than 2,000 acres of surface development throughout the Coastal Plain; prohibit surface infrastructure in sensitive areas; and otherwise avoid or mitigate impacts from oil and gas activities.

The Supplemental EIS will evaluate impacts to various surface resources including, but not limited to, caribou, polar bears, birds, vegetation, and



surface waters including wetlands, as well as to other uses of the Coastal Plain, including subsistence uses. The Supplemental EIS will also consider impacts from greenhouse gas emissions from any Leasing Program.

After the scoping comment period is closed, the BLM will review and consider the scoping comments received and will develop a Draft Supplemental EIS, which BLM estimates will be completed approximately 6 to 8 months after the scoping period ends. At that time the Draft Supplemental EIS will be made available for public comment for at least 45 days. After the close of the Draft Supplemental EIS comment period, BLM will develop a Final Supplemental EIS incorporating comments received on the Draft, which BLM estimates will be completed approximately 6 months after the Draft Supplemental EIS comment period ends. A record of decision selecting a program alternative from the Final Supplemental EIS would be issued no sooner than 30 days after notice of the availability of the Final Supplemental EIS is published in the **Federal Register**.

*Authority:* 40 CFR 1501.9(d), 40 CFR 1501.7 (2019).

**Laura Daniel-Davis,**

*Principal Deputy Assistant Secretary, Land and Minerals Management.*

[FR Doc. 2021-16572 Filed 8-3-21; 8:45 am]

**BILLING CODE 4310-JA-P**

## DEPARTMENT OF THE INTERIOR

### Bureau of Reclamation

[RR85672000, 21XR0680A2, RX.31480001.0040000; OMB Control Number 1006-0003]

### Agency Information Collection Activities; Bureau of Reclamation Use Authorization Application

**AGENCY:** Bureau of Reclamation, Interior.

**ACTION:** Notice of information collection; request for comment.

**SUMMARY:** In accordance with the Paperwork Reduction Act of 1995, we, the Bureau of Reclamation (Reclamation) are proposing to renew an information collection.

**DATES:** Interested persons are invited to submit comments on or before October 4, 2021.

**ADDRESSES:** Send your comments on this information collection request (ICR) by mail to Jason Kirby, Bureau of Reclamation, P.O. Box 25007, Denver, CO 80225-0007; or by email to [jkirby@usbr.gov](mailto:jkirby@usbr.gov). Please reference Office of

Management and Budget (OMB) Control Number 1006-0003 in the subject line of your comments.

**FOR FURTHER INFORMATION CONTACT:** To request additional information about this ICR, contact Jason Kirby by email at [jkirby@usbr.gov](mailto:jkirby@usbr.gov), or by telephone at (303) 445-2895. Individuals who are hearing or speech impaired may call the Federal Relay Service at (800) 877-8339 for TTY assistance.

**SUPPLEMENTARY INFORMATION:** In accordance with the Paperwork Reduction Act of 1995 (PRA, 44 U.S.C. 3501 *et seq.*) and 5 CFR 1320.8(d)(1), all information collections require approval under the PRA. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

As part of our continuing effort to reduce paperwork and respondent burdens, we invite the public and other Federal agencies to comment on new, proposed, revised, and continuing collections of information. This helps us assess the impact of our information collection requirements and minimize the public's reporting burden. It also helps the public understand our information collection requirements and provide the requested data in the desired format.

We are especially interested in public comment addressing the following:

- (1) Whether or not the collection of information is necessary for the proper performance of the functions of the agency, including whether or not the information will have practical utility;
- (2) The accuracy of our estimate of the burden for this collection of information, including the validity of the methodology and assumptions used;
- (3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

- (4) How might the agency minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.*, permitting electronic submission of response.

Comments that you submit in response to this notice are a matter of public record. We will include or summarize each comment in our request to OMB to approve this ICR. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may

be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

*Abstract:* Reclamation is responsible for approximately 6.5 million acres of land which directly support Reclamation's Federal water projects in the 17 Western States. Under Title 43 CFR part 429, individuals or entities wanting to use Reclamation's lands, facilities, or waterbodies must apply using Form 7-2540. Examples of such uses are:

- Agricultural uses such as grazing and farming;
- commercial or organized recreation and sporting activities;
- other commercial activities such as “guiding and outfitting” and “filming and photography;” and,
- resource exploration and extraction, including sand and gravel removal and timber harvesting.

We review applications to determine whether granting individual use authorizations are compatible with Reclamation's present or future uses of the lands, facilities, or waterbodies. When we find a proposed use compatible, we advise the applicant of the estimated administrative costs and estimated application processing time. In addition to the administrative costs, we require the applicant to pay a use fee based on a valuation or by competitive bidding. If the application is for construction of a bridge, building, or other significant construction project, Reclamation may require that all plans and specifications be signed and sealed by a licensed professional engineer.

*Title of Collection:* Bureau of Reclamation Use Authorization Application.

*OMB Control Number:* 1006-0003.

*Form Number:* Form 7-2540.

*Type of Review:* Extension of a currently approved collection.

*Respondents/Affected Public:*

Individuals, corporations, companies, and State and local entities who want to use Reclamation lands, facilities, or waterbodies.

*Total Estimated Number of Annual Respondents:* 225.

*Total Estimated Number of Annual Responses:* 225.

*Estimated Completion Time per Response:* 2 hours.

*Total Estimated Number of Annual Burden Hours:* 450 hours.

*Respondent's Obligation:* Required to obtain or retain a benefit.

*Frequency of Collection:* Each time a use authorization is requested.

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# Appendix C

## Scoping Meeting Presentation

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U.S. Department of the Interior  
Bureau of Land Management

# Coastal Plain Oil and Gas Leasing Program

BLM Alaska (in partnership with U.S. Fish and Wildlife Service)

# Supplemental Environmental Impact Statement Scoping Meeting

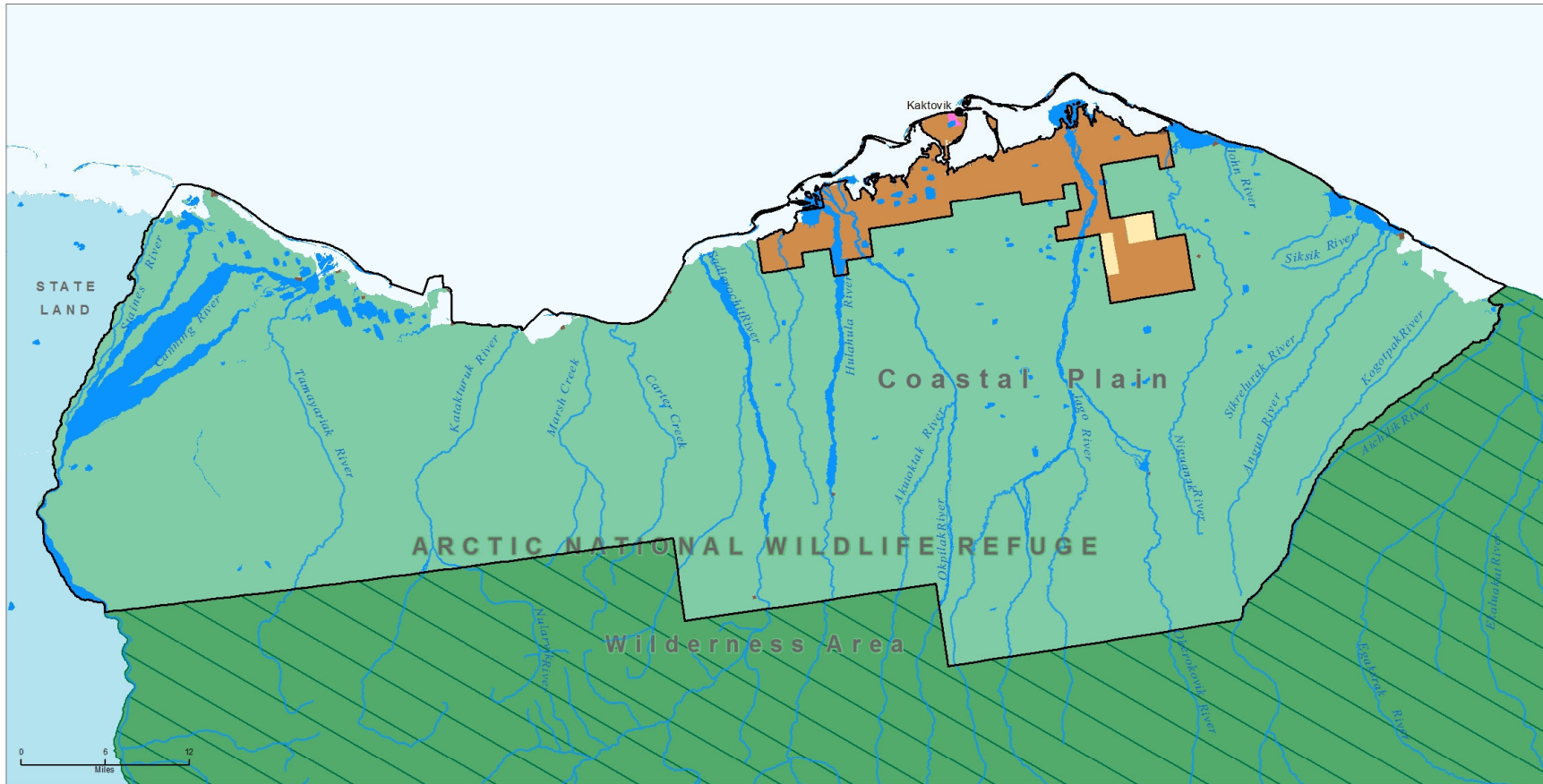


# Agenda

- Overview of the Project Area
- Background
- Decisions to be Made
- Agency Responsibilities
- Tentative Schedule
- How to Participate



# Project Area Map



- U.S. Fish and Wildlife Service
- U.S. Fish and Wildlife Service, wilderness area
- Native-conveyed
- Native-selected
- State
- Native allotment
- Air Force
- Coastal Plain Supplemental EIS Boundary



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use without their data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated in future modifications.



# Background

- Public Law 115-97, Section 20001 (Dec 22, 2017)
  - *Secretary of the Interior, acting through the BLM, shall establish and administer a competitive oil and gas program for the leasing, development, production and transportation of oil and gas in and from the Coastal Plain*
- Coastal Plain Oil and Gas Leasing Program Final EIS published (Sep 12, 2019) and Record of Decision issued (Aug 8, 2020)
- Secretary's Order 3401 (Jun 1, 2021)
  - *Comprehensive analysis and temporary halt on all activities in the Arctic National Wildlife Refuge relating to the Coastal Plain Oil and Gas Leasing Program*





# Decisions to be Made

- Supplemental analysis may include (but is not limited to):
  - Revision of reasonably foreseeable development (RFD) and areas available for leasing
  - An alternative allowing for less than 2,000 acres of surface development
  - Updated analysis of greenhouse gas emissions
  - New information related to subsistence resources (e.g., fish, marine mammals, caribou) and subsistence use/access
  - A wider range of potential development outcomes
  - Revision of lease stipulations and required operating procedures





# Agency Responsibilities

- Bureau of Land Management
  - Lead Federal Agency for Supplemental EIS
  - Management of leasing program
  - Conducting lease sales and adjudicating relevant permits
- Fish and Wildlife Service
  - Partner with BLM in preparation of Supplemental EIS
  - Administers surface of Arctic National Wildlife Refuge
- Cooperating Agencies still being determined



# Tentative Schedule



<b>Notice of Intent</b>	<b>Aug 4, 2021</b>
Scoping Period Ends	Oct 4, 2021
Alternatives Development	Oct – Dec 2021
Evaluate Environmental Consequences	Jan – May 2022
Publish Draft Supplemental EIS	Jun 2022
Draft Supplemental EIS Comment Period (45 days)	July – Aug 2022
Revise Supplemental EIS based on Public Input	Sep 2022 – Mar 2023
Publish Final EIS	Apr 2023 – Jul 2023
Record of Decision	No later than Aug 2023



# How to Participate

## **Provide Testimony**

Testimony tonight will be recorded and incorporated into the analysis process

## **NEPA Register**

<https://eplanning.blm.gov/eplanning-ui/project/2015144/510>

(click Participate Now)

## **Email**

[blm\\_ak\\_coastalplain\\_supplementalEIS@blm.gov](mailto:blm_ak_coastalplain_supplementalEIS@blm.gov)

## **Mail**

BLM, Alaska State Office  
Attn: Coastal Plain Supplemental EIS  
222 West 7th Avenue, #13  
Anchorage, Alaska 99513

**Comments accepted through October 4, 2021**



Thank you

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# Appendix D

## Suggested Literature and Data for the SEIS

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# Appendix D. Suggested Literature and Data for the SEIS

Multiple public comment submissions contained suggested best available science and information for the BLM to consider while preparing the SEIS. The full citations of these references have been organized by resource topic and are provided below.

## BIRDS

Alaska Department of Environmental Conservation. 2015. Annual Summary of Oil and Hazardous Substance Spills Fiscal Year 2014 (July 1, 2013–June 30, 2014). Internet website: <https://dec.alaska.gov/spar/ppr/spill-information/spill-data>.

Alaska Oil Spill Commission. 1990. The Wreck of the Exxon Valdez. Final Report.

Arctic National Wildlife Refuge, Alaska; Revised Comprehensive Conservation Plan. 2015. Appendix F, pp. 2–13. See also, e.g., Audubon Alaska, Alaska WatchList 2017: Red List of Declining Bird Populations. Internet website: <https://databasin.org/maps/new#datasets=f9e442345fb54ae28cf72f249d2c23a9>.

Ashenhurst, A. R., and S .J. Hannon. 2008. “Effects of seismic lines on the abundance of breeding birds in the Kendall Island Bird Sanctuary, Northwest Territories, Canada.” *Arctic* 61: 190–198.

Davidson, et al. 2020. Ecological insights from three decades of animal movement tracking across a changing Arctic. *Science Magazine*. Internet website: <https://doi.org/10.1126/science>.

Davidson S. C., G. Bohrer, E. Gurarie, S. LaPoint, P. J. Mahoney, N. T. Boelman, J. U. H. Eitel, L. R. Prugh, L. A. Vierling, J. Jennewein, et al. 2020. Ecological insights from three decades of animal movement tracking across a changing Arctic. *Science*. Internet website: <https://doi.org/10.1126/science.abb7080>.

Douglas D. C. et al. 2002. Arctic Refuge Coastal Plain Terrestrial Wildlife Research Summaries, Section 9: Snow Geese.

Exxon Valdez Oil Spill Trustee Council. 2014. Exxon Valdez Oil Spill Restoration Plan Update: Injured Resources and Services. Francis, C. D., and J. L. Blickley. 2012. The Influence of Anthropogenic Noise on Birds and Bird Studies. *Ornithological Monographs* 74.

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