

Comments Submitted by State Attorneys General for the State of Washington, the Commonwealth of Massachusetts, and the States of Connecticut, Delaware, Illinois, Maine, Minnesota, New Jersey, New York, Oregon, and Vermont on the Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, 86 Fed. Reg. 147 (Aug. 4, 2021):

**COMMENTS OF ATTORNEYS GENERAL OF WASHINGTON, THE
COMMONWEALTH OF MASSACHUSETTS, AND THE STATES OF CONNECTICUT,
DELAWARE, ILLINOIS, MAINE, MINNESOTA, NEW JERSEY, NEW YORK,
OREGON, AND VERMONT**

October 4, 2021

By Email and Electronic Filing at:

<https://eplanning.blm.gov/eplanning-ui/project/102555/510>
Attn: Coastal Plain Supplemental EIS
Ms. Serena Sweet
Project Lead
BLM Alaska State Office
222 West 7th Avenue, #13
Anchorage, AK 99513-7599
blm_ak_coastalplain_supplementalEIS@blm.gov

Re: Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the
Coastal Plain Oil and Gas Leasing Program, 86 Fed. Reg. 147 (Aug. 4, 2021):

Supplemental EIS Scoping Comments Submitted by State Attorneys General

Dear Ms. Sweet:

The undersigned Attorneys General (States) submit these comments on the proper scope of the Bureau of Land Management’s (“BLM” or the “Agency”) development of a Supplemental Environmental Impact Statement (Supplemental EIS) for the Arctic National Wildlife Refuge Coastal Plain Oil and Gas Leasing Program (Lease Program).

In the detailed scoping comments that follow, the States urge BLM to thoroughly evaluate and fully consider the Lease Program’s environmental impacts in this supplemental review as mandated by the National Environmental Policy Act (NEPA), 42 U.S.C. 4321-4347, focusing on and correcting legal defects identified in the States’ challenge¹ to the Lease Program’s Final EIS and Record of Decision (ROD). These defects include BLM’s: (a) failure to consider a reasonable range of alternatives; (b) unlawful interpretation of surface development limits in the Tax Cuts and

¹ Complaint for Declaratory and Injunctive Relief, *Washington v. Haaland*, No. 3:20-cv-00224 (D. Ala., filed Sept. 9, 2020), ECF No. 1 (States’ Complaint).

Jobs Act of 2017 Tax Act (Tax Act);² (c) evaluation of greenhouse gas emissions and climate impacts; and (d) review of impacts on migratory birds. The States urge that BLM's Supplemental EIS consider alternatives that only allow oil and gas leasing and development that avoid, minimize and mitigate to the greatest extent possible environmental harms and are compatible with the Coastal Plain's conservation purposes. No alternatives analyzed in the Final EIS or adopted in the ROD sufficiently avoid, minimize, and mitigate environmental harms to assure compatibility with the Alaska National Interest Lands Conservation Act (ANILCA)³ and the National Wildlife Refuge System Administration Act (Refuge Act).⁴ Thus, based on the current record, BLM should adopt as preferred the no-action alternative, cancel the issued leases and any future lease sales. Should BLM instead determine that it must select as preferred an action alternative, it must correct all legal deficiencies in the Final EIS and ROD and, as discussed below, develop a new action alternative supported by thorough and sound legal and technical analysis with minimal environmental impacts that are unequivocally compatible with the Coastal Plain's conservation purposes.

Background

On September 25, 2019, BLM issued a Final Environmental Impact Statement (Final EIS) for the Lease Program,⁵ followed by a ROD issued on August 17, 2020, approving the Lease Program. The States filed an action challenging the Lease Program ROD and Final EIS on September 9, 2020,⁶ as briefly discussed in these comments below.

BLM held a lease sale on January 6, 2021, which resulted in thirteen bids on only eleven tracts⁷ averaging only \$26.00 per acre,⁸ bids that are extremely low compared to the historical bid average of about \$47.00 per acre bids in the National Petroleum Reserve-Alaska (NPR-A) west of

² Tax Cuts and Jobs Act of 2017, Pub. L. No. 115-97 § 20001, 131 Stat. 2236 (2017).

³ Alaska National Interest Lands Conservation Act, Pub. L. No. 96-487 § 303(2)(B), 94 Stat. 2371 (1980); 16 U.S.C. § 3142.

⁴ Refuge Administration Act, as amended by Pub. L. 105-57; 16 U.S.C. § 668dd.

⁵ Final Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, Alaska, 84 Fed. Reg. 50,472 (Sept. 25, 2019).

⁶ See States' Compl., n.1, *supra*.

⁷ See BLM, 2021 Coastal Plain Lease Sale Bid Recap (Jan. 6, 2021), https://www.blm.gov/sites/blm.gov/files/docs/2021-01/BLM-Alaska_2021-Coastal-Plain-Sale-Bid-Recap_20210106.pdf.

⁸ See *id.*

the Coastal Plain.⁹ No major oil or gas company bid. On January 19, 2021, BLM issued nine leases on nine tracts—awarding seven to the state-owned Alaska Industrial Development and Export Authority and awarding one lease each to two small companies—totaling only 437,804 acres out of the 1,089,053 acres initially made available for leasing.¹⁰ On January 20, 2021, President Biden issued Executive Order 13990 (Exec. Order 13990) ordering that the Secretary of the Interior shall “place a temporary moratorium on all activities of the Federal Government relating to the implementation of the Coastal Plain Oil and Gas Leasing Program” and “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.” Exec. Order 13990 was followed by Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, signed January 27, 2021 (Exec. Order 14008).¹¹

Following Exec. Order 13990, Interior Secretary Haaland issued a Secretarial Order on June 1, 2021, which identified multiple legal deficiencies in the 2019 Lease Program Final EIS and ROD, including failure to adequately analyze a reasonable range of alternatives and failure to properly interpret certain provisions in the Tax Act,¹² and directed BLM to issue a Notice of Intent to conduct a comprehensive review of the Lease Program’s environmental effects and to correct legal deficiencies in the Lease Program Final EIS.¹³ On June 1, 2021, BLM issued an order suspending all nine leases issued on January 19, 2021.¹⁴ In this lease suspension order, BLM

⁹ From 1999 through 2018, lease sales in the NPR-A averaged \$47.20 per acre (bids totaling \$283,631,268 on 6,009,551). See *BLM Offers 3.98 Million Acres For Oil and Gas Lease Sale Within the NPR-A*, BLM press release (Nov. 5, 2019), <https://www.blm.gov/press-release/blm-offers-398-million-acres-oil-and-gas-lease-sale-within-npr> (summarizing Historical BLM Alaska NPR-A Oil & Gas Lease Sale Data). See also BLM, *Alaska Oil and Gas Lease Sales*, <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/alaska>.

¹⁰ See BLM, 2021 Coastal Plain Lease Report (Jan. 19, 2021), https://www.blm.gov/sites/blm.gov/files/docs/2021-01/AK_CoastalPlain_OilandGas_LeaseReport_January%202021_508.pdf; See also BLM, 2021 Coastal Plain Sale Bid Recap (Jan. 2021), https://www.blm.gov/sites/blm.gov/files/docs/2021-01/BLM-Alaska_2021-Coastal-Plain-Sale-Bid-Recap_20210106.pdf.

¹¹ Exec. Order 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, 86 Fed. Reg. 7037–7043, § 4 (Jan. 25, 2021). Exec. Order 13990 was followed by Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, 86 Fed. Reg. 7619–7633 (Jan. 27, 2021).

¹² Tax Act § 20001, 131 Stat. 2236.

¹³ Sec. of the Interior, Order No. 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 (June 1, 2021), <https://www.doi.gov/sites/doi.gov/files/elips/documents/so-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.pdf>.

¹⁴ Laura Daniel-Davis, BLM Principal Deputy Assistant Secretary for Land and Minerals Management, Decision, Suspension of Operations and Production (June 1, 2021), <http://www.aidea.org/Portals/0/PressReleases/DOI%20to%20AIDEA%20-%20CP%20Lease%20Suspension%20-%206%201%2021.pdf>.

further identified multiple “potential legal defect[s]” in the Lease Program’s Final EIS, including “the EIS’s treatment of foreign greenhouse gas [] emissions and compliance with section 810 of the Alaska National Interest Lands Conservation Act.”

On August 4, 2021, BLM issued a Notice of Intent to Prepare a Supplemental EIS for the Lease Program¹⁵ to comprehensively analyze the Lease Program’s environmental impacts pursuant to NEPA and to address identified legal deficiencies in the Lease Program Final EIS, including the failure to analyze a reasonable range of alternatives. Among the potential new alternatives to be considered in the Supplemental EIS are those that would “[d]esignate 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.”¹⁶ The Supplemental EIS will also consider impacts from greenhouse gas emissions from any Leasing Program, and correct potential legal deficiencies in the Final EIS’s climate impact analysis.¹⁷

The Notice of Intent sought public comment on the proper scope of the Supplemental EIS “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 the Lease Program. The States are pleased to provide BLM with the following comments on the proper scope of the Supplemental EIS, along with issues to be analyzed and the legal errors in the Final EIS and ROD to be addressed and corrected.

¹⁵ 86 Fed. Reg. 41,989–90 (Aug. 4, 2021).

¹⁶ *Id.*

¹⁷ *Id.*

THE STATES' SUPPLEMENTAL EIS SCOPING COMMENTS

I. INTRODUCTION

The Arctic National Wildlife Refuge (Arctic Refuge) is often referred to as “America’s Serengeti,” and the Coastal Plain is the most biologically productive part of the Arctic Refuge for wildlife and the center of wildlife activity.¹⁸ The Coastal Plain is a 1.56-million-acre national treasure, unparalleled in its biological significance with a vast array of wildlife, and a sacred area important to the subsistence of the Gwich’in people. Species that are particularly reliant on the Coastal Plain’s unique ecosystem include caribou, polar bears,¹⁹ and millions of birds that migrate to and from six continents and to or through all 48 lower states. This Arctic and Coastal Plain ecosystem is particularly vulnerable to environmental stressors, including climate change, which has caused thinning sea ice and thawing of permafrost in the region.

The Lease Program’s impacts on climate change and migratory birds are of vital interest to the States. Although these comments on the proper scope of the Supplemental EIS focus on the impacts to climate change and migratory birds, oil and gas exploration and development in the Coastal Plain would have many other lasting, far-reaching, and devastating environmental and social impacts that the Final EIS failed to adequately analyze. Due to its harsh climate, environmental impacts in the Arctic Refuge tend to be long-lived. These include impacts to caribou, to polar bears, listed in 2008 as threatened under the federal Endangered Species Act (ESA), in part due to habitat loss from climate change, and impacts to communities that rely on the Coastal Plain for subsistence.

The Refuge Act and Section 1002 of ANILCA²⁰ govern administration of the Arctic Refuge, including the Coastal Plain. Under ANILCA, the Secretary must administer the Arctic

¹⁸ Laura B. Comay et al., Cong. Research Serv., RL33872, Arctic National Wildlife Refuge (ANWR): An Overview at 4, 18 (Jan. 9, 2018) (quoting U.S. Dept. of the Interior, Fish and Wildlife Serv., Geological Survey, and Bureau of Land Mgmt., Arctic National Wildlife Refuge, Alaska, Coastal Plain Resource Assessment, Report and Recommendation to the Congress of the United States and Final Legislative Environmental Impact Statement, 1987 [commonly referred to as the 1002 Report]).

¹⁹ These comments focus on impacts of vital interest to the States: the proper evaluation and consideration of greenhouse gas emissions and climate impacts and impacts to migratory birds that migrate to or through each of our States. While we recognize the Lease Program’s impacts on caribou, polar bears, and other wildlife and natural resources, the States leave discussion of those and deficiencies in the Final EIS’s evaluation to other parties with more direct interests in these impacts.

²⁰ 16 U.S.C. § 3142 (ANILCA).

Refuge “in accordance with the laws governing the administration of units of the National Wildlife Refuge system, and this act.”²¹ ANILCA identifies four conservation purposes for the Arctic Refuge: 1) conservation of wildlife and their habitat (including migratory birds); 2) fulfillment of international treaty obligations with respect to wildlife and their habitats; 3) protection of water quality and quantity; and 4) opportunity for continued subsistence uses by local residents.²² The Tax Act added “to provide for an oil and gas program on the Coastal Plain” to the existing conservation purposes for the Arctic Refuge.²³ The new purpose, however, does not and legally cannot trump the Coastal Plain’s conservation purposes. The Refuge Act²⁴ also requires that the Secretary manage each refuge “to fulfill the mission” of the National Wildlife Refuge System, “as well as the specific purposes for which that refuge was established.”²⁵ The Refuge Act further requires the Secretary to provide for the conservation of fish, wildlife, and their habitats and ensure that the purposes of each refuge are carried out.²⁶

The Coastal Plain Lease Program would for the first time open the unspoiled Coastal Plain to oil and gas leasing, exploration, and development based on a deficient and unlawful environmental review, resulting in severe, long-lasting environmental harm to the Coastal Plain’s unique and sensitive Arctic ecosystem and incrementally contributing to global climate change even as the climate crisis deepens. In December 2018, BLM issued a Draft EIS for the Lease Program.²⁷ The States commented on the Draft EIS, noting multiple legal defects.²⁸ Along with other environmental review deficiencies, the States argued that the Draft EIS’s sparse purpose and need statement was insufficient to meet NEPA’s mandates because it arbitrarily failed to address or even mention the revenue generation purpose of Congress’s Lease Program directive.²⁹ The Congressional Budget Office (CBO) report accompanying the legislative proposal enacted as the

²¹ *Id.* at § 304(a).

²² 16 U.S.C. § 3142 (ANILCA).

²³ Tax Act § 20001(b)(2)(B)(v).

²⁴ 16 U.S.C. § 668dd.

²⁵ 16 U.S.C. § 668dd(a)(3)(A).

²⁶ *See id.* at 668dd(a)(4).

²⁷ Draft Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, 83 Fed. Reg. 67337 (Dec. 28, 2018).

²⁸ Comments Submitted by State Attorneys General of the States of Washington, Delaware, Oregon, Maine, Maryland, Michigan, Minnesota, New Jersey, New York, North Carolina, Rhode Island, Vermont, the Commonwealths of Massachusetts, Pennsylvania, and Virginia, and the District of Columbia on the Draft Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, 83 Fed. Reg. 67337 (Dec. 28, 2018) (State Draft EIS Comments).

²⁹ *See* State Draft EIS Comments, 19–22.

Tax Act estimated that the anticipated gross proceeds from the proposed Lease Program would generate \$2.2 billion in revenue over ten years, with half of that amount directed to the State of Alaska and the other half to the federal government.³⁰ By failing to discuss Congress’s revenue-generation purpose in establishing the Lease Program to offset the tax revenue loss resulting from passage of the Tax Act, the Draft EIS failed to provide “a meaningful opportunity to *weigh* the benefits of the project versus the detrimental effects on the environment.”³¹ Indeed, the paltry bids in the January 6, 2021, lease sale—averaging only \$26 per acre compared to the historic average of \$47.20 per acre in the NPR-A—demonstrate that in all likelihood the Lease Program will not yield *anywhere near* the revenue generation desired by Congress.³² Much of the Lease Program’s environmental damage to the Coastal Plain will be severe and largely irreversible. Because the Draft EIS failed to discuss and consider the Lease Program’s potential revenue-generation benefits, decision makers and the public were not able to fully weigh the Program’s benefits—including its realistic revenue generation—against its severe, long lasting, and often irreparable environmental harm.

Although BLM revised some of the Draft EIS’s analysis, the Final EIS and the ROD failed to address and correct most of the deficient review and legal errors identified in the State Draft EIS Comments. The States brought an action challenging the Lease Program ROD and Final EIS.³³ Specifically, the States’ challenge alleged that BLM’s ROD and Final EIS unlawfully:

- failed to consider a reasonable range of program alternatives including an alternative that serves the conservation purposes of the Arctic Refuge, in violation of NEPA and the APA;
- failed to take a hard look at impacts on greenhouse gas emissions and climate change, in violation of NEPA and the APA;
- failed to take a hard look at impacts on migratory birds, in violation of NEPA and the APA;
- failed to determine that the authorized leasing program is compatible with or fulfills the purposes of the Arctic Refuge and unlawfully prioritized oil and gas development over the Refuge’s conservation purposes, in violation of the Refuge Act, ANILCA, and the APA; and

³⁰ See Congressional Budget Office (CBO), *A Legislative Proposal Related to the Arctic National Wildlife Refuge* (Nov. 8, 2017), at 2–3, https://www.energy.senate.gov/public/index.cfm/files/serve?File_id=3454269F-6DC5-4E6C-9F23-99D1E3E64698.

³¹ *Marsh v. Or. Nat’l Res. Council*, 490 U.S. 360, 372 (1989) (quoting *TVA v. Hill*, 437 U.S. 153, 188 n. 34 (1978)).

³² See discussion in the cover letter to these Supplemental EIS Scoping Comments at n.710, *supra*.

³³ See States’ Compl., n.1, *supra*.

- adopted an unlawful interpretation of the Tax Act that eliminates Congress’s restrictions and limits on surface development in the Coastal Plain in violation of that Act and the APA.

As discussed above in the cover letter to these Supplemental EIS Scoping Comments, following review of the Lease Program ROD required by and pursuant to the policy goals established in Exec. Order 13990 and Exec. Order 14008, Interior Secretary Haaland identified multiple legal deficiencies in the Lease Program Final EIS and ROD, including failure to adequately analyze a reasonable range of alternatives and failure to properly interpret provisions in the Tax Act. Thereafter, BLM suspended all nine leases³⁴ it issued on January 19, 2021, identifying further potential legal defects in the Final EIS and ROD, including the treatment of foreign greenhouse gas emissions and compliance with ANILCA Section 810. Legal errors in BLM’s Final EIS and ROD that opens the entire Coastal Plain to oil and gas leasing and development markedly underestimate the irreparable damage to the unique and fragile Arctic Coastal Plain ecosystem—increasingly threatened by climate change—at a time when our nation and the world drastically needs to reduce greenhouse emissions to mitigate the most extreme harms of the ever-worsening climate crisis.

EXECUTIVE SUMMARY OF SCOPING COMMENTS

- As directed by Exec. Order 13990, Exec. Order 14008, and Secretary Haaland’s June 1, 2021, Secretarial Order, BLM’s supplemental environmental review must correct deficiencies in the Final EIS and ROD, and evaluate the Lease Program’s environmental impacts following NEPA’s directives and mandates. NEPA requires that agencies take a hard look and assess environmental impacts of proposed projects and actions to the fullest extent possible, provide for meaningful public participation, and inform decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts.
- The Supplemental EIS must analyze a full range of alternatives. Specifically, the Supplemental EIS must evaluate and consider:
 - A no-action alternative. Beyond merely establishing a baseline, BLM should fully evaluate and adopt as preferred the no-action alternative—and recommend that the issued leases be canceled along with any plans for further lease sales—because all action alternatives evaluated likely cannot avoid or adequately minimize harm to sensitive Coastal Plain resources and

³⁴ See Laura Daniel-Davis, Decision, n.14, *supra*.

assure that the Lease Program is compatible with the Coastal Plain's conservation purposes as discussed further below.

- A least impactful alternative that prohibits leasing in sensitive areas and avoids, minimizes, and mitigates impacts to the greatest extent possible in any areas open to leasing.
- The alternatives analyzed in the Supplemental EIS must properly interpret the Tax Act's 2,000-acre surface area disturbance limit and consider an alternative that allows less than 2,000 acres of surface impacts throughout the Coastal Plain.
- The Supplemental EIS must consider alternatives that only allow oil and gas leasing and development compatible with the Coastal Plain's conservation purposes. None of the action alternatives evaluated in the Final EIS sufficiently avoid, minimize, and mitigate environmental harms to assure compatibility with ANILCA and the Refuge Act. Based on the current record, BLM should adopt as preferred the no-action alternative, and cancel the issued leases and any future lease sales. Should BLM instead reject the no-action alternative, it must develop a new, minimally impactful action alternative, supported by robust and sound legal and technical analysis, and only select it as the preferred alternative if fully compatible with the Coastal Plain's conservation purposes.
- The Supplemental EIS must fully analyze the Lease Program's direct and indirect greenhouse gas emissions and resulting impacts on climate change. Specifically, the Supplemental EIS should quantify the Lease Program's indirect effects on U.S. and global greenhouse gas emissions.
- The Supplemental EIS should consider State, Federal, and international climate change mandates and clean energy policies when analyzing the Lease Program's impacts on greenhouse gas emissions.
- The Supplemental EIS should meaningfully analyze the cumulative impacts and long-term effects of the Lease Program's greenhouse gas emissions when combined with other greenhouse gas emissions. This analysis must fully address the Lease Program's cumulative environmental impacts in the context of worldwide greenhouse gas emissions and how those impacts would change under the foreseeable future conditions for the Program Area.
- The Supplemental EIS must meaningfully analyze the costs, including the social costs, of carbon emissions. Consistent with the directive of Exec. Order 13990, the Supplemental EIS should apply the social costs of greenhouse gases protocol to capture the full costs of greenhouse gas emissions as accurately as possible.

- The Supplemental EIS should accurately estimate the Lease Program's total greenhouse gas emissions from methane so that BLM can make an informed decision on its climate change impacts. Because of methane's significant near-term climate change potential, the Supplemental EIS must rely on updated data to accurately estimate the Lease Program's total greenhouse gas emissions and the potency of those emissions.
- The Arctic Refuge supports millions of migratory birds that migrate through six continents and every state, including ESA-listed species. The States have ecological and economic interests in birds migrating to and from the Arctic Refuge. Any Lease Program in the Refuge is likely to adversely affect migratory birds and their habitat, but adequate information regarding bird population and habitat use is lacking. NEPA requires that BLM obtain better information about migratory birds in the Refuge and fully consider impacts of the Lease Program on birds.
- The Lease Program poses threats to migratory birds from oil spills, habitat loss or alteration, changes in hydrology, disturbance due to human presence, and aircraft noise and pollution. The Supplemental EIS must fully evaluate these impacts and consider alternatives that would eliminate or minimize impacts.
- Migratory birds on the North Slope are already being impacted by oil and gas development, and the Refuge may be playing an important role in compensating for these impacts and maintaining populations in other areas. The Supplemental EIS must fully consider the cumulative impact of the Lease Program in the context of existing oil and gas developments.
- The Arctic climate is changing much more rapidly than the Earth's climate overall. The Lease Program contemplates oil and gas operations in the Refuge for as long as 100 years, by which time conditions will likely be very different from those experienced today. The Supplemental EIS must evaluate the impacts of the Lease Program on migratory birds in the context of anticipated future conditions.
- The United States has obligations to protect migratory birds under four international treaties, as implemented by the Migratory Bird Treaty Act. The Supplemental EIS must explain how the Lease Program is consistent with these obligations and consider less impactful alternatives that would fulfill the requirement to protect migratory birds.
- The Final EIS failed to adequately present and consider mitigation for the Lease Program's impact on migratory birds. The Supplemental EIS must discuss

mitigation for likely oil spills, habitat alteration, changes in hydrology, disturbance by human activities and impacts of aircraft noise or pollution and give meaningful consideration to a no-action alternative and a least impactful alternative with minimal impacts on migratory birds. The Supplemental EIS should select as preferred the no action alternative if a minimally impactful action alternative is not compatible with the Coastal Plain's conservation purposes, including the protection and conservation of migratory birds.

II. DETAILED COMMENTS ON THE SCOPE OF THE SUPPLEMENTAL EIS

A. BLM's Supplemental EIS Must Follow NEPA's Mandates and Correct Deficiencies in the Final EIS's Review as Directed by Exec. Orders 13990 and 14008.

As a preliminary matter, BLM's development of a Supplemental EIS must be consistent with NEPA's statutory mandates and comprehensively analyze the Lease Program's direct, indirect, and cumulative impacts. Under NEPA, agencies must assess environmental impacts of proposed projects and actions "to the fullest extent possible."³⁵ At the time of NEPA's passage, Congress expressly provided that the purpose of the statute was to "promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation"³⁶

NEPA directs agencies to consider "any adverse environmental effects which cannot be avoided" should the proposed project be implemented, and "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term

³⁵ 42 U.S.C. § 4332; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) ("Simply by focusing the agency's attention on the environmental consequences of a proposed project, NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast.").

³⁶ 42 U.S.C. § 4321.

productivity”³⁷ Further, NEPA directs agencies to “recognize the worldwide and long-range character of environmental problems.”³⁸

Under the prior Administration, the White House Council on Environmental Quality (CEQ) promulgated extensive revisions to the CEQ regulations implementing NEPA,³⁹ which were finalized on July 16, 2020 (2020 NEPA Regulations).⁴⁰ The States, and others, have filed actions challenging the 2020 NEPA Regulations alleging, among other claims, that the regulations unlawfully (a) limit which federal actions require NEPA compliance; (b) narrow the scope of federal agencies’ obligation to consider environmental effects, including indirect and cumulative impacts; (c) and constrain NEPA’s public participation process.⁴¹

Upon taking Office, President Biden issued Exec. Order 13990 which declared the new Administration’s policy to “listen to the science; to improve public health and protect our environment; to ensure access to clean air and water; to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change; and to prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals.”⁴² Exec. Order 13990 directed federal agencies to “immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal regulations and other actions during the last 4 years that conflict with these important national objectives, and to immediately commence work to confront the climate crisis.”⁴³ On January 27, 2021, President Biden issued Executive Order 14008 (Exec. Order 14008), which further declared the Administration’s policy to “quickly build resilience against the impacts of climate change that are already manifest and will continue to intensify.”⁴⁴

³⁷ 42 U.S.C. § 4332(C)(ii).

³⁸ *Id.* § 4332(2)(F).

³⁹ *See* 40 C.F.R. §§ 1506–1508.

⁴⁰ Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act (2020 NEPA Regulations), 85 Fed. Reg. 43,304 (July 16, 2020) (codified at 40 C.F.R. pt. 1500).

⁴¹ *See* Am. Compl., *California v. CEQ*, No. 3:20-cv-06057 (Nov. 23, 2020 N.D. Cal.), ECF No. 75, and a related case, *Alaska Cmty. Action on Toxics v. CEQ*, No. 3:20-cv-5199 (N.D. Cal.), both of which are currently stayed while the CEQ proceeds with rulemaking to revise the 2020 NEPA Rule.

⁴² *See* Exec. Order 13,990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, 86 Fed. Reg. 7037–7043, § 1 (Jan. 20, 2021).

⁴³ *Id.*

⁴⁴ *See* Exec. Order 14008, Tackling the Climate Crisis at Home and Abroad, 86 Fed. Reg. 7619–7633 (Jan. 27, 2021).

Following the directives in Exec. Order 13990 and Exec. Order 14008, CEQ reviewed the 2020 NEPA Regulations and announced that it will undertake two separate rulemakings proposing and finalizing revisions to the NEPA regulations to address legal deficiencies identified in CEQ’s review, to “meet the environmental, climate change, and environmental justice objectives of E.O.s 13990 and 14008; ensure full and fair public involvement in the NEPA process; provide regulatory certainty to stakeholders; and promote better decision making consistent with NEPA’s statutory requirements.”⁴⁵ First, CEQ will conduct a “Phase 1” rulemaking to address a limited, specific set of proposed revisions.⁴⁶ CEQ will then undertake comprehensive “Phase 2” rulemaking to address a broad range of proposed changes that will likely substantially revise the 2020 NEPA Regulations.⁴⁷ In addition, CEQ will propose new NEPA Climate Guidance.⁴⁸ In any event, BLM must follow NEPA’s statutory directive to evaluate, robustly and fully, the Lease Program’s direct, indirect, and cumulative impacts, including greenhouse gas emissions and climate impacts and impacts to migratory birds.

The Supplemental EIS should thus fully assess a reasonable range of alternatives and robustly analyze the Lease Program’s environmental impacts. This analysis must include, but it is not limited to: direct, indirect, and cumulative climate impacts, discussed *infra* in Section II C, and impacts on migratory birds, discussed *infra* in Section II D. BLM’s supplemental environmental review also must gather appropriate baseline information and not rely on stale data or conclusory assertions to support its analysis. BLM must also analyze each alternative’s impacts to subsistence resources and public health, and evaluate and address impacts on environmental justice communities. Indeed, BLM should, among other things, ensure that any preferred action alternative in the Supplemental EIS complies with the directives in Exec. Order 139990 and Exec. Order 14008 directing federal agencies to identify and address the disproportionately high and adverse human health and environmental effects of their actions on minority and low-income populations.⁴⁹ In sum, the Supplemental EIS must fulfill NEPA’s statutory mandates by rigorously

⁴⁵ See Spring 2021 Uniform Regulatory Agenda, National Environmental Policy Act Implementing Regulations Revisions, <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202104&RIN=0331-AA07>.

⁴⁶ See *id.*, <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202104&RIN=0331-AA05> (“Phase 1” rulemaking addressing a limited number of specific portions of the 2020 NEPA Regulations for revision).

⁴⁷ See *id.*, <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202104&RIN=0331-AA07> (“Phase 2” rulemaking addressing a broad range of revisions to the 2020 NEPA Regulations).

⁴⁸ See Spring 2021 Uniform Regulatory Agenda, National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change and CEQ Climate Guidance, <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202104&RIN=0331-AA06>.

⁴⁹ See Exec. Order 13990, 86 Fed. Reg. at 7037, § 1 (Jan., 20, 2021); Exec. Order 14008, 86 Fed. Reg. at 7629 – 7632, §§ 219–222.

examining all of the Lease Program’s direct, indirect, and cumulative environmental impacts, including climate impacts, to address the kind of piecemeal environmental destruction NEPA was specifically designed to avoid.⁵⁰

B. The Supplemental EIS Must Analyze a Full Range of Alternatives.

NEPA requires that an EIS discuss, among other things: the environmental impact of the proposed federal action, any adverse and unavoidable environmental effects, any alternatives to the proposed action, and any irreversible and irretrievable commitment of resources involved in the proposed action.⁵¹ An agency’s EIS must evaluate and discuss in detail a range of reasonable alternatives so that each alternative’s comparative merits and environmental consequences can be assessed.⁵² The EIS must “provide full and fair discussion of significant environmental impacts and [must] inform decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment.”⁵³ Agencies must rigorously explore and objectively evaluate all reasonable program alternatives, including no-action, and must discuss the reasons for eliminating any alternatives which were rejected for detailed study.⁵⁴ The EIS must also address “appropriate mitigation measures not already included in the proposed action or alternatives.”⁵⁵

1. The Supplemental EIS must evaluate and consider a no-action alternative.

NEPA requires consideration of a no-action alternative “in every EIS.”⁵⁶ Despite the Tax Act’s provisions directing BLM to create a Coastal Plain Lease Program, that directive does not

⁵⁰ See, e.g., 42 U.S.C. § 4332(2)(F) (directing agencies to consider “the worldwide and long-range character of environmental problems”); S. Rep. No. 91-296, at 5 (1969) (expressing concern about governmental decisions being “made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades”); *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976) (agencies are required to consider “cumulative or synergistic environmental impact[s]” of separate proposals).

⁵¹ 42 U.S.C. § 4332.

⁵² See 40 C.F.R. § 1502.14 (a), (b), (f).

⁵³ *Id.* at § 1502.1.

⁵⁴ 40 C.F.R. § 1502.14(a), (d); see also *Border Power Plant Working Grp. v. Dep’t of Energy*, 260 F. Supp. 2d 997, 1030 (S.D. Cal. 2003) (quoting *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1520 (9th Cir.1992) (an “agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action”).

⁵⁵ *Id.* at 1502.14(e).

⁵⁶ *Sovereign Inūpiat for a Living Arctic v. BLM*, 2021 WL 3667986 at *13 (D. Alaska, 2021); 40 C.F.R. § 1502.14(c).

relieve BLM of its obligation to meaningfully consider a no-action alternative of not establishing the Lease Program—canceling the issued leases and not holding future lease sales, as the court recently noted in *Sovereign Iñupiat for a Living Arctic v. BLM*⁵⁷ (“even assuming, without deciding, that BLM could not have selected the no-action alternative” because of existing leasehold rights, the agency “offer[ed] no valid reason for the Willow EIS to be excused from NEPA’s clear legal requirement that the agency prepare an ‘informed and meaningful’ no-action alternative.”) (internal citations omitted); see also CEQ, *Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act* (a no action alternative must be considered “even if the agency is under a court order or legislative command to act.”)⁵⁸

The no-action alternative “allows policymakers and the public to compare the environmental consequences of the status quo to the consequences of the proposed action,”⁵⁹ and to evaluate the “magnitude of environmental effects of the action alternatives.”⁶⁰ Thus, a full and robust evaluation of the no-action alternative is necessary to understand the extent and irreversible nature of the Lease Program’s environmental consequences. Without a thorough consideration of a no-action alternative “there is simply no way to determine what effect the proposed [action] will have on the environment, and, consequently, no way to comply with NEPA.”⁶¹ As CEQ has observed, “NEPA’s purpose is not to generate paperwork or litigation, but to provide for informed decision making and foster excellent action.”⁶² The States ask BLM to adhere to this fundamental NEPA purpose as it considers alternatives and reaches its ultimate decision.

To meet NEPA’s requirements, the Supplemental EIS should include a more thorough consideration of the no-action alternative than does BLM’s Final EIS. In its supplemental review, BLM should carefully weigh the no-action alternative against the environmental impacts of the Lease Program action alternatives—impacts that, as discussed in detail below, are substantial, largely irreversible, and would forever change the Coastal Plain ecosystem.

⁵⁷ *Sovereign Iñupiat*, 2021 WL 3667986 at *13.

⁵⁸ CEQ, *Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act*, question 3, 46 Fed. Reg. 18026 (Mar. 23, 1981, as amended 1986), <https://www.energy.gov/sites/default/files/2018/06/f53/G-CEQ-40Questions.pdf>. (“[I]t is difficult to think of a situation where it would not be appropriate to address a ‘no action’ alternative. Accordingly, the regulations require the analysis of the no action alternative even if the agency is under a court order or legislative command to act.”).

⁵⁹ *Sovereign Iñupiat*, 2021 WL 3667986 at *13.

⁶⁰ *Id.*

⁶¹ *Half Moon Bay Fisherman’s Mktg. Ass’n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988).

⁶² 40 C.F.R. § 1500.1.

Beyond merely establishing an environmental baseline, the States urge BLM in its Supplemental EIS to not only fully evaluate the no action alternative, but to consider and adopt it as the preferred alternative—and recommend that the issued leases be canceled along with any plans for further lease sales—because the various action alternatives likely cannot avoid or adequately minimize harm to sensitive Coastal Plain resources and assure that the Lease Program reconciles the conservation purposes of the Arctic Refuge under ANILCA and the Refuge Act, as discussed *infra* in Section II B 4.⁶³ Should BLM determine that it must select as preferred an action alternative, it must develop a new alternative supported by robust and sound legal and technical analysis that causes minimal harm to the Coastal Plain’s environment and arctic ecosystem. BLM should *only* select as preferred this least environmentally impactful alternative if it is fully compatible with the Coastal Plain's conservation purposes.

2. The Supplemental EIS should evaluate and consider a least impactful alternative that prohibits leasing in sensitive areas and avoids, minimizes, and mitigates impacts in any areas open to leasing.

The Supplemental EIS must fully analyze a robust range of alternatives, including an alternative that avoids, minimizes, and mitigates to the greatest extent possible impacts to sensitive Coastal Plain resources. Indeed, NEPA requires BLM to develop alternatives that avoid or minimize harm to the environment.⁶⁴

Any oil and gas development in the Coastal Plain would have devastating, long-lasting, and in most instances, irreparable environmental impacts. None of the action alternatives evaluated in the Final EIS avoid, minimize, or adequately mitigated these grave impacts, strongly counseling that BLM *adopt* the no-action alternative as the preferred alternative, as discussed *supra* in Section II B 1, and *infra* in Section II B 4. If BLM instead determines that it must select an action alternative as the preferred alternative, it should limit the total, combined acreage offered for sale and limit cumulative surface area development as discussed below.⁶⁵ Consideration and adoption of any action alternatives in a manner that minimizes 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, is particularly

⁶³ See Discussion *infra* in n. 72. In responding to public comments on the Draft EIS, BLM admitted that most habitat alterations “will be permanent.” Final EIS at S-544.

⁶⁴ 40 C.F.R. § 1502.1; *see also* *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 965 (9th Cir. 2005).

⁶⁵ See discussion *infra* in Section II B 3 concerning the proper interpretation of the 2,000-acre limit surface development imposed by the Tax Act.

important here. The Final EIS, while flawed, demonstrates that extensive irreversible environmental harm would result from oil and gas production in the Coastal Plain.⁶⁶

In the Final EIS, BLM evaluated Alternatives B and C (both authorizing leases in the entire Lease Program area, covering 1,563,500 acres), and Alternative D, including sub-alternatives D-1 authorizing lease sales on 1,037,200 acres, and Alternative D-2, authorizing lease sales on 800,000 acres. The environmental impacts of each of these alternatives would cause significant and long-lasting harm to the unique ecology, wildlife, wilderness, and recreational values of the Arctic Refuge. Each alternative threatens to worsen greenhouse gas emissions and associated climate impacts, alter forever the hydrology and habitat of the Coastal Plain, as discussed *infra* in Section II C, and harm migratory bird populations of great importance to States and to the Arctic Refuge itself, as discussed *infra* in Section II D.

The Final EIS recommended as the preferred alternative, and the ROD authorized, Alternative B, which allowed oil and gas leasing on the entire program area encompassing 1,563,500 acres of the Coastal Plain. As the ROD notes, this expansive area will also be available for “future exploration, development, and transportation” resulting from the Lease Program.⁶⁷

Alternative B has the most severe environmental impacts on the sensitive Coastal Plain resources of all alternatives analyzed in the Final EIS. Alternative B maximizes the acreage available for leasing, seismic exploration, development, and transportation and includes the fewest environmental protections. The FEIS included lease stipulations and required operating procedures (ROPs), adopted by the ROD,⁶⁸ that do not adequately protect Coastal Plain resources. Moreover, BLM may waive, exempt, or modify these lease stipulations and required operating procedures.⁶⁹

In the Supplemental EIS, BLM must correct its unlawful failure in the Final EIS to analyze and consider a least impactful alternative. The Supplemental EIS should evaluate robustly and fully consider an alternative that avoids, minimizes, and mitigates to the greatest extent possible harm to sensitive Coastal Plain resources by:

⁶⁶ See Final EIS at 3-77 to 3-136 and discussion *infra* in Section II D (noting direct and indirect harm to migratory birds). See also Final EIS at 3-137 to 3-162 (discussing direct, indirect, and cumulative impacts on caribou); 3-164 to 3-171 (discussing polar bear impacts).

⁶⁷ See ROD at 2 to 3.

⁶⁸ See ROD, App. A, *Lease Stipulations and Required Operating Procedures*, https://eplanning.blm.gov/public_projects/102555/200241580/20024135/250030339/Coastal%20Plain%20Record%20of%20Decision.pdf.

⁶⁹ See *id.*, App. A at A-3.

- 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, discussed *infra* in Section II C, 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 (“TLs”), 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 (*see* discussion *supra* in Section I, Introduction at 6-7).

The Supplemental EIS should *only* recommend the least impactful alternative as the preferred alternative if BLM determines that it must reject the no action alternative and if it determines that the least impactful alternative can avoid or adequately minimize harm to sensitive Coastal Plain resources and assure that the Lease Program reconciles the conservation purposes of the Arctic Refuge under ANILCA and the Refuge Act, as discussed *supra* in Section II A. and *infra* in Section II B 4.

3. The Supplemental EIS must properly interpret the Tax Act’s 2,000-acre surface area development limit and consider an alternative that allows less than 2,000 acres of surface impacts throughout the Coastal Plain.

The Tax Act contains a surface development provision that directs BLM to authorize up to 2,000 acres of federal land on the Coastal Plain “to be covered by production and support facilities (including airstrips and any areas covered by gravel berms or piers for support of pipelines) during

the term of the leases under the oil and gas program under this section.”⁷⁰ This provision limits surface development impacts to no more than 2,000 acres, total. The Tax Act also contains provisions for rights-of-way or easements across the Coastal Plain for the “exploration, development, production, or transportation necessary to carry out this section.”⁷¹

In the Final EIS, BLM adopted an unlawful interpretation of the Tax Act’s 2,000-acre development limit that applied a “rolling cap,” allowing additional infrastructure construction and impacts beyond the initial 2,000 acres when the formerly developed infrastructure and support facilities had served their purpose and the area of this development had been “reclaimed,”⁷² “free[ing] up” the previously impacted acreage for additional development within the 2,000-acre limit.⁷³ This unlawful interpretation of the surface acre disturbance limit would allow 174 or more miles of gravel road construction *plus* extensive and harmful ice road construction, 212 or more miles of pipeline, nearly 300 acres of gravel pits and stockpiles, and seismic activity across much of the Coastal Plain, far exceeding the Tax Act’s 2,000-acre limit.⁷⁴

In the ROD, however, BLM revised its Final EIS interpretation of the 2,000-acre limitation, adopting an interpretation that allows for *even greater* disturbance of the Coastal Plain. Although the ROD continues to interpret the surface acre limit as *requiring* development of not less than 2,000 acres, BLM asserted that the surface development provision applies only to a narrow subset of facilities that are both “production and support” facilities.⁷⁵ Under this new interpretation, many facilities (*e.g.*, airstrips, roads, and gravel mines) that BLM previously considered in the Final EIS to count toward the 2,000-acre surface disturbance limit may not count toward that limit under the Leasing Program authorized by the ROD.⁷⁶

The Supplemental EIS must correct the legal defects in the ROD and interpret the Tax Act’s 2,000-acre surface area limit to strictly prohibit total, cumulative surface disturbances exceeding 2,000 acres throughout the Coastal Plain. The Supplemental EIS should also consider, as part of the least impactful alternative discussed *supra* in Section II B, 2 an alternative that

⁷⁰ See Tax Act § 20001(c)(3).

⁷¹ *Id.*, at § 20001(c)(2).

⁷² Whether previously developed areas can actually be “reclaimed” is in doubt. See Final EIS at S-5. In responding to public comments on the Draft EIS, BLM admitted that most habitat alterations “will be permanent.” Final EIS at S-544.

⁷³ See Final EIS at 1-6, 1-7, S-5 to S-8.

⁷⁴ *Id.*

⁷⁵ See ROD at 11–13.

⁷⁶ *Id.* at 13.

restricts surface acre disturbance, limits ice road construction, limits seismic activity, and allows less than 2,000 acres of surface impacts throughout the Coastal Plain.

4. The Supplemental EIS should consider alternatives that only allow oil and gas leasing and development compatible with the Coastal Plain’s conservation purposes.

The Refuge Act and ANILCA govern administration of the Arctic Refuge, including the Coastal Plain. Under ANILCA, the Secretary must administer the Arctic Refuge “in accordance with the laws governing the administration of units of the National Wildlife Refuge system, and this act.”⁷⁷ ANILCA identifies four conservation purposes for the Arctic Refuge:

1. conservation of wildlife and their habitat (including migratory birds);
2. fulfillment of international treaty obligations with respect to wildlife and their habitats;
3. protection of water quality and quantity; and
4. opportunity for continued subsistence uses by local residents.⁷⁸

These ANILCA purposes built on the original conservation purposes the Interior Secretary identified for creating the Arctic Range to preserve unique wildlife, wilderness, and recreational values.⁷⁹ The Tax Act added “to provide for an oil and gas program on the Coastal Plain” to the existing conservation purposes for the Arctic Refuge.⁸⁰ This new purpose, however, does not and legally cannot trump the Coastal Plain’s conservation purposes.

Indeed, the Refuge Act provides that “the Secretary shall not initiate or permit a new use of a refuge or expand, renew, or extend an existing use of a refuge, unless the Secretary has determined that the use is a compatible use.”⁸¹ ANILCA provides that oil and gas leasing is a “use” that requires compatibility with the Refuge purposes.⁸² A use is a “compatible” use if it will not “materially interfere with or detract from the fulfillment of the mission of the [National Wildlife Refuge] System or the purposes of the refuge.”⁸³ The Lease Program is a new use of the Arctic

⁷⁷ See ANILCA § 304(a), Pub L. No. 96-487.

⁷⁸ See *id.* at § 303(2)(B).

⁷⁹ See Public Land Order 2214 (Dec. 8, 1960) (PLO 2214),

⁸⁰ See Tax Act, § 20001(b)(2)(B)(v).

⁸¹ 16 U.S.C. § 668dd(d)(3)(A)(i).

⁸² ANILCA § 304(b); see also 50 C.F.R. § 25.12.

⁸³ 16 U.S.C. § 668ee(1).

Refuge that requires a compatibility determination. The ROD unlawfully failed to make a compatibility determination.

The Refuge Act also requires that the Secretary manage each refuge “to fulfill the mission” of the National Wildlife Refuge System, “as well as the specific purposes for which that refuge was established.”⁸⁴ The Refuge Act further requires the Secretary to, among other things, provide for the conservation of fish, wildlife, and their habitats, ensure the biological integrity and health of the National Refuge System, and contribute to the conservation of ecosystems in the United States.⁸⁵

Although the ROD recognizes that the Tax Act “included a Coastal Plain oil and gas program as a refuge purpose on *equal footing* with the other refuge purposes,”⁸⁶ it elevates the oil and gas program over the other refuge purposes stated in ANILCA. The ROD does not contain a determination that the Lease Program is a compatible use of the Arctic Refuge or that the Lease Program fulfills all the refuge purposes. The ROD merely states that it took the ANILCA refuge purposes into account and that there will be some impact on those purposes.⁸⁷

The ROD authorizes a Lease Program that materially interferes with or detracts from the fulfillment of the mission of the National Wildlife Refuge System and purposes of the Arctic Refuge because it unlawfully prioritizes oil and gas development above the conservation purposes of the Arctic Refuge. Instead of balancing development with surface resource protection, each action alternative analyzed in the Final EIS unlawfully prioritizes oil and gas production above the conservation purposes of the Arctic Refuge.

The Final EIS failed to analyze a reasonable alternative that adequately protects the Coastal Plain from significant environmental harm and is consistent with the conservation purposes of the Arctic Refuge. Instead, the ROD authorized the Final EIS’s preferred Alternative B that maximizes leasing area and provides the least protection to sensitive Coastal Plain resources.⁸⁸

In the Final EIS’s purpose and need statement, BLM stated that “[a]ll action alternatives were designed to meet Section 2001 of [the Tax Act] and to account for all purposes of the Arctic

⁸⁴ *Id.*, at § 668dd(a)(3)(A).

⁸⁵ *See id.* at 668dd(a)(4).

⁸⁶ *See* ROD at 1 (emphasis added).

⁸⁷ *See id.*, at 7–8.

⁸⁸ *See id.* at 2, 4. *See also* Final EIS at 2-2 to 2-3; table 2-3 (Stipulations and Required Operating Procedures).

Refuge.”⁸⁹ Defendants further stated that “[t]he alternatives analyzed various terms and conditions (i.e., lease stipulations and [required operating procedures]) to be applied to leases and associated oil and gas activities, to properly balance oil and gas development with protection of surface resources.” Yet, instead of balancing development with surface resource protection, each action alternative unlawfully prioritizes oil and gas production above the conservation purposes of the Arctic Refuge.

None of the action alternatives considered in the Final EIS would restrict surface acre disturbance, limit ice road construction, delay or phase leasing, limit seismic activity, mitigate greenhouse gas emissions, effectively protect migratory bird habitat, effectively minimize or mitigate adverse environmental impacts, or otherwise fulfill the conservation purposes of the Refuge to the extent consistent with the Tax Act. An alternative that includes some or all of these components to better protect the Coastal Plain from significant environmental harm and advance the conservation purposes of the Arctic Refuge, to the extent consistent with the Tax Act, is a reasonable alternative consistent with the purpose and need of the proposed Lease Program that BLM should have considered in the Final EIS.

The Supplemental EIS must correct these legal defects and robustly analyze a least impactful alternative, discussed *supra* in Section II B 2, and *only* recommend this alternative, if it lawfully balances the Coastal Plain’s conservation purposes with the Tax Act’s Lease Program requirement. If the least impactful alternative fails to adequately minimize harm to sensitive Coastal Plain resources and assure that a Lease Program is compatible with the Coastal Plain’s conservation purposes, the Supplemental EIS should select the no-action alternative, discussed *supra* in Section II A, as the preferred alternative and recommend that the Secretary cancel the issued leases.

C. **The Supplemental EIS Must Take a “Hard Look” and Accurately Quantify the Impacts of the Lease Program’s Greenhouse Gas Emissions on Climate Change.**

The world is in a climate crisis resulting from emissions of vast amounts of carbon dioxide through widespread burning of fossil fuels. This crisis has only worsened since the States filed their Complaint.⁹⁰ Combustion of the oil and gas produced from the Lease Program will contribute

⁸⁹ See Final EIS at 1–2.

⁹⁰ See States’ Compl., n.1 *supra*, at 32.

further greenhouse gas emissions that will worsen these climate change impacts nationally and in our States, and set back efforts to address the climate crisis.

The existential threat posed by climate change—and the urgent need for action—has been underscored by the newly released 2021 report of the Intergovernmental Panel on Climate Change (“IPCC”), an international scientific body of the United Nations.⁹¹ The report warns that recent warming of the Earth’s climate system has resulted in widespread and rapid changes to the atmosphere and oceans, which in turn have increased the frequency and intensity of extreme heat events, marine heatwaves, heavy precipitation events, droughts, and more severe hurricanes, typhoons, and cyclones.⁹²

Our States are now experiencing unprecedented environmental, public safety, health, and economic damages resulting from the worsening climate crisis, including devastating impacts of extreme weather events, sea level rise, storm surge and coastal flooding, drought and wildfires, ocean acidification, and inland flooding.⁹³ Importantly, the dire consequences of climate change will continue to disproportionately impact Environmental Justice communities in our States, including Black, Latinx, Native/Indigenous people, and other communities of color, vulnerable populations (the elderly, children, and individuals with pre-existing conditions), and low-income populations, which already bear a disproportionate burden of public health and environmental hazards.

In 2021 alone, severe heatwaves and historic wildfires in Washington, Oregon, and California caused widespread risk to human health, as well as injury and death.⁹⁴ The adverse

⁹¹ See IPCC, Summary for Policymakers, In: *Climate Change 2021: The Physical Science Basis, Intergovernmental Panel on Climate Change*, (Masson-Delmotte V. et al. 2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf.

⁹² *Id.* at 19–27.

⁹³ See U.S. Global Change Research Program, *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*, (Crimmins, A., et al., eds., 2016), <https://health2016.globalchange.gov/>.

⁹⁴ An unprecedented June, 2021 heatwave resulted in 95 heat-related deaths in Washington, see Washington State Dep’t of Health, *Heat Wave 2021* (2021), https://www.doh.wa.gov/Emergencies/BePreparedBeSafe/SevereWeatherandNaturalDisasters/HotWeatherSafety/HeatWave2021?fbclid=IwAR0BIUJ7fnJU_ZQw24C2xu3_5JuvlJi8eMTv6tQz_im-M1VmkdfY7mwwJu0. The World Weather Attribution project, a collaboration between climate scientists in the US, UK, the Netherlands, Switzerland, and India, concluded that the heatwave was “virtually impossible” without human-caused climate change, see World Weather Attribution, *Western North American extreme heat virtually impossible without human-caused climate change* (July, 13, 3021), <https://www.weforum.org/agenda/2021/07/new-study-suggests-that-human-caused-climate-change-is-the-main-cause-of-recent-deadly-heatwave/#:~:text=A%20study%20has%20found%20the,times%20rarer%20without%20global%20warming>. (last visited Aug. 9, 2021).

effects of increasing forest fire activity are disproportionately impacting our most vulnerable communities.⁹⁵ Significantly, warmer temperatures have contributed to increased risk of disease and health impacts in our States. In Washington, diminished snowpack harms communities that rely on snowmelt for hydroelectric power, drinking water, and irrigation during the summer.⁹⁶ Warmer weather has also led to negative health impacts such as increased prevalence of Lyme disease in Massachusetts, Maine, Connecticut, Minnesota, Rhode Island, and Vermont.⁹⁷

Sea level rise from melting ice sheets and glaciers and thermal expansion of seawater is adversely impacting coastal and marine resources and the built environment along over 18,000 miles of shoreline in Washington, Massachusetts, California, Connecticut, Delaware, Maine, Maryland, New Jersey, New York, Oregon and Rhode Island.⁹⁸ Sea level rise not only increases the risk to lives and property in our States from future storms, but also threatens coastal wetlands, which provide important species habitat and protect adjacent communities.⁹⁹ This year the storm surge, coastal, and catastrophic flooding from extreme weather events such as Hurricane Ida significantly impacted the Gulf Coast and the States of New Jersey, Connecticut, Pennsylvania, and New York.¹⁰⁰

Just as in our States, the climate in the Arctic Refuge's Coastal Plain is rapidly changing. Average near-surface air temperatures across the Arctic have increased dramatically over the last 50 years, and since 2000 have risen more than twice as fast as global average temperatures.¹⁰¹ Rapidly increasing temperatures in Alaska's Northern Slope have contributed to thawing permafrost that releases carbon dioxide and methane which in turn exacerbates climate change, creating a dangerous feedback loop.

⁹⁵ Ian P. Davies et al., *The unequal vulnerability of communities of color to wildfire* (2018) <https://doi.org/10.1371/journal.pone.0205825>.

⁹⁶ See H.A. Roop, et al., *Univ. Wash. Climate Impacts Group, Shifting Snowlines and Shorelines* (2020), https://cig.uw.edu/wp-content/uploads/sites/2/2020/02/CIG_SnowlinesShorelinesReport_2020.pdf.

⁹⁷ EPA, *Climate Change Indicators: Lyme Disease* (2021), <https://www.epa.gov/climate-indicators/climate-change-indicators-lyme-disease>.

⁹⁸ See States' Compl., n.2, *supra*, at 32.

⁹⁹ See States' Comp., n.2 *supra*, at 33–34.

¹⁰⁰ Ian Livingston, *Ida's impact from the Gulf Coast to Northeast — by the numbers* (Sep. 3, 2021) <https://www.washingtonpost.com/weather/2021/09/03/hurricane-ida-numbers-surge-wind-pressure-damage/>.

¹⁰¹ Michon Scott, *2020 Arctic Air temperatures continue a long-term warming streak* (Dec. 8, 2020) <https://www.climate.gov/news-features/featured-images/2020-arctic-air-temperatures-continue-long-term-warming-streak>.

In response to the global climate crisis the United States, as well as our States individually, have newly committed to ambitious greenhouse gas reduction targets. The United States recently prepared and submitted its nationally determined contribution (NDC) under Article 4 of the Paris Climate Agreement.¹⁰² The Paris Climate Agreement recognizes the need to hold long-term global average temperatures to “well below 2 °C above pre-industrial levels” and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels.¹⁰³ Achieving this ambitious goal will require “nothing less than a complete transformation of how we produce, transport, and consume energy.”¹⁰⁴ Reaching the goal of net-zero global emissions by 2050 will require that the use of fossil fuels be reduced as a share of total world energy supply from 80 percent in 2020 to just over 20 percent in 2050.¹⁰⁵ The NDC commits the United States to net greenhouse gas reduction emissions of 50-52 percent below 2005 levels by 2030.¹⁰⁶ To meet these targets many of our States have adopted aggressive mandates and policies that will require deep reductions in greenhouse gas emissions.¹⁰⁷

Our States appreciate that BLM has acknowledged deficiencies in the Final EIS and directed the Supplemental EIS to consider the “impacts from greenhouse gas emissions from any Lease Program.”¹⁰⁸ Our States urge BLM to correct these deficiencies by meaningfully analyzing the Lease Program’s direct, indirect and cumulative impacts on carbon emissions and resulting climate change. The worsening of the climate crisis and recent decisions interpreting NEPA’s mandates require that BLM take a “hard look” at the Lease Program’s greenhouse gas emissions

¹⁰² *The United States’ Nationally Determined Contribution* (2021), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/United%20States%20of%20America%20First/United%20States%20NDC%20April%202021%202021%20Final.pdf> (NDC)

¹⁰³ U.N., Paris Agreement, Art. 2, U.N. Doc. FCC/CP/2015/L.9 (Dec. 12, 2015) (Paris Agreement).

¹⁰⁴ International Energy Agency, *Net Zero by 2050: A Roadmap for the Energy Sector*, 13 (2021), https://iea.blob.core.windows.net/assets/beceb956-0dcf-4d73-89fe-1310e3046d68/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf.

¹⁰⁵ *Id.* at. 57.

¹⁰⁶ NDC, <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/United%20States%20of%20America%20First/United%20States%20NDC%20April%202021%202021%20Final.pdf>.

¹⁰⁷ **Washington:** Washington: Climate Commitment Act, 2021 Wash. Sess. Laws, ch. 316,(codified as amended in scattered sections of Wash. Rev. Code tits. 43, 70A).; ¹⁰⁷ **See Delaware:** S.B 33, 151st Gen. Assem., 83 Del. Laws ch. 3 (2021) (codified at 26 *Del. C.* § 354); **Maryland:** Clean Energy Jobs Act, 2021 Md. Laws. ch. 164 (H.B. 1007) (codified as amended at Md. Code Ann., Pub. Util. § 7-702); **Massachusetts:** Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, 2021 Mass. Acts. ch. 8, sec. 8; **Michigan:** Executive Directive No. 2020-10 (Mich. 2020).

¹⁰⁸ *See* Notice of Intent, n.15, *supra*, at 41,989-90.

and climate change impacts.¹⁰⁹ To comply with NEPA, the Supplemental EIS must conduct a complete analysis of these greenhouse gas emissions, and quantify not only their direct effects, but their indirect¹¹⁰ and cumulative effects.¹¹¹

To be adequate, the analysis must accurately quantify the Lease Program's indirect reasonably foreseeable greenhouse gas emissions, including global emissions.¹¹² BLM should meaningfully consider state and federal climate change targets and mandates when evaluating the Lease Program's impacts on greenhouse gas emissions. Finally, BLM should thoroughly analyze the costs, including the social costs, of the Program's greenhouse gas emissions on climate change. Should BLM fail to fully address the deficiencies identified in Exec. Order 13990 and Secretary Haaland's June 1, 2021 Order, or to provide an accurate quantitative analysis of the Lease Program's direct, indirect and cumulative greenhouse gas emissions and impacts on climate change, the Supplemental EIS could be set aside for legal error.¹¹³

As directed by the Tax Act, BLM's purpose statement in the Final EIS adopted by the ROD is to create the Lease Program.¹¹⁴ Thus, the Supplemental EIS must assume that oil and gas will be produced from any issued leases and analyze the Lease Program's reasonably foreseeable direct, indirect and cumulative greenhouse gas emissions and climate impacts. For the reasons discussed in Sections II C 1 and 2, the Final EIS underestimates these emissions and impacts. At the same time, the Final EIS overestimates the continued global demand for oil and gas by failing to account for State, Federal, and international climate change mandates and clean energy policies, as discussed in Section II C 3. If BLM appropriately addresses the Final EIS's flawed assumption about continued growth in global oil and gas demand, the Supplemental EIS should conclude that,

¹⁰⁹ *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723 (9th Cir. 2020) (The rule of reason analysis, for reviewing the adequacy of an EIS under NEPA, requires evaluating whether the agency took a sufficiently hard look at probable consequences); *Sovereign Iñupiat*, 2021 WL 3667986; *see also Robertson*, 490 U.S. at 350; *Nat'l Parks & Conservation Ass'n v. BLM*, 606 F.3d 1058, 1072 (9th Cir. 2010).

¹¹⁰ *See* discussion *infra* in Section II C 1. Considering indirect effects of burning any fossil fuels extracted from the Refuge is especially important here, as production and combustion of fossil fuels is not an incidental effect, but the very purpose of the Lease Program.

¹¹¹ *See* discussion *infra* in Section II C 5.

¹¹² *Ctr. for Biological Diversity*, 982 F.3d at 738.

¹¹³ *Ctr. for Biological Diversity*, 982 F.3d at 738; *Sovereign Iñupiat*, 2021 WL 3667986 at *13.

¹¹⁴ *See* Final EIS at 1-1 to 1-2; *Id.* at App. B. *See also* ROD at 7-8. As discussed *supra* in Sections II A and II B 2 and 4, BLM should fully evaluate and adopt as preferred the no-action alternative—and recommend that the issued leases be canceled along with any plans for further lease sales—because all action alternatives evaluated likely cannot avoid or adequately minimize harm to sensitive Coastal Plain resources and assure that the Lease Program reconciles is compatible with the Coastal Plain's conservation purposes.

despite the Tax Act's directive, the Lease Program is not needed to meet U.S. and global oil demand in the long-term. The ever-worsening climate crisis demands that our nation and the world drastically reduce greenhouse gas emissions and not develop oil and gas from the Lease Program as it will impede our ability to meet our greenhouse reduction commitments.

1. The Supplemental EIS should correct deficiencies in the Final EIS's analysis of the Lease Program's direct and indirect impacts on greenhouse gas emissions and climate change.

The States urge BLM to correct deficiencies in the Final EIS by adequately and accurately analyzing the Lease Program's direct and indirect impacts on U.S. and global greenhouse gas emissions and climate change. To meet NEPA's mandates, BLM must fully analyze both the direct impacts that an action will have on the environment, and the action's reasonably foreseeable indirect impacts.¹¹⁵ The Supplemental EIS must accurately quantify the Lease Program's indirect impact on U.S. and global greenhouse gas emissions as a "reasonably foreseeable" indirect effect of drilling.¹¹⁶

While the Final EIS acknowledges that "post-lease activities" such as "seismic and drilling exploration, development, and transportation of oil and gas in and from the Coastal Plain" will have foreseeable indirect and cumulative impacts on greenhouse gas emissions, the Final EIS significantly underestimates the significance of the Lease Program's greenhouse gas emissions and climate change impact.¹¹⁷ The Final EIS suffers from major deficiencies that must be addressed in the Supplemental EIS. First, in the short term, the Final EIS considers only the Lease Program's impact on the U.S. oil market while ignoring effects on global prices and oil consumption. This error is compounded by reliance on a "perfect replacement" theory to conclude that any oil produced would simply offset other production, so that net oil use would not increase. Second, with respect to longer-term impacts, the Final EIS bases its analysis on the view that global oil production and consumption will continue to increase, so that any oil produced by the Lease Program would account for a less- and less-significant fraction of global emissions. The Supplemental EIS should correct these deficiencies and adequately and accurately analyze the

¹¹⁵ *Ctr. for Biological Diversity*, 982 F.3d 723 (An EIS that does not adequately consider the indirect effects of a proposed action violates NEPA). BLM must consider indirect effects that are "reasonably foreseeable," or those that "a person of ordinary prudence would take [] into account in reaching a decision. *EarthReports, Inc. v. F.E.R.C.*, 828 F.3d 949, 955 (D.C. Cir. 2016) (internal quotation marks omitted); *Idaho Sporting Cong., Inc. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002). *Sierra Club v. F.E.R.C.*, 867 F.3d 1357, 1374 (D.C. Cir. 2017) (concluding that FERC violated NEPA by failing to consider "reasonably foreseeable" "indirect effects" of greenhouse gas emissions in authorizing pipeline projects).

¹¹⁶ *Ctr. for Biological Diversity*, 982 F.3d at 738.

¹¹⁷ Final EIS 3-5, 3-6, 3-7, 3-8, 3-9, *see also* App. B.

Lease Program's direct and indirect impacts on greenhouse gas emissions and climate change. Failure to correct these deficiencies and correctly analyze the Lease Program's impacts on climate change could violate NEPA's "hard look" requirement.

2. The Supplemental EIS should adequately and accurately analyze the Lease Program's indirect impacts on both U.S. and global oil consumption and greenhouse gas emissions.

The Final EIS underestimates the Lease Program's indirect impact on greenhouse gas emissions by failing to fully account for U.S. and foreign oil consumption in its short-term and long-term analysis.¹¹⁸ Although BLM acknowledges that petroleum is a "global commodity," the Final EIS selectively limits its greenhouse gas impacts analysis to changes in U.S. demand, projecting that post-lease oil and gas activities will increase U.S. energy demand by only 3.4 percent to 3.9 percent of the total oil and gas produced by the Program.¹¹⁹ The Final EIS reaches this conclusion by incorrectly relying on a "perfect replacement" theory to estimate that "over 96%" of the "Coastal Plain energy production is projected to replace other US (and likely global) energy production that would not happen if the Coastal Plain development goes forward."¹²⁰

The Final EIS's analysis considers the effect of oil from the Lease Program on pricing and demand in the U.S., but fails to consider that oil from the Program ultimately may not be sold domestically. A recent study concluded that the cost of oil produced from the Program, together with certain constraints on shipping it to market in the Lower 48 States, would likely result in any oil produced being sold on the global market rather than domestically.¹²¹ If oil produced from the Lease Program is distributed to the global market global consumption will likely increase.¹²² The Final EIS should correct these deficiencies and accurately and adequately account for the effect that an increase in domestic supply and demand will have on oil consumption, greenhouse gas emissions, and resulting climate change.¹²³

¹¹⁸ See Final EIS 3-6.

¹¹⁹ Final EIS 3-7. Put another way, the Final EIS concludes that approximately 96 percent of the oil and gas produced by the Program would not result in new energy consumption, but would displace oil and gas now being produced by other domestic sources. *Id.*

¹²⁰ Final EIS at 3-7, 3-8.

¹²¹ Energyzt Advisors, LLC, *Economic Assessment of Proposed Oil and Gas Lease Sales in the Arctic National Wildlife Refuge Coastal Plain*, at 46–48 (Mar. 2019).

¹²² Paul Erickson & Michael Lazarus, *Impact of the Keystone XL Pipeline on Global Oil Markets and Greenhouse Gas Emissions*, Nature Climate Change (Aug. 4, 2014).

¹²³ *Ctr. for Biological Diversity*, 982 F.3d at 738 (holding that NEPA requires agencies to consider a project's impacts on global—not just domestic—energy consumption); see also *Sovereign Inūpiat*, 2021 WL 3667986 at *12

In the short-term, the Supplemental EIS should adequately and accurately account for the Lease Program’s impact on global prices and oil consumption and correct its reliance on a “perfect replacement” theory to conclude that any oil produced would simply offset other production. First, BLM should correct the Final EIS’s reliance on perfect replacement theory, which fails to meet NEPA’s “hard look” requirement. The Final EIS provides no meaningful evidence to support the assumption that the vast majority of oil produced in the Coastal Plain will displace other likely cheaper oil production in the United States or globally.¹²⁴ Numerous studies and “basic supply and demand principles” show that perfect substitution for oil and gas production is based on faulty assumptions and does not occur in reality.¹²⁵ Instead, basic economic principles dictate that increases in U.S. oil and gas production resulting from projects such as the Lease Program will result in a decrease of oil prices and an increase in oil consumption.¹²⁶ Several courts have previously rejected agency reliance on this theory.¹²⁷ In *WildEarth Guardians v. U.S. Bureau of Land Mgmt*, the Court rejected BLM’s use of perfect replacement theory and the argument that the agency could ignore the climate effects of extracting coal because if BLM had not issued the leases, demand would have been met from another coal source.¹²⁸ By failing to correct its reliance on perfect replacement theory the Final EIS significantly underestimates the Program’s impact on greenhouse gas emissions and climate change.

Second, BLM must adequately and accurately analyze the true global effect of the Lease Program by fully modeling the global oil market and accurately assessing the Lease Program’s indirect impacts on global—not just domestic—energy consumption.¹²⁹ Even if the oil produced

(holding BLM’s exclusion of foreign emissions in its alternatives analysis in the Willow EIS was arbitrary and capricious).

¹²⁴ Final EIS 3-8.

¹²⁵ *WildEarth Guardians v. BLM*, 870 F.3d 1222, 1234-6 (10th Cir. 2017).

¹²⁶ *Ctr. for Biological Diversity*, 982 F.3d at 736 (“Understanding why foreign oil consumption is critical to BOEM’s alternatives analysis requires some basic economics principles. If oil is produced from Liberty, the total supply of oil in the world will rise. Increasing global supply will reduce prices. Once prices drop, foreign consumers will buy and consume more oil . . .”).

¹²⁷ *WildEarth Guardians*, 870 F.3d at 1236–37 (concluding BLM irrationally relied on a perfect substitution assumption in assessing the effects of increased coal consumption); *Mont. Env’tl. Info. Ctr. v. U.S. Off. of Surface Mining*, 274 F.Supp.3d 1074, 1098 (D. Mont. 2017) (rejecting BLM’s reliance on perfect replacement theory). See *supra* Section II B 5.

¹²⁸ *WildEarth Guardians*, 870 F.3d at 1234.

¹²⁹ *Id.* at 740; see also Energyzt Advisors, LLC, *Economic Assessment of Proposed Oil and Gas Lease Sales in the Arctic National Wildlife Refuge Coastal Plain*, *supra* n121, at 46–48; U.S. Department of the Interior, Bureau of Ocean Energy Management, *Consumer Surplus and Energy Substitutes for OCS Oil and Gas Production: The 2015*

by the Lease Program were consumed domestically, recent precedent requires that its effect on global pricing and consumption be taken into account. The Ninth Circuit recently held, in *Ctr. for Biological Diversity v. Bernhardt*, that federal agencies such as BLM must assess a project's indirect impacts on global emissions resulting from foreign consumption of oil as a "reasonably foreseeable" indirect effect of drilling.¹³⁰ In this analogous case involving an offshore drilling and production facility along the coast of Alaska in the Beaufort Sea, the Court relied on economic analysis that showed that the Program's increase in domestic oil supply would result in lower prices and increased global oil consumption in the short-term.¹³¹ Even a small increase in supply on the global market may lead to increased net oil consumption.¹³² For example, one study analyzed the possible impact of additional oil production that would be enabled by the Keystone XL pipeline, and concluded that every barrel of new oil produced would lead to consumption of an additional 0.6 barrels due to the impact on global oil pricing.¹³³ That is a far greater effect on global consumption than would be suggested by the Final EIS' analysis.¹³⁴ Conversely, should the oil and gas resources that are the subject of the Lease Program be left undeveloped, global oil and gas consumption and the resulting greenhouse gas emissions would decrease.¹³⁵ The States urge BLM to correct this unsupported assumption and accurately quantify how the Lease Program will increase U.S. and global oil consumption in the short-term, and the social costs of this consumption on climate change.

Finally, in the long-term the Supplemental EIS must correct the unsupported assumption that global oil production and consumption will continue to increase, so that any oil produced by the Lease Program will represent a smaller percentage of global production. The Final EIS

Revised Market Simulation Model (MarketSim) OCS Study BOEM 2015-054 (Dec. 2015), <https://www.boem.gov/Market-Simulation-Model/>.

¹³⁰ *Ctr. for Biological Diversity*, 982 F.3d at 738. See also *Sovereign Inūpiat*, 2021 WL 3667986, at *12 (Holding that BLM's exclusion of foreign emissions in its alternatives analysis in the Willow Environmental Impacts Statement was arbitrary and capricious).

¹³¹ *Ctr. for Biological Diversity*, 982 F.3d at 738–39.

¹³² *Id.*

¹³³ Erickson, n.122 *supra*. Erickson & Lazarus based their calculations on increased supply of 830,000 barrels/day from the Keystone pipeline, which is similar to the amount of oil (21 to 143 million barrels annually, or 57,000 to 397,000 barrels/day) likely to be produced from the Lease Program.

¹³⁴ Final EIS at 3-7 to 3-8.

¹³⁵ See Paul Erickson & Michael Lazarus, *How would phasing out U.S. federal leases for fossil fuel extraction affect CO₂ emissions and 2C goals?*, 26 Stockholm Environmental Institute Working Paper No. 2016-02 (May 3, 2016) <https://mediamanager.sei.org/documents/Publications/Climate/SEI-WP-2016-02-US-fossilfuel-leases.pdf>, "In total, we find that by ceasing to issue new and renewed leases for fossil fuel extraction from federal lands and waters, the DOI could reduce net CO₂ emissions by about 100 Mt per year by 2030."

estimates the Lease Program’s indirect global greenhouse gas emissions impacts by projecting U.S. supply and demand as a percentage of global production.¹³⁶ After making the unjustified assumption that the oil produced by the Lease Program would serve only to displace other *domestic* production, the Final EIS then pivots to comparisons with *global* oil production, stating that at peak production “post-lease oil and gas activities could supply in the range of .1 to .5 percent of global production” and that this percentage “will represent a smaller fraction of global production as the years pass.”¹³⁷ This trivialization of the Lease Program’s indirect impact on long-term carbon emissions depends on the proposition that global oil production will continue to increase over the next 70 years.¹³⁸ The Final EIS does not provide a sufficient explanation for the assertion that global oil production will increase in the long-term despite aggressive state, federal, and international policies and targets requiring a reduction of the use of fossil fuel and a transition to clean energy sources.¹³⁹ Instead, the evidence contradicts BLM’s assumption and shows that greenhouse gas reduction mandates and clean energy policy developments will cause U.S. and global demand for oil to decline in the *long-term* resulting in a projected 1-2 million barrel per day decrease in demand in 5-15 years.¹⁴⁰ To correct these deficiencies the States urge BLM to incorporate new and existing greenhouse gas emission policies and targets into consideration of the global effects of greenhouse gas emissions from the Lease Program.

¹³⁶ Final EIS 3-7; *Ctr. for Biological Diversity*, 982 F.3d 723.

¹³⁷ Final EIS 3-7.

¹³⁸ *Id.*

¹³⁹ See **Washington**: Climate Commitment Act, 2021 Wash. Sess. Laws, ch. 316 (codified as amended in scattered sections of Wash. Rev. Code tits. 43, 70A); see **Delaware**: S.B 33, 151st Gen. Assem., 83 Del. Laws ch. 3 (2021) (codified at 26 Del. C. § 354.); **Maryland**: Clean Energy Jobs Act, 2021 Md. Laws. ch. 164 (H.B. 1007) (codified as amended at Md. Code Ann., Pub. Util. § 7-702); **Massachusetts**: Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, 2021 Mass. Acts. ch. 8, sec. 8; **Michigan**: Executive Directive No. 2020-10 (Mich. 2020); **New York**: Climate Leadership and Community Protection Act, 2019 Sess. Law News of N.Y. ch. 106 (S. 6599); **Maine**: 38 M.R.S. § 576-A; see also 06-096 C.M.R. chs. 167, 168; **New Jersey**: Global Warming Response Act, N.J. Stat. Ann. §§ 26:2C-37 to -58; **Oregon**: Executive Order No. 20-04 (Or. 2020), https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf; see also Energyzt, *Economic Assessment of Proposed Oil and Gas Lease Sales in the Arctic National Wildlife Refuge Coastal Plain*, at 49–60, *supra* n.70.

¹⁴⁰ See also Energyzt, *Economic Assessment of Proposed Oil and Gas Lease Sales in the Arctic National Wildlife Refuge Coastal Plain*, *supra* note 127, at 56-57; U.S. EIA, ANNUAL ENERGY OUTLOOK 2021 WITH PROJECTIONS TO 2050 at 21 (Feb. 3 2021), <https://www.eia.gov/outlooks/aeo/>.

3. The Supplemental EIS should consider State, Federal, and international climate change mandates and clean energy policies when analyzing the Lease Program's impacts on greenhouse gas emissions.

The States urge BLM to consider our States' climate change and clean energy mandates and policies, and national and international targets, in the Supplemental EIS's analysis of the Lease Program's impacts on greenhouse gas emissions. The Supplemental EIS should correct the Final EIS's flawed assumptions about global oil [and gas] demand and assume that, consistent with these targets and policies, oil demand will decrease in the long-term.¹⁴¹ This correct analysis will show that the Lease Program is inconsistent with, and will impede, actions to meet our aggressive greenhouse gas emission reduction targets and mandates and mitigate climate change impacts.

Many States have adopted ambitious greenhouse gas reduction mandates and policies. Recently, some of our States have adopted mandates requiring utilities serving their consumers to reduce or eliminate their greenhouse gas emissions and/or to provide increasing portions of the electricity delivered from renewable sources.¹⁴² Our States have also taken action to reduce or eliminate greenhouse gas emissions statewide.¹⁴³ Additionally, our States have collaborated on successful regional initiatives to reduce or eliminate greenhouse gas emissions. A group of western states and Canadian provinces formed the Western Climate Initiative to support the development and implementation of greenhouse gas emissions trading programs.¹⁴⁴ Eleven Northeastern and Mid-Atlantic states are part of the Regional Greenhouse Gas Initiative, a cap-and-trade system codified and implemented through each participating state's laws and regulations, which places increasingly stringent limits on carbon pollution from power plants.¹⁴⁵ Building on the Regional

¹⁴¹ *Id.*

¹⁴² *See* **Delaware**: S.B 33, 151st Gen. Assem., 83 Del. Laws ch. 3 (2021) (codified at 26 Del. C. § 354.); **New York**: Climate Leadership and Community Protection Act, 2019 Sess. Law News of N.Y. ch. 106 (S. 6599); **Washington**: Clean Energy Transformation Act, 2019 Wash. Sess. Laws, ch. 288, (codified at Wash. Rev. Code Ann. §§ 19.405.030-40).

¹⁴³ **Maine**: 38 M.R.S. § 576-A; *see also* 06-096 C.M.R. chs. 167, 168; **New York**: Climate Leadership and Community Protection Act, 2019 Sess. Law News of N.Y. ch. 106 (S. 6599); **Massachusetts**: Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, 2021 Mass. Acts. ch. 8, sec. 8; **New Jersey**: Global Warming Response Act, N.J. Stat. Ann. §§ 26:2C-37 to -58; **Oregon**: Executive Order No. 20-04 (Or. 2020), https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf; **Washington**: Climate Commitment Act, 2021 Wash. Sess. Laws, ch. 316 (codified as amended in scattered sections of Wash. Rev. Code tits. 43, 70A).

¹⁴⁴ *See* Western Climate Initiative Our Work, <https://wci-inc.org/> (last visited Oct. 1, 2021).

¹⁴⁵ *See* The Regional Greenhouse Gas Initiative, Elements of RGGI, <https://www.rggi.org/program-overview-and-design/elements> (last visited Oct. 1, 2021).

Initiative's success, a coalition of Northeast and Mid-Atlantic states are now working to advance a regional program to cap and reduce transportation-based greenhouse gas emissions.¹⁴⁶

The States urge BLM to incorporate national and global greenhouse gas emissions targets into consideration of the Lease Program's benefits and impacts. BLM should assume that achieving the targets under the Paris Climate Accord will require dramatic reductions in the use of fossil fuels from just over 80 percent of the total world energy supply in 2020 to just 20 percent in 2050.¹⁴⁷ These ambitious mandates and targets combined with technology developments will ultimately reduce fossil fuel demand in the long-term.¹⁴⁸ But the Final EIS assumes, wrongly and without support, that the Lease Program will represent a smaller (and by implication, less important) fraction of global production as oil production continues to increase over the next 70 years.¹⁴⁹ Instead, state mandates and international targets requiring dramatic and sustained reductions in greenhouse gas emissions alone will, *over the long term*, cause U.S. and global demand for oil to *decline*.¹⁵⁰ A recent global study found that carbon emissions from burning the oil, gas and coal in the world's *currently operating* fields and mines would exceed the Paris Agreement's target of limiting greenhouse gas emission targets to 1.5 Celsius.¹⁵¹ Projected forward, this trajectory toward zero net emissions means that neither new oil fields nor exploration for new resources will be necessary.¹⁵²

The Supplemental EIS should correct the flawed assumptions about oil consumption¹⁵³ in the Final EIS, and reevaluate the impact of the Lease Program in light of these ambitious national and global greenhouse reduction targets and mandates. The States urge the current administration to reexamine the climate change impacts of the Lease Program and to align U.S. production

¹⁴⁶ Massachusetts Dep't of Env'tl. Prot., Overview in Transportation & Climate Initiative (TCI), <https://www.mass.gov/info-details/transportation-climate-initiative-tci#overview-> (last visited Oct. 1, 2021).

¹⁴⁷ *Supra* at n.109. IEA, *Net Zero by 2050: A Roadmap for the Global Energy Sector*, 57.

¹⁴⁸ See Energyzt, *Economic Assessment of Proposed Oil and Gas Lease Sales in the Arctic National Wildlife Refuge Coastal Plain*, *supra* n.127, at 40–60, 71.

¹⁴⁹ Final EIS 3-7.

¹⁵⁰ See IEA, *Net Zero by 2050: A Roadmap for the Energy Sector*, 101–102; Energyzt, *Economic Assessment of Proposed Oil and Gas Lease Sales in the Arctic National Wildlife Refuge Coastal Plain*, *supra* n.127 at 49–62, 71.

¹⁵¹ Kelly Trout, *Drilling Towards Disaster: Why U.S. Oil and Gas Expansion is Incompatible with Climate Limits*, Oil Change International, 5 (Jan. 16, 2019) <http://priceofoil.org/content/uploads/2019/01/Drilling-Towards-Disaster-Web-v3.pdf> (“Previous analysis has shown that existing oil and gas fields and coal mines already contain enough carbon to push the world beyond the goals of the Paris Agreement . . .”).

¹⁵² IEA, *Net Zero by 2050: A Roadmap for the Energy Sector*, 101–102.

¹⁵³ Final EIS 3-7.

policies with these commitments. This analysis will demonstrate that the impacts of greenhouse gas emissions associated with the Lease Program would hinder the United States and the global community's ability to meet their greenhouse gas emission reduction commitments.

If BLM appropriately addresses this flawed assumption in the Supplemental EIS it will be clear that the Lease Program is not needed to meet U.S. and global oil demand, despite the Tax Act's directive. Indeed, by reducing the costs of burning fossil fuels, the Lease Program will work at cross purposes with efforts to meet our greenhouse gas emission reduction targets and mandates and mitigate the increasingly severe and costly climate impacts within our borders.¹⁵⁴

4. The Supplemental EIS Must Meaningfully Analyze the Costs, including the Social Costs, of Carbon Emissions.

The States urge BLM to use the best available estimates of the Social Cost of Greenhouse Gases when analyzing the costs of the Leasing Program's greenhouse gas emissions on climate change. The Social Cost of Greenhouse Gases is a standardized method used to estimate the monetized damages associated with an incremental increase in greenhouse gases in a given year.¹⁵⁵ Consistent with federal policy as directed by Exec. Order 13990, the Supplemental EIS should apply the Social Costs of Greenhouse Gases protocol to capture the full costs of greenhouse gas emissions as accurately as possible.¹⁵⁶

NEPA requires that when an agency such as BLM quantifies the economic benefits of the proposed action, the agency must also quantify the costs to ensure that the agency accurately analyzes the environmental consequences of its proposed action.¹⁵⁷ The intent of NEPA's mandate is for BLM to quantify the costs of the economic activity when it is quantifying its economic result.¹⁵⁸ BLM's argument that the economic result is not viewed as a benefit to all does not change

¹⁵⁴ See discussion, *supra*, in Section I at 2–4, Section II A, and Section II B. 4. In addition to conflicting with the States' greenhouse gas and carbon reduction mandates and policies, legal errors in BLM's Final EIS and ROD that opens the entire Coastal Plain to oil and gas leasing and development markedly underestimate the irreparable damage to the unique and fragile Arctic Coastal Plain ecosystem increasingly threatened by climate change. And at a time when our nation and the world drastically needs to reduce greenhouse emissions to mitigate the most extreme harms of the ever-worsening climate crisis.

¹⁵⁵ See Exec. Order 13990, n.42, *supra*, at 7040.

¹⁵⁶ Exec. Order 13990, n.42, *supra*, at 7040, 7042.

¹⁵⁷ See *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1198 (9th Cir. 2008) (agency "cannot put a thumb on the scale by undervaluing the benefits and overvaluing the costs" of a proposed action.) *Columbia Basin Land Prot. Ass'n v. Schlesinger*, 643 F.2d 585, 595 (9th Cir. 1981).

¹⁵⁸ *WildEarth Guardians v. Zinke*, No. CV 17-80-BLG-SPW-TJC, 2019 WL 2404860, at *11 (D. Mont. 2019), *report and recommendation adopted sub nom. WildEarth Guardians v. Bernhardt*, No. CV 17-80-BLG-SPW, 2021 WL 363955 (D. Mont. Feb. 3, 2021), *appeal dismissed sub nom. Mont. Env't Info. Ctr. v. Haaland*, No. 21-35294,

NEPA's requirements to fully capture the costs of greenhouse gas emissions.¹⁵⁹ Failure to capture the full costs of greenhouse gas emissions, when a scientifically robust method exists to do so, runs afoul of NEPA.¹⁶⁰ Further, the Final EIS' description of climate change trends or potential effects is not sufficient to satisfy NEPA's "hard look" requirement.¹⁶¹ Finally, "[g]eneral statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided."¹⁶²

In this case, where the Lease Program will generate greatly increased greenhouse gas emissions, NEPA's "hard look" requirement extends to examination of the harms caused by those emissions.¹⁶³ At a minimum, the States urge BLM to correct these deficiencies by fully and accurately capturing the full costs of greenhouse gas emissions in a manner that does not improperly minimize negative side effects.¹⁶⁴ The use of the Social Cost of Greenhouse Gases tool to assess the cost of those emissions is particularly appropriate in an instance such as this where BLM is quantifying the economic benefits of the action.¹⁶⁵ On February 26, 2021 the Interagency Working Group published interim updated estimates of the Social Costs of Greenhouse Gases, and initiated a process to finalize updated estimates by 2022.¹⁶⁶ To this end, the Interagency Working Group is currently engaged in updating the Social Cost of Carbon Greenhouse Gas protocol and is

2021 WL 3077586 (9th Cir. June 23, 2021) ("Because OSM quantified the benefits of the proposed action, it must also quantify the associated costs or offer non-arbitrary reasons for its decision not to.")

¹⁵⁹ *NHTSA*, 538 F.3d at 1203; *High Country Conservation Advoc. v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1195 (D. Colo. 2014) ("It is arbitrary to offer detailed projections of a project's upside while omitting a feasible projection of the project's costs.")

¹⁶⁰ *Ctr. for Biological Diversity*, 982 F.3d at 737.

¹⁶¹ See Final EIS at F-3 "The EIS refers readers to Section 3.1.1.1. and 3.1.1.2, respectively, of the Greater Mooses Tooth 2 (GMT2) Development Project Final Supplemental Environmental Impact Statement (SEIS)(BLM 2018) for descriptions of climate change trends in the Arctic and on the North Slope. Also, regarding the potential effects of climate change on the region, the reader is referred to Section 3.1.1.3 of the GMT2 SEIS (BLM 2018)."

¹⁶² *Conservation Cong. v. Finely*, 774 F.3d 611, 621 (9th Cir. 2014).

¹⁶³ *NHTSA*, 538 F.3d at 1194 ("hard look" under NEPA includes "a reasonably thorough discussion of the significant aspects of the probable environmental consequences.")

¹⁶⁴ *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1241 (9th Cir. 2005). ("A 'hard look' does not dictate a soft touch or brush-off of negative effects.")

¹⁶⁵ *WildEarth Guardians*, 2019 WL 2404860, *9–12 (D. Mont. 2019); *Citizens for a Healthy Cmty. v. U.S. Bureau of Land Mgmt.*, 377 F. Supp. 3d 1223, 1239–41 (D. Colo. 2019). Cf. *WildEarth Guardians v. Bernhardt*, 2020 WL 6701317, *12 (D.D.C. 2020) (finding that supplemental EA's carbon budget analysis was incomplete).

¹⁶⁶ See U.S. Interagency Working Group on Social Cost of Greenhouse Gases, *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990*, at 3 (Feb. 2021), https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf.

seeking public comment before updated estimates are due to be released in January 2022.¹⁶⁷ The Working Group’s estimates of the Social Cost of Greenhouse Gases represent the best available tool to monetize the environmental and economic impacts of a project’s greenhouse gas emissions. At the time it conducts its analysis BLM should use the Working Group’s then current estimates in analyzing the Lease Program’s social costs to climate change.

The Final EIS’ stated reasons for not applying the Social Cost of Greenhouse Gases protocol lack any reasonable basis and are directly contradicted by recent federal policy.¹⁶⁸ BLM’s argument that it is not obligated to evaluate the costs of carbon emissions because it considered the “economic impact” rather than the “economic benefit” of the proposed project is in error.¹⁶⁹ Both the economic “benefit” and “impact” quantify the economic result of an action, and thus the Supplemental EIS must quantify the costs, as well as the benefits, of the Lease Program.¹⁷⁰ Second, BLM’s argument that it was not obligated to use the Social Costs of Greenhouse Gases protocol because it was created to “meet the requirements for regulatory impact analyses during rulemaking” runs afoul of legal precedent and recent federal mandates.¹⁷¹ Executive Orders and White House guidance have, for decades, instructed agencies to “use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible.”¹⁷² Agencies across the federal government, as well as state agencies and local governments, have in fact incorporated a

¹⁶⁷ See Notice of Availability and Request for Comment on Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates Under Exec. Order 13990, 86 Fed. Reg. 24,669-24,670 (May 7, 2021).

¹⁶⁸ See Exec. Order 13990, n.42, *supra*, at 7040.

¹⁶⁹ Final EIS F-3. “Any increased economic activity that is expected to occur with the proposed action is simply an economic impact, rather than an economic benefit.”

¹⁷⁰ *NHTSA*, 538 F.3d at 1203; *High Country Conservation Advoc.*, 52 F. Supp. 3d at 1195. (“It is arbitrary to offer detailed projections of a project's upside while omitting a feasible projection of the project’s costs.”)

¹⁷¹ Final EIS F-2; *Cf.* Office of Mgmt. & Budget, Circular A-4 at 29 (Sept. 17, 2003) (agencies should consider “any important ancillary benefits and countervailing risks,” including those “secondary to the statutory purpose of the rulemaking”); Exec. Order No. 13563 § 1, 76 Fed. Reg. 3821, 3821 (Jan. 21, 2011) (affirming Exec. Order No. 12,866) (directing agencies to assess the “actual results of regulatory requirements” and explicitly require analysis of both direct and indirect costs and benefits); Exec. Order No. 12866 § 1, 58 Fed. Reg. 51,735, 51,741 (Oct. 4, 1993) (“Costs and benefits shall be understood to include both quantifiable measures . . . and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider.”); U.S. EPA, Guidelines for Preparing Economic Analyses, 11-2 (Dec. 17, 2010) (directing the agency to assess “all identifiable costs and benefits,” including both direct effects “as well as ancillary benefits and costs”).

¹⁷² Exec. Order No. 13563 § 1(c) (Jan. 18, 2011); *accord* Exec. Order No. 12866 §§ 1, 6(a)(3)(C) (Oct. 4, 1993) (requiring agencies to assess “all costs and benefits” of regulatory actions and alternatives, including “quantifiable measures []to the fullest extent that [they] can be usefully estimated”); White House Off. of Mgmt. & Budget, *Circular A-4* at 2, 18 (2003) (instructing agencies that expression of “potential real incremental benefits and costs” of their actions “in monetary units” provides “useful information for decision makers and the public”).

form of Social Cost of Greenhouse Gases protocol into their regulatory analyses for years.¹⁷³ The fact that BLM issued a Final EIS rather than conducting a rulemaking is of little consequence. Requiring agencies to quantify the costs as well as the benefits of a proposed action is consistent with NEPA’s “hard look” analysis.¹⁷⁴ Conversely, failing to acknowledge the true costs of climate harms would falsely value the Lease Program’s climate impacts at zero dollars and inappropriately bias the agency’s decision making.

Lastly and significantly, the Final EIS’ reliance on Executive Order 13783 (Exec. Order 13783)¹⁷⁵ as a basis to reject application of the Social Cost of Greenhouse Gases protocol is no longer valid. To the contrary, agencies are now expressly directed to quantify the social costs of greenhouse gas emissions.¹⁷⁶ Exec. Order 13783 has been revoked and superseded by Exec. Order 13990, which directs use of the Social Cost of Greenhouse Gases protocol.¹⁷⁷ Exec. Order 13990 affirms that it is critical that agencies “accurately determine the social benefit of reducing greenhouse gas emissions when conducting cost benefit analyses of regulatory and other actions.”¹⁷⁸ This administration also issued a Memorandum requiring all agencies “to make evidence-based decisions guided by the best available science and data,” which includes application of the Social Cost of Greenhouse Gases in analyzing greenhouse gas emissions.¹⁷⁹ To comply with NEPA and recent federal mandates the States urge BLM to correct these deficiencies and apply the Social Cost of Greenhouse Gases protocol to the Lease Program to accurately monetize the social costs of greenhouse gas emissions.

¹⁷³ See 2021 TSD at 2.

¹⁷⁴ *WildEarth Guardians v. Bernhardt*, 2020 WL 6701317, *12 (D.D.C. 2020) (finding that supplemental EA’s carbon budget analysis was incomplete); See Exec. Order 13,990, n.42, *supra*, at 7040.

¹⁷⁵ Exec. Order 13783, “Promoting Energy Independence and Economic Growth,” 82 Fed. Reg. 16093-16097, Sec. 5 (Mar. 31, 2021).

¹⁷⁶ See Exec. Order 13,990, n.42, *supra*, at 7040.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ *Presidential Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking* (Jan. 27, 2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/>.

5. The Supplemental EIS should consider the cumulative impact of the Lease Program when combined with other greenhouse gas emissions.

The States urge BLM to conduct a cumulative impacts analysis¹⁸⁰ that adequately considers the Lease Program's impact on greenhouse gas emissions. This analysis must fully address the Lease Program's cumulative environmental impacts in the context of worldwide greenhouse gas emissions and how those impacts would change under the foreseeable future conditions for the Program Area. Conducting an analysis that considers the cumulative and long-term effects of the Program is appropriate and consistent with NEPA's directive that "the worldwide and long-range character of environmental problems" is "recognized."¹⁸¹ The impact of greenhouse gas emissions resulting from the Program on climate is precisely the kind of "relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity" that NEPA requires agencies to analyze.¹⁸² And NEPA's requirement of "full disclosure to the public and to other entities within government of all environmental effects likely to stem from agency action"¹⁸³ can only be met if the Program's cumulative and long-term effects are considered.

As directed by the Tax Act, BLM's purpose statement for the Lease Program enables extraction, and the resulting combustion, of oil and gas in the Coastal Plain.¹⁸⁴ As a result, the Program would increase greenhouse gas concentrations in the atmosphere and contribute to climate change.¹⁸⁵ But the Earth's climate is even now in flux due to previous and ongoing greenhouse gas emissions. The Lease Program's impacts, including both direct impacts on the

¹⁸⁰ As discussed *supra* in Section II A, the States submit these comments with the understanding that the CEQ has issued the 2020 NEPA Regulations—revisions that delete language regarding cumulative effects analysis. See 40 C.F.R. 1508.1(g)(3), repealing 40 C.F.R.1508.7. As noted in n. 41, *supra*, the States and others have filed actions challenging the 2020 NEPA Regulations. Notwithstanding the 2020 NEPA Regulations, however, BLM should conduct a cumulative impact analysis to fulfill NEPA's direction that agencies "recognize the worldwide and long-range character of environmental problems." 42 U.S.C. § 4332(2)(F). Indeed, the Senate Committee Report on NEPA recognized that cumulative analysis was fundamental to the statute's purposes, stated that the law was necessary because "[i]mportant decisions concerning the use and the shape of man's future environment continue to be made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades." S. Rep. No. 91-296, at 5.

¹⁸¹ 42 U.S.C. § 4332(2)(F).

¹⁸² 42 U.S.C. § 4332(2)(C)(iv); *NHTSA*, 538 F.3d at 1217.

¹⁸³ *Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1099 (D.C. Cir. 1973).

¹⁸⁴ See Final EIS at 1-1 to 1-2; *Id.* at App. B. See also ROD at 7-8.

¹⁸⁵ The precise degree to which the Program would add to oil consumption and therefore to greenhouse gas concentrations is a subject which should be further studied in the Supplemental EIS; however, it is undisputed that there would be such an effect. See Section II C and Final EIS at 3-7 to 3-8.

Coastal Plain environment and the indirect impacts of extracting and burning fossil fuels extracted from the Coastal Plain, should be measured not merely in terms of impacts under today's atmospheric greenhouse gas concentrations and climate conditions, but in the context of the reasonably foreseeable conditions over the lifetime of the Lease Program. The Final EIS gives only cursory treatment to the cumulative effects associated with the Lease Program on greenhouse gas emissions, incorrectly assuming that it has adequately conducted this analysis because the greenhouse gas emissions "from oil and gas development on the North Slope and elsewhere around the globe are *implicitly* included in the supply/demand analysis of GHG emissions under *Indirect GHG Emission from Future Development*."¹⁸⁶ But the Final EIS merely presents the estimated future emissions in volumes relative to other sources of emissions,¹⁸⁷ and does not adequately consider the reasonably foreseeable future conditions prevailing over the lifetime of the project. And while the Final EIS includes a chart that compares analysis of twelve "reasonably foreseeable" future projects, eleven of which involve oil or gas exploration, production, or transportation, the impacts analysis of greenhouse gas emissions does not include specific consideration of these projects.¹⁸⁸

Given the very long duration (as much as 100 years)¹⁸⁹ projected for the Lease Program, it is a near-certainty that future operations including drilling, processing, and transport of oil or gas would take place under substantially different conditions than those prevailing now.¹⁹⁰ Accordingly, the future effects of the Lease Program's operations including road building, water extraction, and construction of drilling pads on permafrost would be expected to differ from what they would be under present conditions. The Final EIS contained only a cursory and inadequate discussion of these effects.¹⁹¹

Furthermore, any oil and gas produced under the Lease Program would contribute to increasing the magnitude of climate change, which in turn would further alter the future conditions under which Program activities are carried out and their environmental impacts.¹⁹²

¹⁸⁶ Final EIS at 3-7 to 3-8.

¹⁸⁷ Final EIS at 3-5 to 3-10.

¹⁸⁸ Final EIS at 3-10; *Id.* at App F-7 to F-10.

¹⁸⁹ This may be a conservative time span. Under the Reasonably Foreseeable Development Scenario projected in the Final EIS, new fields might continue to be developed for as long as 85 years after lease sales begin. Final EIS at App. B-11.

¹⁹⁰ Final EIS at 3-7; See also discussion *supra* at Section II C.

¹⁹¹ Final EIS at 3-9 to 3-10.

¹⁹² BLM's August 4, 2021 Notice of Intent To Prepare a Supplemental Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, Alaska states that the Supplemental EIS "will also consider impacts

Because of this, the Lease Program’s actual environmental impacts can only be assessed in the context of the future conditions that are reasonably foreseeable over the Lease Program’s lifetime.¹⁹³ By failing to evaluate the long-term and cumulative effects of the Lease Program, the Final EIS falls short of meeting NEPA’s command that BLM take a “hard look” at its impacts.

6. The Supplemental EIS must take a “hard look” at the climate change impacts from methane emissions.

The Supplemental EIS must adequately address the climate change impact associated with methane emissions. Methane is an incredibly potent greenhouse gas that is over 30 times more powerful than carbon dioxide in its ability to trap heat in the atmosphere over a 100-year time frame, and 86 times more potent over a 20-year timeframe.¹⁹⁴ Recently, scientists have estimated that “methane is responsible for about one-quarter of the warming the world has experienced so far.”¹⁹⁵ Methane emissions from the Lease Program are generally due to “leaks during the drilling, production, processing and transport of natural gas.”¹⁹⁶ In light of the potency of methane and the immediate need for dramatic reductions in greenhouse gas emissions it is critical that the Supplemental EIS take a “hard look” at the Lease Program’s total methane emissions and their contributions to climate change. But the Final EIS’s brief paragraph discussing methane leaks fails to accurately estimate the amount and potency of methane emissions.¹⁹⁷ First, the Final EIS relies on outdated data to estimate the total methane emissions associated with the Lease Program, and

from greenhouse gas emissions from any Leasing Program.” 86 Fed. Reg. 41990. As greenhouse gas emissions are fungible, the impacts from greenhouse gases produced due to the Program can only be evaluated in the context of the total greenhouse gas concentrations expected at the time that actions will be taken. BLM should consider this cumulative impact.

¹⁹³ CEQ’s regulations contemplate consideration of changes in the context for an action, imposing a duty on agencies to supplement an EIS when “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. § 1502.9(d)(1)(ii). See *Indigenous Env’t Network v. U.S. Dep’t of State*, 347 F. Supp. 3d 561, 578 (D. Mont. 2018), order amended and supplemented, 369 F. Supp. 3d 1045 (D. Mont. 2018), and appeal dismissed and remanded sub nom. *Indigenous Env’t Network v. U.S. Dep’t*, No. 18-36068, 2019 WL 2542756 (9th Cir. June 6, 2019). In the instant case, when such “new circumstances” are foreseeable and reasonably certain to occur, economy of agency effort would be served by an up-front consideration of the Program’s impacts in the context of other past, present and future greenhouse gas emissions.

¹⁹⁴ See Gunnar Myhre et al., *Anthropogenic and Natural Radiative Forcing*, In: *Climate Change 2013: the Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* 714 tbl. 8.7 (Stocker, T.F. et al. eds. 2013) https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter08_FINAL.pdf.

¹⁹⁵ Nicholas Kusnetz, *Is Natural Gas Really Helping the U.S. Cut Emissions?* Inside Climate News (Jan. 30, 2020).

¹⁹⁶ Final EIS 3-8.

¹⁹⁷ *Id.*

admits that its estimates may not be accurate.¹⁹⁸ Second, the Final EIS' cursory analysis fails to accurately account for the potency of methane emissions particularly in a 20 year timeframe.

Because of methane's significant near-term heat trapping effect, the Supplemental EIS must first accurately estimate the total methane emissions associated with the Lease Program. To do so the Supplemental EIS must use updated and reliable data to accurately quantify the expected methane emissions. The Final EIS relies on EPA's 2016 inventory to estimate that emissions from the oil and gas sector are the largest industrial source of methane emissions in the United States, accounting for about 31 percent of total U.S. methane emissions.¹⁹⁹ The Final EIS then states that "[n]ationally, the EPA estimate of methane's GHG contribution from petroleum production processes equates to approximately 5 percent of the CO₂e contribution from the nationwide petroleum and natural gas combustion" and that this will equal roughly "5 percent of the estimated direct plus indirect emissions from the Coastal Plain development."²⁰⁰ But a more updated study finds that methane emissions were 60 percent higher than the EPA inventory estimates, likely because existing inventory methods miss emissions released during abnormal operating conditions.²⁰¹ While the more recent study is the "best estimate to date on the climate impact of oil and gas activity in the United States," the Final FEIS ignores it.²⁰² By failing to rely on this more recent and reliable study, the Final FEIS underestimates the Lease Program's methane emissions. The Supplemental EIS should correct this deficiency and accurately estimate the methane emissions from the Lease Program with the most up to date and reliable data.

Second, the Supplemental EIS should accurately estimate the potency of the methane emissions resulting from the Lease Program as measured by its relative contributions to climate change within the relevant timeframes. Methane is a powerful greenhouse gas with a 100-year

¹⁹⁸ Final EIS 3-8. "It is difficult to obtain accurate estimates of the amount of GHG emissions from such leaks as compared to the GHG emissions from the combustion process." The Final EIS relies on 2016 data from the EPA to estimate that "31 percent of the 2016 methane contribution is from oil and gas production activities, which would mean that 3.1 percent of US total GHG emissions are from methane associated with oil and gas production."

¹⁹⁹ See Final EIS at 3-8. See also EPA, *Greenhouse Gas Emissions*, (Last Updated Oct. 31, 2018) <http://www3.epa.gov/climatechange/ghgemissions/gases/ch4.html>.

²⁰⁰ Final EIS at 3-9.

²⁰¹ See Ramon A. Alvarez, et al., *Assessment of Methane Emissions from the U.S. Oil and Gas Supply Chain*, Science, Vol. 361, Issue 6398, 186–188 (July 13, 2018); see also U.S. EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2016 at 3-69 to 3-70 (2018).

²⁰² See University of Colorado at Boulder, *New study finds U.S. oil and gas methane emission 60 percent higher than estimated* (June 21, 2018) ("This study provides the best estimate to date on the climate impact of oil and gas activity in the United States," said co-author Jeff Peischl, a CIRES scientist working in NOAA's Chemical Sciences Laboratory in Boulder, Colorado"), <https://cires.colorado.edu/news/new-study-finds-us-oil-gas-methane-emissions-60-higher-estimated>.

global warming potential 28-36 times that of CO₂. Measured over a 20-year period, that ratio grows to 84-86 times.²⁰³ As a result, methane is particularly powerful in terms of trapping heat in the atmosphere over shorter timescales. While the Global Warming Potential for methane is significantly different from that of CO₂ depending on the time frame chosen, the Final EIS still relies on the U.S. EPA Inventory which uses the 100-year timeframe exclusively.²⁰⁴ By relying exclusively on the 100-year timeframe and failing to analyze the increased impacts of methane emissions over a 20 year timeframe, the Final EIS has fallen short of taking a “hard look” at the Lease Program’s methane impacts.²⁰⁵ Without an accurate estimate of the potency of methane emissions relative to these timeframes, BLM will not be able to accurately assess the resulting climate change impacts of the proposed Lease Program. BLM should correct these deficiencies and provide an accurate quantitative analysis of the Lease Program’s methane emissions and their contributions to climate change. The States urge BLM take a “hard look” at the Lease Program’s direct, indirect and cumulative greenhouse gas impacts and the social costs of these impacts to make an informed decision on the environmental consequences of the Program.²⁰⁶

D. The Supplemental EIS Must Meaningfully Analyze the Direct and Indirect Impacts of the Lease Program on Migratory Birds.

Gas and oil development pursuant to the Lease Program is likely to adversely impact the millions of migratory birds that use the Arctic Refuge’s Coastal Plain each year. Because our knowledge of migratory bird population densities and habitat usage is incomplete, the Final EIS’ assessment of how the Lease Program would affect these species is inadequate for informed decision making. Because adequate information is lacking, BLM has also failed to take the “hard look” required by NEPA at the Program’s impact on migratory birds.²⁰⁷ The States urge BLM to more completely and carefully evaluate these impacts in the Supplemental EIS, as discussed below.

1. The Arctic Refuge, in particular the Coastal Plain, provides important habitat for many species of migratory birds.

²⁰³ See U.S. EPA, Understanding Global Warming Potentials, <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>. See also <https://unece.org/challenge>.

²⁰⁴ Final EIS 3-8, 3-9.

²⁰⁵ See also *Robertson*, 490 U.S. at 350; *Nat'l Parks & Conservation Ass'n.*, 606 F.3d at 1072.

²⁰⁶ See *WildEarth Guardians*, 870 F.3d at 1233–38.

²⁰⁷ *Northern Plains Res. Council v. Surface Transp. Bd.*, 668 F.3d 1067, 1085 (9th Cir. 2011) (decision regarding siting of railroad arbitrary and capricious where agency lacked data to evaluate impacts on birds, wildlife and plants).

Millions of migratory birds representing at least 157 species visit the Coastal Plain, adjacent marine waters, and northern foothills of the Arctic Refuge each year.²⁰⁸ Birds migrate from the Arctic Refuge to all 50 states and to six continents.²⁰⁹ Two ESA-listed Threatened species use the Arctic Refuge, and two have been considered for listing.²¹⁰ Ten others are listed as “sensitive species” by the Bureau of Land Management.²¹¹ The US Fish and Wildlife Service lists 11 species using the Arctic Refuge as “Birds of Conservation Concern.”²¹² And the International Union for Conservation of Nature lists 19 as either “Endangered,” “Vulnerable,” or “Near Threatened.”²¹³

The Arctic Coastal Plain is a particularly important breeding, nesting, rearing, and staging habitat for many of these species. An aerial survey study of waterfowl found that the Coastal Plain was an important area for species including cackling goose, tundra swan, king eider, jaeger, and red-throated loon.²¹⁴ A large proportion of the Alaskan breeding populations of pacific, yellow-billed and red-throated loons use the Arctic Coastal Plain, specifically in the coastal lagoons and near-shore areas.²¹⁵ Most of the Arctic Coastal Plain to the west of the Arctic Refuge, including the NPR-A and the Prudhoe Bay area, either has been or will be opened for oil and gas development. The portion located within the Arctic Refuge (the “Refuge Coastal Plain”)²¹⁶ represents a large, essentially undisturbed expanse of habitat available for migratory bird use.

²⁰⁸ Final EIS at 3-106; *Id.* at Table J-13, App. J ; Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan and Final EIS, US Fish and Wildlife Service 2015 (USFWS 2015) at 4-80.

²⁰⁹ Final EIS at 3-107; AR 17786.

²¹⁰ Steller’s and spectacled eiders are listed as Threatened. 62 Fed. Reg. 31748–31757 (Steller’s eider); 58 Fed. Reg. 27474–27480 (spectacled eider). The USFWS made a finding of “warranted, but precluded” for the yellow-billed loon in 2009, which was subsequently revised to “not warranted” in 2014. 79 Fed. Reg. 59195-59204. The buff-breasted sandpiper has been considered for listing. National Research Council (2003). *Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope*. Washington, DC: The National Academies Press at 120 (NRC 2003) <https://doi.org/10.17226/10639>.

²¹¹ Final EIS Table J-13.

²¹² *Id.*

²¹³ *Id.*

²¹⁴ *Id.* at 3-107.

²¹⁵ *Id.* at 3-111; Deborah J. Groves et al., *Status and trends of loon populations summering in Alaska, 1971–1993*, *The Condor* 98(2):189–195 (May 1, 1996).

²¹⁶ The Refuge Coastal Plain corresponds to the area designated in Section 1002 of ANILCA (the 1002 Area).

As much as 60 percent of the Pacific population of lesser snow geese uses the Arctic Refuge as a staging area before migrating.²¹⁷ The Arctic Refuge seems to be especially favorable for lesser snow geese, as relatively fewer birds were seen in the NPR-A region to the west.²¹⁸ The Refuge Coastal Plain in particular provides important habitat for snow geese.²¹⁹ A 2002 United States Geological Survey (USGS) study examined use of the Refuge Coastal Plain for snow goose staging and feeding.²²⁰ Staging is an important part of the migratory cycle when geese are feeding and accumulating the fat reserves needed for their southward migration. As many as 300,000 birds used this part of the Arctic Refuge in any given year, largely in the mid-coastal plain, with the majority of sites used located in the Refuge Coastal Plain.²²¹ Annual variations in the number of birds present is thought to be due to annual differences in habitat conditions, with the Arctic Refuge hosting a larger number of geese when there was snow cover or poor forage conditions on the Canadian portion of the staging area.²²² Areas within 400 meters of river channels contained the plants comprising the birds' primary food sources.²²³ Extensive grazing reduces forage abundance at the sites used for a period of several years, and geese may be unable to exploit a given site for a period of several years after it has been grazed.²²⁴

Two ESA-listed species of eider, the Steller's and spectacled eider (both listed as "Threatened") are present in the Lease Program Area.²²⁵ Critical habitat for Steller's eider has been designated in western Alaska, adjacent to the proposed marine transportation route. While critical habitat for this species has not been designated in the Arctic Refuge, nesting distribution of Steller's eiders formerly extended eastward to Demarcation Bay, at the eastern end of the Refuge.²²⁶ The threatened spectacled eider has been documented to nest in the Canning River Delta

²¹⁷ NRC 2003 at 122.

²¹⁸ Dirk V. Derksen et al., *Use of Wetland Habitats by Birds in the National Petroleum Reserve – Alaska*. U.S. Department of the Interior, Fish and Wildlife Service, Resource Publication 141 (1981).

²¹⁹ Final EIS at 3-88; *see also* Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan and Final EIS, US Fish and Wildlife Service 2015 at 4-80.

²²⁰ D.C. Douglas et al., *Arctic Refuge Coastal Plain Terrestrial Wildlife Research Summaries*, Section 9: Snow Geese, United States Geological Survey, (2002).

²²¹ *Id.* at 71; *see also* Donna G. Robertson et al., *Distribution of Autumn-Staging Lesser Snow Geese on the Northeast Coastal Plain of Alaska*. 68 J. Field Ornithology 1,124–34 (1997).

²²² Douglas, 2002 at 73.

²²³ *Id.*, at 72.

²²⁴ *Id.*, at 73.

²²⁵ *See* n.209, *supra*.

²²⁶ Final EIS at 3-108.

at the west end of the Arctic Refuge.²²⁷ The full extent to which the spectacled eider uses the Arctic Refuge is unknown; the Final EIS notes that “contemporary systematic ground surveys” for spectacled eider have not been conducted in the Program Area.²²⁸ The North Slope is also an important breeding area for the yellow-billed loon, which has been considered for listing under the ESA.²²⁹ Half of the world’s population of buff-breasted sandpipers nests on the North Slope, entirely within regions (including the Arctic Refuge) with known or probable oil deposits.²³⁰ This species too is under consideration for ESA listing.²³¹

2. Migratory birds are ecologically and economically important nationwide, and in particular to our States.

As well as being valued ecosystem components, migratory birds have important economic value to our states. For instance, in 2011, bird and other wildlife watchers expended \$3.2 billion in Washington and generated an economic impact of about \$5.5 billion.²³² For example, Washington has expended resources to manage its population of long-tailed ducks as a Species of Greatest Conservation Need,²³³ given the species’ declining population in the state, as well as its population of snow geese, one of the most abundant species on the Coastal Plain.

In 2011, birdwatching and wildlife watching generated approximately \$2.3 billion in economic impact in Massachusetts, \$1.2 billion in Michigan, and \$4 billion in New York.²³⁴ The 2011 figure for Delaware was \$170 million, for Rhode Island \$200 million, and for Vermont \$289 million.²³⁵ In 2006, waterfowl hunting was a \$43 million dollar industry in Minnesota.²³⁶

²²⁷ *Id.*, at Map 3-20, App. A.

²²⁸ *Id.*, at 3-108.

²²⁹ See n 209, *supra*; both the yellow-billed and red-throated loons are listed as “sensitive species” by the BLM. Final EIS at 2-109.

²³⁰ NRC 2003 at 120.

²³¹ *Id.*

²³² States’ Compl., *supra* n.1, at 20.

²³³ *Id.* at 19.

²³⁴ *Id.* at 24, 44, 51.

²³⁵ *Id.* at 33, 57, 59.

²³⁶ *Id.* at 46.

3. The Supplemental EIS must incorporate the best available data on use of the Lease Program area by migratory birds and the changes expected under existing climate change scenarios.

The States urge BLM to incorporate the best available data on the use of the Lease Program area by migratory birds. Information is lacking about migratory bird distribution in large parts of the Refuge, and much of the data on migratory bird populations and distributions cited in the Final EIS is cursory and outdated. The Final EIS acknowledges that “although there are historical survey data for the [Arctic Refuge Coastal Plain], as described in USFWS and BLM (2018), detailed distribution and abundance data for the program area are lacking for many species, and contemporary data are lacking for most bird species.”²³⁷ The Draft EIS prepared for the Lease Program further stated that “estimates of waterbird abundance and distribution across the Program area [are] relatively unreliable.”²³⁸ And in its response to comments on the Draft EIS, BLM confirmed that the last USFWS aerial survey was done in 2011.²³⁹ A 2018 report by the USFWS noted that “[t]he Canning River Delta on the western edge of the Refuge Coastal Plain is the only site within the 1002 Area for which contemporary, fine spatial scale breeding bird data are available.”²⁴⁰ The same report stated that “[c]onservation of birds in association with exploration, development, and production of oil and gas resources in the 1002 Area of the Coastal Plain of the Refuge” would require information regarding abundance and distribution of birds and their patterns of seasonal movement, and identification of important areas for feeding, nesting, and molting.²⁴¹ USFWS also reported that data was needed on impacts of development and disturbance to birds relative to the pre-development baseline, and that the differences in water availability between the 1002 Area and Prudhoe Bay could lead to dissimilar impacts.²⁴²

²³⁷ Final EIS at 3-107.

²³⁸ Draft EIS at 3-86.

²³⁹ Final EIS at S-509.

²⁴⁰ FWS and BLM, “Rapid Response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 20001” (Feb. 16, 2018) (Rapid Response Resource Assessments).

²⁴¹ *Id.*

²⁴² *Id.*

Without complete and updated data on migratory birds, the Supplemental EIS cannot meet the “hard look” requirement of NEPA.²⁴³ This is especially important in a case such as this, where ESA-listed species and those considered for listing are present.

4. The Supplemental EIS must address the importance of the Arctic Refuge as the last remaining protected North Slope habitat for migratory birds.

There is evidence that, due to climate change and previous habitat alteration, the Arctic Refuge’s Coastal Plain is more important as habitat for migratory birds than would be suggested by merely surveying bird distribution. For example, nesting success for ground-nesting birds, including black brant, has been found to be “unusually low” in oil fields, possibly due to increased predation.²⁴⁴ Modeling suggests that black brant populations may not be sustainable at such low success rates, and that the oilfield populations may represent “sink” populations that are sustained by in-migration from nearby areas.²⁴⁵ The National Research Council report predicted that “as industrial activity spreads into new areas, the amount of sink habitat will increase.”²⁴⁶ By compensating for the “sink” habitat in other parts of the North Slope, the Arctic Refuge may play a critical role in maintaining populations of these birds and the Program’s effect on their populations may be greater than expected simply due to the degree of habitat disruption predicted. NRC further noted that “sink” habitat effects cannot be determined through population counts alone, underscoring the need to more fully understand population dynamics on the North Slope.²⁴⁷

While common eider populations have generally decreased in northern Alaska, nesting on Arctic Refuge barrier islands dramatically increased.²⁴⁸ The USFWS postulated that this may have been due to habitat change, possibly due to earlier ice melt reducing predators’ access to the islands. If so, the Arctic Refuge’s barrier island habitat may become even more important as the climate continues to change.²⁴⁹ If the barrier islands in the Arctic Refuge are indeed hosting eider

²⁴³ *N. Plains Res. Council*, 668 F3d at 1086 (reliance on stale data regarding habitat and population not adequate for environmental impact analysis).

²⁴⁴ NRC 2003 at 120.

²⁴⁵ *Id.* at 121.

²⁴⁶ *Id.* at 122.

²⁴⁷ *Id.*

²⁴⁸ Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan and Final EIS, US Fish and Wildlife Service 2015 (USFWS 2015) at 4-83.

²⁴⁹ *Id.* The barrier islands appear to be vulnerable to sea level rise and to increased shoreline erosion as loss of sea ice is leading to higher waves and intensified storm surges. Final EIS at 3-117.

displaced from other sites, then the effect on the species of impacts to this habitat would be greater than predicted from observations in the Arctic Refuge alone. A survey of wetland habitat use in the NPR-A found that fewer lesser snow geese were found in the NPR-A than had been reported in the Arctic Refuge to the east.²⁵⁰ These authors also noted that “fewer birds have been seen in recent years, possibly due to disturbance from intensive helicopter traffic.”²⁵¹

NEPA’s requirement that BLM take a “hard look” at impacts of the Lease Program on migratory birds can only be met if updated, accurate data regarding migratory bird populations and the importance of the Arctic Refuge in maintaining populations is used to develop the no-action baseline. The Ninth Circuit has explained that where baseline data is deficient, NEPA requires an agency to “gather information before it can make an informed decision.”²⁵² Once that data is available, it should be used to inform an analysis of how the Lease Program’s impacts in the Refuge Coastal Plain will affect migratory birds.

5. The Supplemental EIS must correct deficiencies in the analysis of the Lease Program’s direct and indirect impact on migratory birds.

The States urge BLM to correct deficiencies in the analysis of the Lease Program’s direct and indirect impacts on migratory bird populations. The Lease Program threatens to adversely impact migratory birds through altered habit, disturbance and displacement, and mortality and human activities. The Supplemental EIS must more completely address the effects on migratory birds of habitat alterations due to direct impacts of the Lease Program as well as indirect climate effects due to combustion of the oil and gas that would be produced, and the consequences of the oil spills likely to occur during operations.

The Supplemental EIS must also discuss the likely effect of the Lease Program on populations of the migratory birds using the Lease Program Area. Oil spills, habitat destruction, disturbance by human presence, and aircraft noise and emissions of lead all have the potential to reduce migratory bird populations. However, the Final EIS is devoid of any real consideration of how the Lease Program would impact migratory bird populations. In many cases, BLM responded to comments regarding impacts on birds simply by stating “no bird species is anticipated to face

²⁵⁰ Derksen, n.219, *supra*.

²⁵¹ *Id.*

²⁵² *N. Plains Res. Council*, 668 F.3d at 1085 (agency obligated to “ensure data exists *before approval* so that [it] can understand the adverse environment effects.”)

population level impacts,” without citation to any further analysis.²⁵³ Such conclusory remarks do not allow an informed decision between alternatives, or provide a court with a basis for review of the decision made.²⁵⁴ Even if there *was* data that would have allowed a determination whether or not there would be a population-level impact, this assertion would not be adequate to meet NEPA’s requirement that the EIS inform the public that environmental concerns were considered in the decision making process.²⁵⁵ Finally, the Supplemental EIS must fully consider and analyze the Lease Program’s impact to the bird population’s long-term health including population consequences.

- a. The Supplemental EIS must meaningfully address the likelihood of spills, as well as the magnitude of the threat posed to migratory birds and how this threat can be mitigated.

As demonstrated by the 1989 Exxon Valdez disaster, oil spills pose a grave risk to the environment and to wildlife.²⁵⁶ Unfortunately, in the case of drilling in the Lease Program area, the question is not “if” spills will occur, but “when,” and how much oil will then be released. Based on historical spill rates in the NPR-A and the estimated amount of oil to be produced under the Program, the Final EIS estimates that there would be 281-1870 “small” spills (averaging 2.8 barrels) and up to six large spills (averaging 7374 barrels) over the lifetime of the Project.²⁵⁷ The records for North Slope oil spills provided in Appendix I indicate that “very large” spills, of greater than 100,000 gallons, also occur with non-zero frequency and should not be ignored.²⁵⁸ This is of heightened concern because much of the Lease Program area is either shoreline or wetlands, where cleanup of oil may be very difficult.²⁵⁹

Considering the inevitability of spills in the Lease Program area, the Final EIS fails to adequately analyze the impacts and risks of spills on migratory birds. First, the Final EIS’s treatment of marine spill impacts in the Final EIS is contradictory and inadequate. The Final EIS

²⁵³ See, e.g., Final EIS at S-448, S-449, S-451, S-457. In one case, this statement is directly coupled with the admission that “detailed data on many species do not exist.” Final EIS at S-449.

²⁵⁴ *Nat. Res. Def. Council, Inc. v. Hodel*, 865 F.2d 288, 298 (DC Cir. 1988).

²⁵⁵ *Earth Island Inst. v. U.S. Forest Service*, 442 F.3d 1147, 1154 (9th Cir. 2006).

²⁵⁶ See *Spill: The Wreck of the Exxon Valdez*, Final Report, Alaska Oil Spill Commission (Feb. 1990); Exxon Valdez Oil Spill Restoration Plan, 2014 Update: Injured Resources and Services, Exxon Valdez Oil Spill Trustee Council (2014).

²⁵⁷ Final EIS at 3-49.

²⁵⁸ *Id.* at Table I-5, I-4.

²⁵⁹ *Id.* at 3-79.

states that the effect of a spill in marine waters is projected to exceed acute toxicity levels, but to be “short term and localized.”²⁶⁰ However, the same section notes that “spills to water bodies during [spring ice breakup] are likely to be widely dispersed and difficult to contain or clean up”²⁶¹, and that “potential spills in the coastal zone” could impact water quality across the international boundary.²⁶² The Final EIS wholly fails to assess the grave environmental impacts of such a major event. Further, these conflicting statements (either any marine spill would be limited and short-term, or the oil would persist in such quantities as to affect the environment tens or hundreds of miles away) suggest that BLM failed to take a “hard look” at the impacts of a spill in marine waters. The Supplemental EIS must adequately discuss the significant environmental impacts of such a large spill including the possible consequences to birds and other wildlife.

Second, the Final EIS fails to adequately analyze the degree of risk of spills to migratory birds. The Final EIS notes that spills are possible in the Lease Program Area, that large spills “do occur,” and that birds could be vulnerable. While the Final EIS describes numerous short-term and long-term effects in general terms, there is no specific discussion of the degree of risk, which species are likely to be affected, or the potential impact on populations.²⁶³ The Final EIS appears to simply accept the possibility that there would be harmful effects on birds and to assume that these effects would not be consequential.²⁶⁴

The Supplemental EIS must remedy this deficiency by addressing the specific degree of threats to migratory birds and bird populations. Given that threatened spectacled eiders are known to nest in at least part of the Lease Program area, the potential for a large spill to negatively impact their populations must be addressed. While the Final EIS acknowledges that “critical habitat for Steller’s and spectacled eiders” could be affected by a spill along the marine transport route, there is no discussion of whether such spills could further jeopardize these species.²⁶⁵ Rather than inaccurately downplaying the likelihood of a significant oil spill, the Supplemental EIS must squarely address the chances of such events and explain in detail the probable consequences.

²⁶⁰ *Id.* at 3-74.

²⁶¹ *Id.* at 3-79.

²⁶² *Id.* at 3-76.

²⁶³ *Id.* at 3-129 to 3-130.

²⁶⁴ The Final EIS repeatedly states, without analysis, that “no bird species is anticipated to face population level impacts.” *See* n. 252, *supra*.

²⁶⁵ Final EIS at 3-130.

In addition to spills of crude oil itself, work in the Lease Program area carries the risk of spills of substances such as diesel or aviation fuel or of contaminated drilling water. All action alternatives considered in the Final EIS, including Alternative B, unlawfully selected in the ROD as the preferred alternative,²⁶⁶ rely on ROPs for protection against such spills. ROP 3 is cited as protecting riparian habitats.²⁶⁷ This ROP allows for a significant amount of fuel—up to 210 gallons—to be stored within floodplains and without a required minimum distance to water. The Supplemental EIS should address the risk of a spill of this significant amount of fuel oil into a river and its potential impact on wildlife, including migratory birds.

- b. The Supplemental EIS must address in detail how the Lease Program’s impacts on habitat would impact migratory birds.

Surface occupancy by roads, drilling pads and other infrastructure is expected to impact migratory birds by disrupting their habitat. While each alternative purports to limit surface occupancy to a total of 2000 acres, the “spider web” nature of the network of roads, pads, drilling facilities, and pipelines to be developed means that disturbances to nesting or staging birds could be distributed over far more than 2000 acres. BLM’s erroneous view of PL 115-97 as limiting surface occupancy to 2000 acres *at any given time*, rather than in total throughout leasing and development, would further increase the total amount of habitat subject to disturbance. This pattern of development would also lead to significant habitat fragmentation. For the representative “anchor field” with 750-acre footprint, described in the Final EIS, BLM estimates that a total of 11,820 acres would be within 656 feet (200 meters) of a developed area and therefore subject to disturbance.²⁶⁸ Extrapolated to the full amount of development contemplated in BLM’s scenario, the total is 31,000 affected acres, or 2 percent of the entire Lease Program area.²⁶⁹

The Final EIS addresses how this large amount of habitat disturbance would affect migratory birds only in passing. Despite acknowledging that “[p]otential impacts of disturbance and displacement by summertime construction and operations would be long term and may affect . . . nesting success for some birds near facilities,” the Final EIS once again concludes that habitat disturbance is “unlikely to affect regional or global population sizes or nesting densities of breeding birds.”²⁷⁰ This conclusory assertion is unsupported by any citation or analysis. In fact, evidence shows that some species of birds are sensitive to disturbance by human activity at

²⁶⁶ See discussion *supra* in Sections II B 2 and 4.

²⁶⁷ *Id.* at 2-20.

²⁶⁸ Final EIS at 3-120.

²⁶⁹ *Id.*

²⁷⁰ *Id.* at 3-126.

distances far greater than 656 feet, which would greatly increase the area of impacts.²⁷¹ Shorebird density has been found to be lower near roads & gravel pads.²⁷² Further, the areas impacted by ice roads were not included in the BLM's calculations. The Final EIS notes that habitat alteration from ice roads is "likely," and that vegetation damage from ice roads is most severe in tundra and shrub habitats, which support passerines, ptarmigan and some shorebirds.²⁷³ But without some estimation of the total number of ice roads to be constructed, along with their length and location, it is impossible to fully estimate the impact that they would have on migratory birds.

The Final EIS also fails to adequately address the Lease Program's impacts on migratory birds in riparian areas. Riparian areas are especially sensitive to disturbance, and are important habitat for many bird species including shorebirds and waterfowl.²⁷⁴ The Final EIS describes required setbacks (which would carry No Surface Occupancy restrictions) from major lakes, rivers and streams, but not for all waterways.²⁷⁵ The NSO restriction would bar "permanent oil and gas facilities," but not all operations, within the setbacks. Under the BLM's erroneous interpretation of PL 115-97, sec. 20001(c)(2), unlimited construction of rights-of-way (which fragment habitat beyond the actual right-of-way footprint) and river crossings, as well as gravel mining, would be allowed within the otherwise closed setback areas to facilitate development of leased areas.²⁷⁶ As a result, not all waterways are protected,²⁷⁷ and even those which are on paper set aside from development would be subject to significant impacts. The latter impacts were completely ignored in the Final EIS, a deficiency which must be addressed in the Supplemental EIS.

While Alternative D describes a bar on leasing or new infrastructure in areas near some important springs or aufeis²⁷⁸ areas, this provision is not applicable to the preferred alternative

²⁷¹ See discussion *infra* in Section II D 5 c.

²⁷² NRC 2003 at 120.

²⁷³ Final EIS at 3-121.

²⁷⁴ USFWS 2015 at 4-87.

²⁷⁵ Lease Stipulations 1-3, Final EIS at 2-5 to 2-10.

²⁷⁶ See Lease Stipulation 1, Final EIS at 2-5; *see also* ROD at A-4 to A-5.

²⁷⁷ The barrier islands and lagoons at the Refuge's edge also provide important habitat. As Kaktovik's airstrip is located on a barrier island, project operations that require improvements to the airstrip would affect the barrier island habitat. The SEIS must address the impacts of shoreline alterations, including any improvements to the Kaktovik airstrip (located on a barrier island in the coastal zone), on migratory birds.

²⁷⁸ Aufeis refers to areas where perennial water flow under freezing conditions leads to formation of thick, layered sheets of ice. Final EIS at 3-40. Aufeis is an important habitat feature which helps sustain streamflow in summer, and provides insect relief for caribou. Final EIS at Table 2-3, 2-7.

(Alternative B), and protection of these features under Alternative B would depend on studies yet to be performed.^{279, 280}

Under any action alternative, the Lease Program would have significant long-term effects on the Refuge ecosystems, which must receive a complete discussion in the Supplemental EIS. BLM states, on the one hand, that ROP 35 would “ensure eventual ecosystem restoration to the land’s previous hydrological, vegetation, and habitat condition” and admits on the other that most habitat alteration “will be permanent.”²⁸¹ These flatly contradictory statements demonstrate the lack of substantial analysis of this important question.

The States urge BLM to address these critical deficiencies through a complete analysis of how these widely distributed habitat disturbances resulting from the Lease Program would affect migratory bird populations.

- c. The Supplemental EIS must address how migratory birds would be impacted by human presence in the Lease Program area.

Increased human activity in the Arctic can adversely affect migratory bird species.²⁸² This may occur through direct disturbance of birds by human presence, or the increased predator densities that result from location of camps and infrastructure. A study on the Arctic Refuge’s Coastal Plain found that nesting tundra swans left their nests when human observers were as far away as 500 – 2000 meters, and moved > 500 meters from the nests.²⁸³ In the North Slope oil fields, spectacled eider nesting success was lower than in the Yukon-Kuskokwim Delta (which lacks oil development), with the difference apparently associated with increased predation.²⁸⁴ Black brant nesting success was also found to be lower in oilfields, and may have been reduced below the point where it can sustain local populations without in-migration.²⁸⁵ This too was thought to be due to the increased predation resulting from human presence in the area.²⁸⁶

²⁷⁹ Table 2-3, Final EIS at 2-7.

²⁸⁰ The Final EIS 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.

²⁸¹ Final EIS at 3-35, *Id.* at S-544.

²⁸² NRC 2003 at 120–123.

²⁸³ M. J. Monda, *Reproductive Ecology of Tundra Swans on the Arctic National Wildlife Refuge, Alaska*, *The Journal of Wildlife Management* 58, 757–73 n.4 (1994).

²⁸⁴ NRC 2003 at 122.

²⁸⁵ *Id.* at 121.

²⁸⁶ *Id.* at 121.

Considering this evidence, the Supplemental EIS must include an analysis of how migratory birds would be impacted by human presence in the Lease Program area.

- d. The Supplemental EIS must address how migratory birds would be impacted by increased aircraft noise and lead emissions associated with the Lease Program.

Regardless of the alternative selected as the preferred alternative in the Supplemental EIS,²⁸⁷ oil and gas exploration or production in the Refuge would be accompanied by increased use of aircraft, which is the primary means of year-around access to and in the Coastal Plain.²⁸⁸ The Final EIS is vague on the probable extent of increased air traffic, but does note that “use levels could be up to ten times current use levels if air traffic levels at the Deadhorse Airport are indicative of future air traffic levels at Kaktovik Airport.”²⁸⁹ Importantly, much of the oil industry-related aircraft noise from the Project would likely be closer to the areas within the Refuge used by birds rather than simply flights to or from Kaktovik. But discussion of the impact of such air traffic is essentially absent from the Final EIS, which simply notes that intensity of helicopter flights in summer would vary, and that “impacts . . . would be extensive in geographic scope.”²⁹⁰ In its comment on this issue, USFWS suggests there may be “thousands of helicopter flights” to move people around.²⁹¹ Additionally, although the Final EIS recognizes for all action alternatives that increased use of aircraft will produce a number of pollutant air emissions, including nitrogen oxides, VOCs, and carbon monoxide,²⁹² it makes no mention of the production of lead emissions from the use of aviation fuel²⁹³ (“avgas”) in piston-engine aircraft. Studies demonstrate that proximity to piston-engine aircraft traffic causes a dose-responsive increase of blood lead levels in children, with those living within 500 m of an airport at which planes use leaded avgas

²⁸⁷ As discussed *supra* in Section II A and Sections II B 2 and 4, BLM should select as preferred the no-action alternative because none of the action alternatives evaluated will likely be compatible with the Coastal Plain’s conservation purposes. BLM should only select a least impactful alternative if it results in minimal harm to the Coastal Plain’s environment and arctic ecosystem compatible ANILCA, the Refuge Act, and the Coastal Plain’s conservation purposes.

²⁸⁸ The increase would be most significant in Alternative B, unlawfully selected in the Final EIS and ROD as the preferred alternative, *see* discussion *supra* in Sections II B 2 and 4, where aircraft noise and impacts would be widespread and impact much of the coastal plain area.

²⁸⁹ Final EIS at 3-27.

²⁹⁰ Final EIS at 3-127.

²⁹¹ Final EIS at S-530.

²⁹² Final EIS at 3-14 to 3-18.

²⁹³ Since elimination of lead as an additive in fuel for terrestrial vehicles, aviation gasoline is now the largest source of lead emitted into the atmosphere in the United States. Marie Lynn Miranda et al., *A Geospatial Analysis of the Effects of Aviation Gasoline on Childhood Blood Lead Levels*, 119 *Env’t Health Persp.* 10, 1513–16 (Oct. 2011).

measuring higher blood lead levels than other children.²⁹⁴ Lead exposure in birds and other wildlife alike, even at low levels, is associated with adverse health effects and severe developmental harm.²⁹⁵

The Final EIS should fully analyze how migratory birds would be impacted by the use of aircraft from the Lease Program. Staging snow geese are readily disturbed by aircraft activity. Studies have found that the geese are readily flushed from their feeding areas by helicopters or fixed-wing aircraft within a distance of 5-6 km, and as a result were displaced between 1.8 and 5.9 km from their feeding sites.²⁹⁶ The USGS authors found that displacement of geese from feeding areas was of “special concern,” noting that they “cannot assume that snow geese would be able to locate adequate feeding habitat in other regions” if they were displaced from the Refuge Coastal Plain.²⁹⁷ Because of this, the USGS study recommended that aircraft activity be “closely managed,” and restricted when large numbers of geese were present.²⁹⁸ While impact of aircraft on snow geese is briefly discussed in the Final EIS,²⁹⁹ there is no assessment of how these impacts would ultimately affect the population of these birds or whether the areas used by the geese might change as a result. The Supplemental EIS must contain an assessment of how exploration, drilling, and operations under the restrictions described in the alternatives would affect feeding areas and the potential to displace geese from these important riparian zones.³⁰⁰

Further, the Supplemental EIS must consider alternatives which restrict leasing, and the associated aircraft activity, to smaller areas of the coastal plain. In this light, the Supplemental EIS must consider that leasing *any* area of the Coastal Plain will result in associated aircraft activity that will have significant impacts on migratory birds.

²⁹⁴ Sammy Zahran et al., *The Effect of Leaded Aviation Gasoline on Blood Lead in Children*, 4 J. Assoc. Environ. Res. Economists, 2, 577 (June 2017), <https://www.journals.uchicago.edu/doi/abs/10.1086/691686?journalCode=jaere&Miranda,n.294, supra>.

²⁹⁵ See, e.g., Deborah J. Pain, D.J. et al., *Effects of lead from ammunition on birds and other wildlife: A review and update*, 48 *Ambio*, 9, 935–53 (Sept. 2019) (“the toxic effects of lead are broadly similar in all vertebrates and well known from numerous experimental and field studies.”)

²⁹⁶ Final EIS at 3-14 to 3-18; Rolph A. Davis & Allen N. Wiseley, Normal behavior of snow geese on the Yukon-Alaska North Slope and the effects of aircraft-induced disturbance on this behavior. Ch. 2 (1973) (Davis 1973).

²⁹⁷ Davis 1973.

²⁹⁸ *Id.* The authors suggested that during autumn staging, aircraft should be restricted within 6 km of frequently used areas between the Okpilak and Aichilik Rivers, and across the entire staging area in years when more than 100,000 geese are present on the Refuge.

²⁹⁹ Final EIS at 3-98.

³⁰⁰ Molting black brant have also been found to be sensitive to disturbance by aircraft. Final EIS at 3-124.

- e. The Supplemental EIS must address how alterations in the hydrological regime due to gravel mining, water extraction, and blockage of water flow would impact migratory birds.

The impacts of Program-related water withdrawals are likely to include changes in the active layer groundwater levels, lake-shoreline location and exposure of lakebed to wind and water erosion, local drainage patterns near lakes and interconnectivity of lakes, as well as potential drying of vegetation. These impacts would supposedly be mitigated through ROPs 8 and 9 which require water withdrawals to be conducted in such a manner as to maintain natural hydrologic regimes in order to conserve fish and wildlife and their habitats.³⁰¹ However, the Final EIS admits that water withdrawals may exceed the rate of recharge, “resulting in lower long-term water levels,” and that long-term effects of water withdrawals “are likely to occur and may be widespread.”^{302, 303} Coupled with predictions that the Coastal Plain will be drier under climate change conditions,³⁰⁴ this raises concerns that the water supplies needed by migratory birds may be imperiled by the Lease Program. The Supplemental EIS must address these concerns and analyze how alterations in the hydrological regime due to gravel mining, water extraction, and blockage of water flow would impact migratory birds. The implications of large local water demands should be further discussed in the Supplemental EIS.

6. The Supplemental EIS must consider the Lease Program’s impacts on migratory birds under the climate conditions reasonably foreseeable during the Program’s lifetime.

The Final EIS evaluates the proposed alternatives under a basic assumption that future conditions will be similar to those now observed, albeit with mild caveats relating to climate change. This is inadequate for two major reasons. First, the Arctic is particularly vulnerable to increased greenhouse gas concentration in the atmosphere and is warming much faster than the globe on average.³⁰⁵ Given that the timeline for oil production from the Lease Program would be

³⁰¹ *Id.* at 3-72.

³⁰² *Id.* at 3-122.

³⁰³ The Final EIS estimates that a total of 55,000 acre-feet of ice-free volume exists in the lakes of the Lease Program area. *See* Final EIS at 3-67. Ice road construction would be a major use of fresh water and requires from one to 1.5 million gallons of water (3-4.5 acre-feet) per mile. The anticipated number of miles of ice roads that would be constructed annually is not specified in the Final EIS, and would be expected to vary with the amount and distribution of Program activity. Construction of a large number of ice roads could easily require a substantial portion of the water available in any given part of the Lease Program area.

³⁰⁴ Final EIS at 3-86.

³⁰⁵ *Id.* at 3-2. *See* discussion *supra* in Section II C.

as long as 100 years, it is important to understand how migratory birds would be impacted under the anticipated future Arctic conditions. Examples of likely impacts include erosion or disintegration of barrier islands, and reduced water availability on the Coastal Plain.³⁰⁶

Second, because migratory birds travel great distances and experience a wide variety of habitats, the effects of climate change in all parts of the migrations must be considered. Species which are not currently at risk may become threatened in the future. Birds may experience changes in water supply at wintering areas or stopovers, temperature changes along their migration routes, changes in food availability, and altered timing of migration. Any or all of these factors could increase the susceptibility of migratory birds to impacts occurring in the Arctic Refuge.

As a baseline, the SEIS must assess the impacts of the Lease Program alternatives on migratory birds under 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.

7. The Supplemental EIS must explain how the Lease Program is compatible with the Coastal Plain’s conservation purposes with respect to protection of migratory birds.

As discussed *supra* in Section II B 4, the Refuge Act and Section 1002 of ANILCA³⁰⁷ govern administration of the Arctic Refuge, including the Coastal Plain. Under ANILCA, the Secretary must administer the Arctic Refuge “[i]n accordance with the laws governing the administration of units of the National Wildlife Refuge system, and this act.”³⁰⁸ ANILCA identifies four conservation purposes for the Arctic Refuge: 1) conservation of wildlife and their habitat (including migratory birds); 2) fulfillment of international treaty obligations with respect to wildlife and their habitats; 3) protection of water quality and quantity; and 4) opportunity for continued subsistence uses by local residents.³⁰⁹

While ANILCA does provide for “an analysis of the impacts of oil and gas exploration, development, and production,” it authorizes “exploratory activity within the coastal plain *in a manner that avoids significant adverse effects* on the fish and wildlife and other resources.”³¹⁰

³⁰⁶ USFWS 2015 at 4-61; Final EIS at 3-86 (Climate change is expected to result in increased temperatures and a longer growing season, which in turn would increase evapotranspiration and lead to “landscape-scale drying.”)

³⁰⁷ ANILCA, § 303(2)(B), Pub L. No. 96-487, 16 U.S.C. § 3142.

³⁰⁸ *Id.* at § 304(a).

³⁰⁹ *Id.*, at § 303(2)(B), Pub L. No. 96-487 . *See* discussion *supra* in Section II D.

³¹⁰ 16 U.S.C. § 3142(a) (emphasis added).

Guidelines for exploration shall include “prohibitions, restrictions, and conditions” that the Secretary deems necessary to “ensure that exploratory activities do not significantly adversely affect the fish and wildlife, their habitats, or the environment.”³¹¹

Rather than ensuring that the Lease Program would not have significant adverse effects on migratory birds, the alternatives reviewed and considered in the Final EIS are likely to have significant adverse impacts on numerous bird species.³¹² Moreover, information is simply lacking about use of many areas of the Arctic Refuge by numerous migratory bird species.³¹³ Without more complete knowledge of what bird species are present and which features of the Refuge environment are important to their survival, it will be impossible to tailor any exploration and drilling program to avoid significant impacts. The Supplemental EIS must fully explain how any action alternative reviewed for the Lease Program is compatible with the purposes of the Refuge and with ANILCA, and how any leases would be conditioned to protect migratory birds. As discussed *supra* in Section II A and Sections II B 2 and 4, BLM should select as preferred the no-action alternative because none of the action alternatives evaluated will likely be compatible with the Coastal Plain’s conservation purposes, including protection of migratory birds. BLM should only select a least impactful alternative if it results in minimal harm to the Coastal Plain’s environment and arctic ecosystem compatible ANILCA, the Refuge Act, and the Coastal Plain’s conservation purposes to protect migratory birds that is supported by robust and sound legal and technical analysis.

8. The Supplemental EIS must analyze how the Lease Program will comply with the United States’ treaty obligations to protect migratory birds.

The United States is a signatory to several international treaties protecting migratory birds.³¹⁴ Where treaty obligations are based on a natural resource, they may be addressed for NEPA

³¹¹ 16 U.S.C. § 3142(d)(1).

³¹² Impacts including disturbance by human presence and aircraft, increased predation due to infrastructure presence, habitat disturbance or destruction, and the risk of oil spills are among the adverse effects on migratory birds predicted by the Final EIS. See Final EIS at 3-24 to 3-130.

³¹³ See discussion *supra* in Section III D 3; US FWS and BLM, “Rapid Response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2001” (Feb. 16, 2018) (Rapid Response Resource Assessments); Final EIS at 3-107.

³¹⁴ 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

purposes through discussion of how the underlying resource would be affected and measures for its protection.³¹⁵ The Supplemental EIS must therefore provide an adequate discussion of how migratory birds would be affected by the Program. As discussed above, the Final EIS wholly failed to provide this discussion.

In this case, a specific statute also applies. The Migratory Bird Treaty Act (MBTA), 16 U.S.C. § 703–712, implements the United States’ treaty obligations. The MBTA provides that any decision to allow take of migratory birds must factor in “due regard to the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds.”³¹⁶ Accordingly, BLM’s environmental review must consider these parameters for migratory birds in the Project area. As discussed above, the Final EIS falls far short of a thorough consideration of these factors and the Supplemental EIS must correct this omission.

The Final EIS’s consideration of obligations under the MBTA is also based on an incorrect and outdated legal standard. BLM’s discussion of the MBTA is based on an interpretation that incidental take is permissible and that the Act “only requires no birds are deliberately killed and no nests deliberately destroyed.”³¹⁷ This view is based on Solicitor Opinion M-37050, issued December 17, 2017, which stated that the Act barred only intentional acts aimed at birds, such as hunting, and permitted incidental take. However, this Opinion was not only vacated by a Federal Court as inconsistent with the language of the Act, but has since been permanently withdrawn by the Department of the Interior.³¹⁸ The SEIS must fully address protection of migratory birds under the currently applicable law and government policy.

As discussed above, the Final EIS contains admittedly incomplete information about the populations and distribution of numerous migratory bird species in the Coastal Plain and how these species would be affected by oil exploration and drilling. In order to adequately address possible impacts on migratory birds and to comply with the United States’ treaty obligations, the Supplemental EIS must adequately and completely examine how migratory birds would be

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 Eng’rs*, 255 F.Supp.3d 101, 131 (D.D.C. 2017).

³¹⁶ 16 U.S.C. § 704.

³¹⁷ Final EIS at S-472.

³¹⁸ *Nat. Res. Def. Council v. U.S. Dep’t of the Interior*, 478 F.Supp.3d 469, 481 (S.D.N.Y. 2020); U.S. Department of the Interior Opinion M-37065 (Mar. 8, 2021). A final Rule revoking this interpretation is to be published in the Federal Register.

affected by the proposed alternatives. This analysis must be done using the correct MBTA standard, which would bar incidental or unintentional take.³¹⁹

9. The Supplemental EIS must correct deficiencies in identification and description of measures to mitigate impacts of the Lease Program on migratory birds.

The Final EIS fails to meaningfully incorporate and analyze mitigation measures to protect migratory birds from the potentially severe impacts of the Lease Program. The Final EIS as released presents a long list of potentially serious impacts on migratory birds, ranging from loss of habitat or disturbance of birds using the refuge to increased mortality due to predation and possibly oil spills. For almost every risk that the project poses to birds, inadequate or ineffective mitigation policies are proposed. Even so, BLM persists in its assumption that there will not be species-level impacts on any migratory birds. The States urge BLM to provide a more thorough discussion of how impacts to migratory birds can be reduced or otherwise mitigated.

- a. The Supplemental EIS must address and meaningfully consider the least impactful alternative that avoids, minimizes, and mitigates to the greatest extent possible impacts on migratory birds.

As discussed supra in Section II B 2, the Supplemental EIS must meaningfully address a least impactful alternative, that with lower impacts on migratory birds. Among the alternatives reviewed in the Final EIS, Alternative B, unlawfully selected as the preferred alternative, both opens the largest amount of territory to leasing and is, in nearly every way, the least protective alternative with respect to migratory birds.

In contrast, Alternative D is the most protective, and poses the lowest degree of threat to migratory birds. As the Final EIS notes, “Unlike other alternatives, Alternatives D1 and D2 would protect high-value waterbird habitats in the entire Canning River delta and adjacent lakes district with an NSO designation (Lease Stipulation 2).”³²⁰ Alternative D1 or D2 would also reduce the risk to birds posed by accidental spills; for example, those Alternatives require that fuel be stored at a much greater distance from waterbodies than does Alternative B (500 feet in Alternatives D1 or D2 vs. 100 feet in Alternative B). But nothing in the FEIS suggests that the amount of oil produced would be different under the different Alternatives, and in particular there is no showing

³¹⁹ *NRDC*, 478 F.Supp.3d at 488.

³²⁰ Final EIS at 3-133.

that Alternative B would result in production of more oil than Alternative D (or even a more-protective Alternative that leased only the minimum 800,000 acres).

The impacts analysis presented in no way “inform[s] the public that [BLM] has indeed considered environmental concerns in its decision making process.”³²¹ To the contrary, the discussion of alternatives in the Final EIS strongly suggests that Alternative B was selected, not because it was the best alternative in terms of “creat[ing] and maintain[ing] conditions under which man and nature can exist in productive harmony,” as NEPA demands,³²² but with the goal of opening up the Refuge to leasing to the maximum extent possible, regardless of the impacts on migratory birds. This is not permissible under NEPA.

The most straightforward and effective way to mitigate for possible impacts would be to select as the preferred alternative the least impactful alternative, as discussed *supra* in Section II B 2, with the lowest possible projected impacts on migratory birds. The Supplemental EIS must explore this approach and meaningfully consider the least impactful and no-action alternatives impacts on migratory birds.³²³

- b. The Supplemental EIS must consider mitigation for habitat losses due to changes in hydrology caused by Lease Program activities.

The Refuge Coastal Plain contains fewer lakes and therefore less available water than areas of the North Slope that have been previously developed (i.e., the NPR-A).³²⁴ Exploration and development under any alternative would result in very significant water use for purposes including ice road construction. The amount of water used may result in exceeding natural recharge rates, which would result in changes in lake ecosystems.³²⁵ Reduced populations of fish or invertebrates in lakes would make them less suitable as habitat for waterbirds, songbirds, and some loon species.³²⁶ Lowered lake levels may eliminate important nesting sites on islands and

³²¹ *Earth Island Institute*, 442 F.3d at 1153–54.

³²² 42 U.S.C. § 4331(a).

³²³ As discussed *supra* in Section II A and Sections II B 2 and 4, BLM should select as preferred the no-action alternative because none of the action alternatives evaluated will likely be compatible with the Coastal Plain’s conservation purposes. BLM should only select a least impactful alternative if it results in minimal harm to the Coastal Plain’s environment and arctic ecosystem compatible ANILCA, the Refuge Act, and the Coastal Plain’s conservation purposes and is supported by robust and sound legal and technical analysis.

³²⁴ Final EIS at 3-96.

³²⁵ *Id.*, at 3-122. While ROP 9 is intended to place limits on water withdrawals, the Final EIS acknowledges that withdrawals could exceed recharge even with ROP 9 in place.

³²⁶ *Id.*

peninsulas. The changing climate may further reduce available water, which would exacerbate any such impacts. The Supplemental EIS must include discussion of measures that would adequately protect water supplies and mitigate water-related impacts on migratory birds.

- c. The Supplemental EIS must consider mitigation for disturbance to migratory birds due to construction or surface alteration.

Impacts to habitat in the project area are projected to be long-term and to occur over large areas. Habitat loss or alteration due to gravel pads, roads, and material sites would occur (per the BLM's estimate) over almost 20,000 acres.³²⁷ Habitat alteration due to fugitive dust, thermokarsting, and water impoundments is expected to intensify with time, so that impacts to birds would also likely worsen over the life of the Project. Mitigation measures for habitat alteration would include "minimizing footprints in wetlands," where bird densities are generally highest. However, this may not represent a net reduction in impact to birds. The Final EIS acknowledges that impacts on species using uplands or well-drained habitat (including passerines, ptarmigans, and some waterfowl and shorebird species) would be increased by siting footprints away from wetlands.³²⁸ Lease Stipulation 1 (Rivers & Streams) establishes setbacks from many water bodies where most permanent structures would be prohibited; however, there are many exceptions to this prohibition and there would likely be substantial activity near this water bodies.³²⁹

The Supplemental EIS must discuss mitigation approaches that will result in actual reduction of impacts from habitat loss to migratory birds, including restricting project activities to smaller total areas.

- d. The Supplemental EIS must discuss mitigation approaches that will reduce impacts of aircraft noise and air lead emissions on migratory birds.

As discussed above, the increased aircraft traffic associated with the Project will likely cause disturbance to numerous migratory bird species. The only mitigation measure for aircraft noise addressed in the Final EIS is ROP 34³³⁰, which requires that overflights of snow geese staging areas in late summer be "avoided" but does not bar such aircraft use. Mitigation for noise effects on other migratory birds is not specifically addressed. In response to a public comment

³²⁷ *Id.*

³²⁸ *Id.* at 3-123.

³²⁹ *Id.* at 2-5 to 2-6.

³³⁰ *Id.* at 2-34.

regarding aircraft disturbance of snow geese, BLM responded by stating “ROPs and lease stipulations provide indirect mitigation for other species.”³³¹ BLM also notes that aircraft use plans would be submitted for specific uses, but the criteria used to evaluate these plans are not specified.³³² The Final EIS makes no mention of any measure to mitigate or to altogether avoid the impacts on migratory birds of lead emissions from the use of avgas in piston-engine aircraft.

The Supplemental EIS should discuss concrete plans for avoiding aircraft impacts on migratory birds, including standards by which aircraft use plans would be evaluated. The States urge BLM to incorporate and discuss mitigation measures for migratory birds in its analysis to ensure the Project’s environmental consequences have been fairly evaluated.³³³

III. CONCLUSION

For all the above reasons, the States urge BLM to thoroughly review the Lease Program’s environmental impacts in the Supplemental EIS, focusing on and correcting legal defects identified in the States’ Complaint challenging the Lease Program’s Final EIS and ROD. These defects include BLM’s: (a) failure to consider a reasonable range of alternatives; (b) unlawful interpretation of surface development limits in in the Tax Act; (c) inadequate evaluation of greenhouse gas emissions and climate impacts; and (d) insufficient review of impacts on migratory birds. No alternatives analyzed in the Final EIS or adopted in the ROD sufficiently avoid, minimize, and mitigate environmental harms to assure compatibility with the Coastal Plain’s conservation purposes, ANILCA, and the Refuge Act. Thus, based on the current record, BLM should adopt as preferred the no-action alternative, canceling the issued leases and any future lease sales. Should BLM instead determine that it must select as preferred an action alternative, it must correct all legal deficiencies in the Final EIS and ROD and develop a new action alternative supported by thorough and sound legal and technical analysis with minimal environmental impacts that are unequivocally compatible with the Coastal Plain's conservation purposes.

³³¹ *Id.* at S-460.

³³² *See* ROP 34, Final EIS at 2-35; *Id.* at S-270.

³³³ *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998).

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