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BEFORE THE SECRETARY OF THE INTERIOR

PETITION TO THE UNITED STATES BUREAU OF LAND MANAGEMENT, AN AGENCY OF THE DEPARTMENT OF INTERIOR

Filed on behalf of WildEarth Guardians

Petition Requesting a Programmatic Environmental)	
Impact Statement Addressing the Bureau of Land)	
Management's Oil and Gas Leasing Program and)	<i>Submitted Jan. 20, 2016</i>
Formal Adoption of the Council on Environmental)	
Quality's Guidance for Greenhouse Gas Emissions)	
And Climate Change Impacts)	

I. INTRODUCTION

In 2014, President Obama described climate change as an “urgent and growing threat . . . that will define the contours of this century more dramatically than any other.”¹ Pope Francis expressed similar concern in his recent encyclical, stating “[t]he climate is a common good, belonging to all and meant for all,” and that climate change “represents one of the principal challenges facing humanity in our day.”² It is a “moral imperative [to] assess[] the impact of our every action . . . on the world around us.”³ “There is an urgent need to develop policies so that, in the next few years, the emission of carbon dioxide and other highly polluting gases can be drastically reduced.”⁴ Recognizing this need, 195 nations recently agreed “that climate change represents an urgent and potentially irreversible threat to human societies and the planet.”⁵

¹ White House, Office of the Press Secretary, *Remarks by the President at U.N. Climate Change Summit* (Sept. 23, 2014), *archived at* perma.cc/9U8K-KUTT.

² Pope Francis, Encyclical Letter, *Laudato Si'*, On Care For Our Common Home ¶¶ 23, 25 (May 24, 2015), *archived at* perma.cc/K8XL-EPMT.

³ *Id.* at ¶ 208.

⁴ *Id.* at ¶ 26.

⁵ United Nations Framework Convention on Climate Change, Adoption of the Paris Agreement, Nov. 30–Dec. 11, 2015, *archived at* perma.cc/D76U-BDR4. A copy of this Agreement is attached to this Petition as Exhibit (“Ex.”) 1.



In his final, historic State of the Union address, President Barack Obama reiterated his commitment to fighting climate change.⁶ Committing “to accelerate the transition away from old, dirtier energy sources,” President Obama made a powerful promise “to change the way we manage our oil and coal resources so that they better reflect the costs they impose on taxpayers and our planet.”⁷ Three days later, the U.S. Department of the Interior (“DOI” or “Interior”) announced the launch of a programmatic environmental review of its federal coal leasing program under the National Environmental Policy Act (“NEPA”), 42 U.S.C. § 4321 *et seq.*⁸ Citing the looming threat of climate change, along with declining coal prices and the socioeconomic impacts of Interior’s coal leasing program, Secretary Jewell further ordered a moratorium on new coal leases while the review is underway, stating that “we’re taking the prudent step to hit pause on approving significant new leases so that decisions about those leases can benefit from the recommendations that come out of the review.”⁹

The climate change rationale for programmatic review of Interior’s coal leasing program applies with an equally great urgency to the agency’s oil and gas leasing program. The scope of the Bureau of Land Management’s (“BLM’s” or “Bureau’s”) oil and gas leasing program is unrivaled, spanning 258 million surface acres of land managed by the Bureau, 57 million surface acres where the minerals are federally owned but the surface is under non-federal (mostly private) ownership,¹⁰ and 385 million acres whose surface is managed by other federal agencies.¹¹ BLM estimates that about half of these 700 million subsurface acres contain oil and/or natural gas¹²—both primary targets in our Nation’s battle against climate change.

BLM’s oil and gas leasing program’s significant contribution to climate change reflects the program’s broad geographic reach. From 2008–2010, GHG emissions from onshore federal oil and gas reserves extracted by private leaseholders resulted in the release of 612,309,429 metric tons of carbon dioxide equivalent (“MTCO₂e”).¹³ By comparison, from 2008–2010, the combined GHG emissions from Belize, Costa Rica, El Salvador, Guatemala, Honduras,

⁶ White House, Office of the Press Secretary, *Remarks of President Barack Obama—State of the Union Address As Delivered* (Jan. 13, 2016), *archived at* <https://perma.cc/NH5E-UTUW>.

⁷ *Id.*

⁸ U.S. Dep’t of the Interior (“DOI”), Office of the Secretary, *Secretary Jewell Launches Comprehensive Review of Federal Coal Program* (Jan. 15, 2016), *archived at* <https://perma.cc/E6T6-477W>; *see also* DOI, Order No. 3338: Discretionary Programmatic Environmental Impact Statement to Modernize the Federal Coal Program (Jan. 15, 2016), *archived at* <https://perma.cc/UVX4-YMBW>. A copy of Secretary Jewell’s order requiring the Bureau of Land Management to undertake a PEIS of the federal coal program (Order No. 3338) is attached to this Petition as Ex. 2.

⁹ DOI, *Secretary Jewell Launches Comprehensive Review of Federal Coal Program*, *supra* note 8.

¹⁰ Land where the minerals are federally owned but the surface is non-federally owned is called “split-estate” land. *See* Bureau of Land Management (“BLM”), Split Estate, *archived at* perma.cc/VW2D-HUV6.

¹¹ *Id.*

¹² *Id.*

¹³ STRATUS CONSULTING, GREENHOUSE GAS EMISSIONS FROM FOSSIL ENERGY EXTRACTED FROM FEDERAL LANDS AND WATERS: FINAL REPORT 13 (2012) (“2012 Stratus Report”), *archived at* perma.cc/4LWM-CY3V; *see also* § II.D., *infra*. This figure includes the release of 49,885 metric tons of methane (“MTCH₄”), 612,240,176 metric tons of carbon dioxide (“MTCO₂”), and 9,684 metric tons of nitrous oxide (“MTN₂O”) into the atmosphere. 2012 Stratus Report at 13. A copy of the 2012 Stratus Report is attached to this Petition as Ex. 3.



Nicaragua, and Panama resulted in the release of 549,760,000 MTCO₂e.¹⁴ In other words, during these years, BLM's oil and gas leasing program contributed more annual GHG emissions to the atmosphere than all of the approximately 40 million people of Central America combined.

Experts project little change to this emissions profile in the foreseeable future. With the advent of novel, and controversial, fracking and oil drilling technologies, the United States is experiencing an unprecedented oil and gas boom. According to Interior's own estimates, oil and gas production on federal lands soared 81 percent between 2008–2014.¹⁵ The softening demand for coal only deepens the federal government's support for domestic oil and gas production—the assumed replacement fuels for coal.¹⁶ And, the recent Congressional agreement to end the nation's forty-year-old crude oil export ban fuels speculation in favor of this market trend over the long term. Any one of these factors, taken alone, leads to the same conclusion—a federal commitment to expanded oil and gas production, leading to increased GHG emissions and frustrating the nation's recent international commitment to reduce GHG emissions—one of Interior's justifications for its programmatic review of coal.¹⁷

Unsurprisingly, the sudden and dramatic increase in domestic oil production has contributed to the recent plunge in oil prices, which have dipped to their lowest level in more than a decade. This market shift, in turn, raises serious questions about the economic benefit of Interior's oil and gas leasing program to the American taxpayer.¹⁸ In announcing Interior's regulatory efforts to modernize its oil and gas royalty scheme, Secretary Jewell acknowledged that “[i]t's time to have a candid conversation about whether the American taxpayer is getting the right return for the development of oil and gas resources on public lands.”¹⁹ Citing the similarly declining value of coal, Interior chose to address its identical concerns about coal's “fair return” to the American taxpayer in its programmatic review order.²⁰ No rational distinction may be drawn for Interior's oil and gas program, which demands the same programmatic treatment. And, just as Interior ordered for its coal leasing program, programmatic review of Interior's oil and gas program requires a thorough cost-benefit analysis that accurately accounts for the social cost of carbon.²¹ Programmatic review of Interior's oil and gas leasing program

¹⁴ World Resources Institute, CAIT Climate Data Explorer, Historical Emissions Data (2015), *archived at* <https://perma.cc/9YV6-7ECN>. An Excel spreadsheet with 2008–2010 emissions data from these countries (from the CAIT Explorer) is attached to this Petition as Ex. 4.

¹⁵ BLM, *Interior Department Seeks Public Dialogue on Reform of Federal Onshore Oil and Gas Regulations* (Apr. 17, 2015) (last accessed Jan. 17, 2016), *archived at* <https://perma.cc/WA33-DGZ9>.

¹⁶ *Id.* at 5 (“As reported by EIA, between 2008 and 2013, United States’ coal production fell by 16 percent, as declining natural gas prices and other factors made coal less competitive as a fuel for generating electricity.”); *see also* White House, *Remarks of President Barack Obama—State of the Union Address As Delivered*, *supra* note 6 (“Gas under two bucks a gallon ain’t bad, either.”).

¹⁷ DOI, *Secretary Jewell Launches Comprehensive Review of Federal Coal Program*, *supra* note 8.

¹⁸ Oil and Gas Leasing; Royalty on Production, Rental Payments, Minimum Acceptable Bids, Bonding Requirements, and Civil Penalty Assessments, 80 Fed. Reg. 22148 (proposed Apr. 21, 2015) (to be codified at 43 C.F.R. pt. 3100), *archived at* <https://perma.cc/D8XM-9G4R>.

¹⁹ BLM, *Interior Department Seeks Public Dialogue on Reform of Federal Onshore Oil and Gas Regulations*, *supra* note 15.

²⁰ DOI, Order No. 3338, *supra* note 8, at 7–8.

²¹ *Id.* at 8.



will go a long way toward addressing the need “to change the way we manage our oil and coal resources so that they better reflect the costs they impose on taxpayers and our planet.”²² Finally, while an update of Interior’s programmatic review of its coal leasing program is long overdue, the fact that Interior has *never* conducted a comprehensive PEIS of its oil and gas leasing program cannot be overlooked. In short, Interior’s acknowledged “obligation . . . to ensure the federal coal program . . . takes into account its impacts on climate change”²³ makes the case for concurrent programmatic review of its oil and gas program all the more compelling.

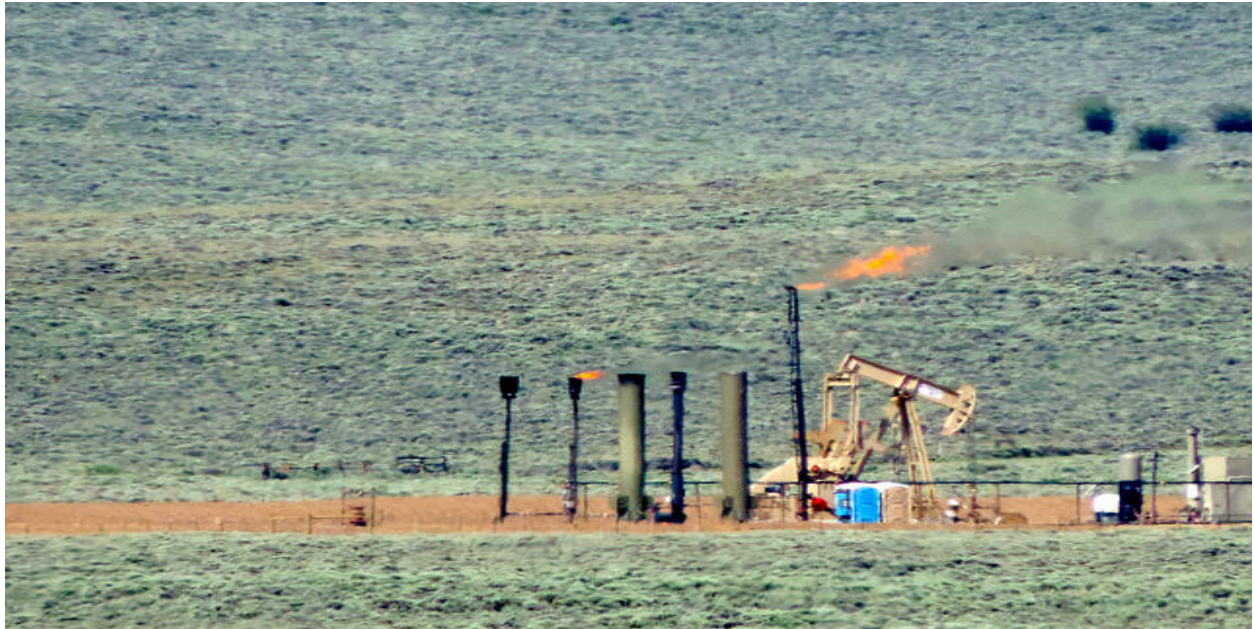


Photo Credit: WildEarth Guardians

In light of the above, and as further discussed below, WildEarth Guardians hereby petitions BLM for the completion of a PEIS evaluating the direct, indirect, and cumulative impacts of BLM’s oil and gas leasing program on climate change, including a quantification of GHG emissions from burning extracted oil and gas. WildEarth Guardians simultaneously petitions BLM to evaluate the programmatic non-climate impacts of its oil and gas leasing program, including increased seismic activity related to fracking, public health and safety impacts associated with fracking, and environmental impacts associated with large numbers of improperly abandoned and unplugged and unreclaimed wells. Consistent with Interior’s approach to coal leasing, pending completion of the PEIS WildEarth Guardians requests a moratorium on all new oil and gas leasing and approvals of applications for permits to drill (“APDs”). This moratorium is a “prudent step . . . so that decisions about those leases can benefit from the recommendations that come out of the review.”²⁴ Pursuant to Administrative Procedure Act (“APA”) section 553(e), WildEarth Guardians further requests that the DOI amend its NEPA regulations to incorporate the Council on Environmental Quality’s (“CEQ”) 2014 revised draft

²² White House, *Remarks of President Barack Obama—State of the Union Address As Delivered*, *supra* note 6.

²³ DOI, *Secretary Jewell Launches Comprehensive Review of Federal Coal Program*, *supra* note 8.

²⁴ DOI, *Secretary Jewell Launches Comprehensive Review of Federal Coal Program*, *supra* note 8.



guidance for GHG emissions and climate change (“2014 Guidance”).²⁵ Lastly, due to the critically important and accelerating effects of climate change, WildEarth Guardians, consistent with APA section 555(e) and 43 C.F.R. § 14.3, requests a prompt response to this Petition.

II. ARGUMENT

A. WildEarth Guardians Holds a Constitutional Right to Petition an Agency, as Codified in the APA, Which Also Guarantees a Prompt Agency Response.

The First Amendment guarantees “the right of the people . . . to petition the Government for a redress of grievances.”²⁶ “The right to petition is cut from the same cloth as the other guarantees of the First Amendment, and is an assurance of a particular freedom of expression.”²⁷ This right “is implicit in ‘[t]he very idea of government, republican in form.’”²⁸ Through the First Amendment, “people ‘may communicate their will’ through direct petitions to [the government].”²⁹

The APA, 5 U.S.C. § 500 *et seq.*, codifies the First Amendment right to petition the government. APA section 553(e) provides that “[e]ach agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.” The rulemaking provisions of the APA “were designed to ensure fairness and mature consideration of rules of general application.”³⁰ “Section 553 is designed to ensure that affected parties have an opportunity to participate in and influence agency decision making.”³¹ The APA also ensures that a federal agency’s judgment is well informed and based upon good information. As the Fifth Circuit has stated,

Congress realized that an agency’s judgment would be only as good as the information upon which it drew. It prescribed [APA] procedures to ensure that the broadest base of information would be provided to the agency by those most interested and perhaps best informed on the subject of the rulemaking at hand.³²

Further, the requirements of the APA “are fundamental to due process.”³³ WildEarth Guardians, therefore, holds a constitutional right to petition BLM, as codified in the APA.

²⁵ Should CEQ release a final version of its guidance by the time of the proposed rulemaking, DOI may incorporate that guidance instead of the current draft guidance.

²⁶ U.S. Const. amend. I; *McDonald v. Smith*, 472 U.S. 479, 482 (1985).

²⁷ *McDonald*, 472 U.S. at 482.

²⁸ *Id.* (quoting *United States v. Cruikshank*, 92 U.S. 542 (1876)).

²⁹ *McDonald*, 472 U.S. at 482 (quoting James Madison in congressional debate on the amendment, 1 Annals of Cong. 738 (1789)).

³⁰ *N.L.R.B. v. Wyman-Gordon Co.*, 394 U.S. 759, 764 (1969).

³¹ *U.S. Steel Corp. v. U.S. E.P.A.*, 595 F.2d 207, 214 (5th Cir. 1979).

³² *Brown Exp., Inc. v. U.S.*, 607 F.2d 695, 701 (5th Cir. 1979).

³³ *Bell Lines, Inc. v. U.S.*, 263 F.Supp. 40, 46 (S.D.W.Va. 1967).



The APA also guarantees WildEarth Guardians the right to a prompt response to its petition. Pursuant to APA section 555(e),

Prompt notice shall be given of the denial in whole or in part of a written application, petition, or other request of an interested person made in connection with any agency proceeding. Except in affirming a prior denial or when the denial is self-explanatory, the notice shall be accompanied by a brief statement of the grounds for denial.

DOI's regulations reiterate the requirement of a prompt response. 43 C.F.R. § 14.3 provides that a petition for rulemaking "will be given prompt consideration and the petitioner will be notified promptly of action taken."

The importance and ongoing effects of climate change further necessitate a timely response. The most recent report by the Intergovernmental Panel on Climate Change ("IPCC") has identified the following climate change-associated risks with high confidence:

- i) Risk of death, injury, ill-health, or disrupted livelihoods in low-lying coastal zones and small island developing states and other small islands, due to storm surges, coastal flooding, and sea level rise;
- ii) Risk of severe ill-health and disrupted livelihoods for large urban populations due to inland flooding;
- iii) Systemic risks due to extreme weather events leading to breakdown of infrastructure networks and critical services such as electricity, water supply, and health and emergency services;
- iv) Risk of mortality and morbidity during periods of extreme heat, particularly for vulnerable urban populations and those working outdoors in urban or rural areas;
- v) Risk of food insecurity and the breakdown of food systems linked to warming, drought, flooding, and precipitation variability and extremes, particularly for poorer populations in urban and rural settings;
- vi) Risk of loss of rural livelihoods and income due to insufficient access to drinking and irrigation water and reduced agricultural productivity, particularly for farmers and pastoralists with minimal capital in semi-arid regions;
- vii) Risk of loss of marine and coastal ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for coastal livelihoods, especially for fishing communities in the tropics and the Arctic; and
- viii) Risk of loss of terrestrial and inland water ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for livelihoods.³⁴

³⁴ IPCC, Summary for Policymakers, in CLIMATE CHANGE 2014: IMPACTS, ADAPTATION, AND VULNERABILITY 13 (2014). Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, *archived at* perma.cc/AKZ7-PPK7. A copy of this summary is attached to this Petition as Ex. 5. For further discussion of the consequences of climate change, see § II.E., *infra*.



Marshall Islands | Photo Credit: Al Jazeera America

This list is not exhaustive and the consequences of climate change are neither remote nor speculative. They are real, immediate, and already are being felt throughout the world, including in the United States. In the words of Secretary of the Interior Sally Jewell:

I see the costs of a changing climate everywhere I go. In Kivalina, Alaska, coastal erosion threatens to wipe out an entire village, and it's one of several that are in danger. In the Marshall Islands, they have to sandbag the airport runway to keep the rising ocean from washing it away. And across the country, communities are facing more extreme wildfires, bigger storms, devastating droughts, disappearing wildlife and rising economic damages.³⁵

As detailed above, climate change poses an ongoing and accelerating threat that requires immediate action. Therefore, WildEarth Guardians requests that BLM act on this Petition without delay.

B. NEPA Requires BLM to Consider the Effects of its Oil and Gas Leasing Program on Climate Change.

NEPA is our basic national charter for protection of the environment.³⁶ It is designed to promote full disclosure and comprehensive consideration of potential environmental effects on

³⁵ DOI, *Secretary Jewell Offers Vision for Balanced, Prosperous Energy Future* (Mar. 17, 2015), archived at perma.cc/H2S7-9RWM.

³⁶ 40 C.F.R. §1500.1(a).



the human environment³⁷ resulting from proposed federal agency actions, and to provide decisionmakers with alternatives to mitigate these effects.³⁸ NEPA ensures that agencies take account of environmental effects as an integral part of the agency's own decisionmaking process before decisions are made.³⁹ It informs decisionmakers by ensuring agencies consider environmental consequences of a proposed action as they decide whether to proceed with the action and, if so, how to take appropriate steps to eliminate or mitigate adverse effects.⁴⁰ NEPA analysis should be conducted "at the earliest possible time to insure that planning and decisions reflect environmental values."⁴¹ NEPA also informs the public, promoting transparency of and accountability for consideration of environmental effects.⁴² For these reasons, NEPA reviews "must be of high quality."⁴³ "Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."⁴⁴ Importantly, a better decision, rather than better—or even excellent—paperwork is the goal of NEPA analysis.⁴⁵

NEPA also created a Council on Environmental Quality ("CEQ") within the Executive Office of the President⁴⁶ and charged CEQ with ensuring that federal agencies meet their obligations under NEPA. To that end, CEQ has promulgated implementing regulations for NEPA and has provided guidance to federal departments and agencies on compliance with NEPA's requirements.⁴⁷

On December 18, 2014, CEQ released revised draft guidance for public comment that describes how federal departments and agencies should consider the effects of GHG emissions and climate change in their NEPA reviews.⁴⁸ The 2014 Guidance supersedes the draft GHG and climate change guidance released by CEQ in February 2010. Importantly, unlike the 2010 draft guidance, the 2014 Guidance applies to all proposed federal agency actions, "including land and resource management actions."⁴⁹

The 2014 Guidance recognizes that "[c]limate change is a fundamental environmental issue, and the relation of federal actions to it falls squarely within NEPA's focus."⁵⁰ "Focused

³⁷ 40 C.F.R. § 1508.14 ("Human environment" shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.).

³⁸ Council on Env'tl. Quality ("CEQ"), Revised Draft Guidance for Greenhouse Gas Emissions and Climate Change Impacts 5 (2014) ("2014 Guidance"). A copy of the 2014 Guidance is attached to this Petition as Ex. 6. *See also* 40 C.F.R. § 1500.1(b).

³⁹ 2014 Guidance, *supra* note 38, at 5.

⁴⁰ *Id.*

⁴¹ 40 C.F.R. § 1501.2.

⁴² 2014 Guidance, *supra* note 38, at 5.

⁴³ 40 C.F.R. § 1500.1(b).

⁴⁴ *Id.*

⁴⁵ 40 C.F.R. § 1500.1(c).

⁴⁶ 42 U.S.C. § 4342.

⁴⁷ CEQ's implementing regulations for NEPA can be found at 40 C.F.R. § 1500 *et seq.*

⁴⁸ 2014 Guidance, *supra* note 38.

⁴⁹ *Id.* at 1 n.2 ("The CEQ 2010 draft guidance had carved out the question of how land and resource management actions should be considered in NEPA reviews. That distinction is no longer retained.")

⁵⁰ *Id.* at 2.



and effective consideration of climate change in NEPA reviews,” the 2014 Guidance notes, “will allow agencies to improve the quality of their decisions.”⁵¹ This focused consideration of climate change in NEPA reviews will improve environmental outcomes “by identifying important interactions between a changing climate and the environmental impacts from a proposed action, and can contribute to safeguarding federal infrastructure against the effects of extreme weather events and other climate related impacts.”⁵² “This guidance will help [f]ederal agencies ensure their analyses of GHG emissions and climate change in an EA or an EIS are useful by focusing on assessing those proposed actions that involve emissions, or that have a long lifespan such that a changing climate may alter the environmental consequences associated with the proposed action.”⁵³

The 2014 Guidance counsels agencies to include a discussion of the direct, indirect, and cumulative impacts of a proposed action’s reasonably foreseeable emissions and effects.⁵⁴ Further, the Guidance discusses “the consideration of reasonable alternatives and [informs agencies of] the need to consider the short-term and long-term effects and benefits [of a project] in the alternatives analysis and mitigation to lower emissions.”⁵⁵ Finally, the 2014 Guidance provides that “[a]gencies should consider the following when addressing climate change: (1) the potential effects of a proposed action on climate change as indicated by its GHG emissions; and (2) the implications of climate change for the environmental effects of a proposed action.”⁵⁶

Moreover, as the 2014 Guidance notes, actual estimates of emissions are required even when they are uncertain and can at best be “projected”;⁵⁷ there is a presumption that climate emissions are quantitatively evaluated.⁵⁸ The “reasonably foreseeable effects” on our climate that must be analyzed under NEPA include those that come from “using the resource.”⁵⁹ Downstream emissions should be accounted for in NEPA analysis.⁶⁰ Thus, the analysis of emissions from the combustion of oil and gas must be included in the PEIS, as it is a reasonably foreseeable, and intended, downstream effect.⁶¹

As the 2014 Guidance makes clear, climate change is a fundamental environmental issue that falls squarely within NEPA’s ambit. A focused consideration of climate change will allow BLM to improve the quality of its decisions and improve environmental outcomes. In particular, a programmatic NEPA review would identify the interactions between climate change and BLM’s oil and gas leasing program, including the effects its program has on climate change and vice versa. BLM’s oil and gas leasing program unquestionably contributes to GHG emissions

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.* at 3.

⁵⁴ *Id.* at 4.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.* at 8.

⁵⁸ *Id.* at 16.

⁵⁹ *Id.* at 12.

⁶⁰ *Id.* at 11.

⁶¹ See § II.I., *infra*.



and is a program with “a long lifespan such that a changing climate may alter the environmental consequences associated with [it].”⁶² The discussion of climate change in BLM’s NEPA review should include the direct, indirect, and cumulative impacts and emissions associated with its oil and gas leasing program.

C. BLM’s Oil and Gas Leasing Activities Constitute a Program Under NEPA.

BLM’s oil and gas leasing activities constitute a program under NEPA for two reasons: First, BLM’s oil and gas leasing activities are “systematic and connected agency decisions allocating agency resources to implement a specific statutory program” and thus meet the definition of “program” under NEPA’s implementing regulations; and second, BLM’s oil and gas leasing activities include multiple, independent permitting decisions that have overlapping, shared, and cumulative impacts, thus requiring a PEIS.

1. BLM’s Oil and Gas Leasing Activities Are Systematic and Connected Agency Decisions Allocating Agency Resources to Implement a Specific Statutory Program

NEPA’s implementing regulations provide the contours of programmatic NEPA review. NEPA’s implementing regulations define a “program” as “a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.”⁶³

BLM’s oil and gas leasing activities fall within this definition of a program because they are “connected agency decisions allocating agency resources to implement” the Mineral Leasing Act of 1920, 30 U.S.C. § 181 *et seq.*, and the Mineral Leasing Act for Acquired Lands of 1947, 30 U.S.C. § 351 *et seq.* (collectively “Mineral Leasing Acts”), for the purpose of exploration or development of oil and natural gas resources.⁶⁴ The Mineral Leasing Act of 1920 authorizes and governs leasing of public lands for developing deposits of coal, petroleum, natural gas and other hydrocarbons, in addition to phosphates, sodium, sulfur, and potassium. Section 13 of the Mineral Leasing Act provides that the “Secretary of the Interior is hereby authorized . . . to grant to any applicant qualified under this Act a prospecting permit . . . to prospect for oil or gas . . . wherein such deposits belong to the United States.” Similarly, the Mineral Leasing Act for Acquired Lands extended the provisions of the Mineral Leasing Act and the authority of the Secretary of the Interior over mineral extraction operations to federal “acquired lands.” In the words of BLM,

The [Mineral Leasing Acts], as amended, give the [BLM] responsibility for oil and gas leasing on about 564 million acres of BLM, national forest, and other

⁶² 2014 Guidance, *supra* note 38, at 3.

⁶³ 40 C.F.R. § 1508.18.

⁶⁴ *Id.*



Federal lands, as well as State and private surface lands where mineral rights have been retained by the Federal Government.⁶⁵

Each leasing decision must be consistent with the provisions of the Mineral Leasing Acts, and each leasing decision must be consistent with the applicable BLM district's resource management plan ("RMP"). Indeed, the tiered structure of BLM's oil and gas leasing program, discussed below, amply demonstrates the interconnectedness of the Bureau's program.

Also, the 2014 Guidance confirms the programmatic character of BLM's oil and gas leasing program. The Guidance notes that NEPA reviews can address different geographic scales that can range from the programmatic or landscape level, to the site- or project-specific level.⁶⁶ It further provides that "[p]rogrammatic NEPA review is appropriate when a decision is being made that is subject to NEPA, such as establishing formal plans, establishing agency programs, and approving a suite of similar projects."⁶⁷ Programmatic review provides a "useful and efficient" analysis of broad agency plans and programs and also allows for the agency to incorporate by reference that analysis into future NEPA reviews.⁶⁸

BLM's oil and gas leasing program is highly structured and follows a well-defined process that is suited to the tiered review contemplated by NEPA's implementing regulations and the 2014 Guidance. Development of onshore federal oil and natural gas resources occurs in five phases: (1) land use planning; (2) parcel nominations and lease sales; (3) well permitting and development; (4) operations and production; and (5) plugging and reclamation.⁶⁹ BLM further subdivides each phase into multiple steps. For example, at the land use planning phase, BLM creates RMPs that "establish which areas are open to oil & gas leasing and which are closed."⁷⁰ At the parcel nomination and lease sale phase, parcels in areas identified as open for leasing in an RMP may be nominated for leasing "by sending a written expression of interest to the BLM State Office for the area where the lands are located."⁷¹ However, nominated parcels are not automatically placed on sale; BLM first reviews each nomination to ensure that the parcels are available under the RMP and that stipulations from that RMP, if any, are attached before the lease is placed on sale.⁷² Then, leases are placed for sale at competitive auctions that, by law, are held quarterly by each BLM State Office.⁷³ Successful bidders "obtain[] the right to explore and drill for, extract, remove, and dispose of deposits of oil and gas (except helium) found on the lease."⁷⁴ The leaseholder must file an APD and a surface use plan of operations, which happens during phase three of the oil and gas leasing process, before the leaseholder may begin extracting

⁶⁵ BLM, Questions and Answers About Leasing, *archived at* perma.cc/Q36K-VWC4.

⁶⁶ 2014 Guidance, *supra* note 38, at 29.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ BLM, Leasing of Onshore Federal Oil and Gas Resources, *archived at* perma.cc/X6RK-C2QU.

⁷⁰ BLM, Land Use Planning, *archived at* perma.cc/2YBJ-L3GP.

⁷¹ BLM, Competitive Leasing, *archived at* perma.cc/3BYX-XXE7.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.*



oil and gas.⁷⁵ This highly structured, tiered process evidences the “systematic and connected agency decisions” that constitute BLM’s oil and gas leasing program. Moreover, it is clear that BLM’s leasing decisions allocate agency resources, including time, money, and minerals, to implement the directives of the Mineral Leasing Acts.

Tellingly, BLM expressly refers to its oil and gas leasing activities as a program. For example, BLM claims that its “Oil and Gas Management program is one of the most important mineral leasing programs in the Federal government.”⁷⁶ BLM notes that “[d]omestic production from over 63,000 Federal onshore oil and gas wells accounts for 11 percent of the Nation’s natural gas supply and five percent of its oil.”⁷⁷ BLM also states that “[t]he Oil and Gas program also processes applications for the permits required to develop leased resources. The most common of these is the [APD].”⁷⁸

By any reasonable measure, BLM’s oil and gas leasing activities constitute a program under NEPA. BLM’s leasing decisions are “systematic and connected agency decisions allocating agency resources to implement a specific statutory program”—a program of oil and gas leasing authorized by the Mineral Leasing Acts.⁷⁹

2. NEPA Requires the Preparation of a PEIS Where Multiple Projects Share Similar or Cumulative Effects

BLM’s oil and gas leasing activities also constitute a program under NEPA because those activities encompass multiple projects that share similar and cumulative effects. NEPA expressly contemplates preparation of a PEIS where an agency faces multiple, independent permitting decisions that have overlapping, shared, and cumulative impacts.⁸⁰ It is unquestionable that distinct land and mineral leases and approvals of APDs all contribute to climate change and non-climate impacts, and together have a cumulative impact greater than the sum of each individual lease. And, as CEQ’s 2014 Guidance makes clear, “[a]gencies are required to consider direct, indirect, and cumulative effects when analyzing any proposed Federal actions and projecting their environmental consequences.”⁸¹ Combustion of oil and gas extracted through BLM leases and approved APDs emits carbon dioxide and other GHGs into the atmosphere, exacerbating climate change and its dire consequences. Thus, NEPA requires the development of a PEIS for the federal oil and gas leasing program.

⁷⁵ BLM, Environmental Review and Permitting, *archived at* perma.cc/6N4F-UPBV.

⁷⁶ BLM, Oil and Gas, *archived at* perma.cc/X2QQ-W46D.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ 40 C.F.R. § 1508.18.

⁸⁰ See *Native Ecosystems Council v. Dombeck*, 304 F.3d 886 (9th Cir. 2002) (“A single NEPA review document is required for distinct projects when . . . the projects are ‘connected,’ ‘cumulative,’ or ‘similar’ actions . . .”).

⁸¹ 2014 Guidance, *supra* note 38, at 10.



D. BLM's Oil and Gas Leasing Program is a Significant Contributor to Climate Change, Triggering NEPA's EIS Requirement.

Under NEPA, the requirement to prepare an EIS is triggered by a finding that the proposed action will have “significant” environmental effects.⁸² NEPA’s implementing regulations define significance by both “context” and “intensity.”⁸³ Context “means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality.”⁸⁴ Furthermore, “both short- and long-term effects are relevant” to context.⁸⁵ Intensity “refers to the severity of impact” and includes consideration of the following:

- Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial;
- The degree to which the proposed action affects public health or safety;
- The degree to which the effects on the quality of the human environment are likely to be highly controversial;
- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks;
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration;
- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts; and
- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.⁸⁶

The 2014 Guidance sheds light on these considerations as applied to climate change. At the outset, the Guidance provides that “when assessing the potential significance of the climate change impacts of their proposed actions, agencies should consider both context and intensity, as they do for all other impacts.”⁸⁷ Thus, 40 C.F.R. § 1508.27 guides the significance determination in the context of climate change as well. The Guidance notes that agencies must also consider the direct, indirect, *and* cumulative effects of an action on climate change;⁸⁸ cumulative impact is

⁸² See 42 U.S.C. § 4332(2)(C) (“[A]ll agencies of the Federal Government shall include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment . . .”); 40 C.F.R. § 1502.3 (setting forth the statutory requirements for EISs).

⁸³ 40 C.F.R. § 1508.27.

⁸⁴ *Id.* at 1508.27(a).

⁸⁵ *Id.*

⁸⁶ *Id.* at 1508.27(b)(1)–(10).

⁸⁷ 2014 Guidance, *supra* note 38, at 10.

⁸⁸ *Id.* at 11 (“After identifying and considering the direct and indirect effects, an agency must consider the cumulative impacts of its proposed action and reasonable alternatives.”) (emphasis added); *see also* CEQ



defined in CEQ's regulations as the "impact on the environment that results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions."⁸⁹ In other words, BLM must consider the impact on the environment that results from its oil and gas leases when companies burn fossil fuels extracted pursuant to the leases, an entirely foreseeable (and intended) consequence of BLM's leasing program.⁹⁰

Analysis of the context and intensity of BLM's oil and gas leasing program makes clear that the program significantly affects human health and the environment. First, climate change alters the environment on a global scale, and a PEIS that addresses climate change should address the environmental effects of BLM's oil and gas leasing program at a regional, national, and global scale.⁹¹ Further, as CEQ's regulations make clear, both the short- and long-term effects of the program are relevant to the context analysis.⁹² Second, BLM's oil and gas leasing program contributes significant amounts of GHGs into the atmosphere, thereby posing a threat to public health and safety.⁹³ As discussed below, these public health and safety impacts are well-documented. BLM's past and current implementation of its program carries precedential impact on all future RMP's, leases, and APDs issued pursuant to this program, thereby satisfying another above-listed intensity factor supporting a finding of significance.⁹⁴ Moreover, it is reasonably foreseeable that BLM's various leasing and APD approvals, when viewed together, will have a cumulative impact much greater than the individual impacts of each lease and APD. As CEQ's regulations make clear, this cumulative impact alone triggers a significance finding.⁹⁵ Finally, climate change, and BLM's significant contributions to it, have also already caused endangered species to shift their ranges and will likely continue to adversely affect protected species, thereby increasing the severity of the program's impact on the last intensity factor listed above.⁹⁶

Data collected on BLM's oil and gas leasing program show that it contributes significant amounts of carbon dioxide and carbon dioxide equivalent into the atmosphere. Stratus

Memorandum to Heads of Federal Agencies, "Guidance on the Consideration of Past Actions in Cumulative Effects Analysis," June 24, 2005, *archived at* perma.cc/D89K-6T8F.

⁸⁹ 40 C.F.R. § 1508.7.

⁹⁰ 43 C.F.R. § 46.30; *see also* § II.I., *infra*.

⁹¹ 40 C.F.R. § 1508.27(a).

⁹² *Id.*

⁹³ *Id.* at 1508.27(b)(2). More frequent wildfires, longer droughts, an increase in the number, duration, and intensity of tropical storms, and sea level rise are only a small fraction of the projected effects of climate change that threaten public health and safety. *See* § II.E, *infra*.

⁹⁴ *Id.* at 1508.27(b)(6).

⁹⁵ *Id.* at 1508.27(b)(7) ("Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.")

⁹⁶ *See* Javier Monzón et al., *Climate Change and Species Range Dynamics in Protected Areas*, 61 BIOSCIENCE 752, 752 (2010) ("[T]hreatened species are moving out of protected areas."); Erin E. Seney, *Climate Change, Marine Environments, and the U.S. Endangered Species Act*, 27 CONSERVATION BIOLOGY 1138, 1140 (2013) ("Many climate-related ecological effects, including range shifts and potentially some extinctions, have already been documented."). A copy of the Monzón et al. article is attached to this Petition as Ex. 7. A copy of the Seney article is attached to this Petition as Ex. 8.



Photo Credit: WildEarth Guardians

Consulting prepared a report for The Wilderness Society calculating the GHG emissions from fossil fuels extracted from federal lands and waters for the years 2008–2010.⁹⁷ The Stratus Report found that in 2008 GHG emissions from extracted onshore oil by private leaseholders resulted in the release of 2,618 metric tons of methane (“MTCH₄”), 50,715,803 metric tons of carbon dioxide (“MTCO₂”), and 2,792 metric tons of nitrous oxide (“MTN₂O”), for a total release of 51,613,257 MTCO₂e.⁹⁸ That same year, GHG emissions from extracted onshore natural gas by private leaseholders resulted in the release of 15,709 MTCH₄, 173,153,676 MTCO₂, and 576 MTN₂O, for a total release of 173,718,049 MTCO₂e.⁹⁹

Similar data is available for 2009 and 2010. In 2009, GHG emissions from extracted onshore oil by private leaseholders resulted in the release of 2,617 MTCH₄, 50,710,929 MTCO₂, and 2,800 MTN₂O, for a total release of 51,610,868 MTCO₂e.¹⁰⁰ GHG emissions from extracted onshore natural gas by private leaseholders in 2009 resulted in the release of 12,756 MTCH₄, 139,473,656 MTCO₂, and 466 MTN₂O, for a total release of 139,931,411 MTCO₂e.¹⁰¹

⁹⁷ 2012 Stratus Report, *supra* note 13.

⁹⁸ *Id.* at 13.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.*



Finally, in 2010 GHG emissions from extracted onshore oil by private leaseholders resulted in the release of 2,390 MTCH₄, 46,141,874 MTCO₂, and 2,543 MTN₂O, for a total release of 46,959,493 MTCO₂e.¹⁰² GHG emissions from onshore natural gas extracted by private leaseholders in 2010 resulted in the release of 13,795 MTCH₄, 152,044,238 MTCO₂, and 507 MTN₂O, for a total release of 152,540,230 MTCO₂e.¹⁰³ Thus, for only three years BLM's oil and gas leasing program contributed a total of 49,885 MTCH₄, 612,240,176 MTCO₂, and 9,684 MTN₂O into the atmosphere, for a total release of 612,309,429 MTCO₂e. To put this into perspective, the threshold that triggers the application of the EPA's GHG Reporting Rule is 25,000 MTCO₂e.¹⁰⁴ This is the same threshold CEQ adopted in its 2010 draft guidance¹⁰⁵ and retained in its 2014 Guidance¹⁰⁶ despite criticisms of the threshold in public comments on the 2010 draft guidance.¹⁰⁷ CEQ notes that 25,000 MTCO₂e emissions on an annual basis is an "appropriate reference point" that allows agencies to focus their attention on projects with large GHG emissions.¹⁰⁸ BLM's oil and gas leasing program contributes on average over eight thousand times that amount on an annual basis.

The amount of GHGs released by BLM's oil and gas leasing program from 2008–2010 represents the rule, not the exception. As an update to its 2012 report, Stratus Consulting released new data in December 2014 quantifying the GHG emissions associated with fossil fuels extracted from federal lands by private leaseholders in 2012.¹⁰⁹ GHG emissions from onshore oil by private leaseholders in 2012 resulted in the release of 2,999 MTCH₄, 56,346,510 MTCO₂, and 2,985 MTN₂O, for a total release of 57,311,142 MTCO₂e.¹¹⁰ GHG emissions from onshore natural gas extracted by private leaseholders in 2012 resulted in the release of 12,358 MTCH₄, 144,135,798 MTCO₂, and 480 MTN₂O, for a total release of 144,587,927 MTCO₂e.¹¹¹ Thus, in 2012 BLM's oil and gas leasing program resulted in the release of 201,899,069 MTCO₂e. Once again, these more recent emissions exceed CEQ's "appropriate reference point" by more than eight thousand times.¹¹²

BLM's failure to disclose these GHG emissions in a PEIS compounds other important disclosure and reporting failures. As the Stratus Report notes, the figures for 2008–2010 were not

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ 40 C.F.R. § 98.2.

¹⁰⁵ CEQ, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions 2 (2010).

¹⁰⁶ 2014 Guidance, *supra* note 38, at 18.

¹⁰⁷ Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews, 79 Fed. Reg. 77801 (proposed Dec. 24, 2014), *archived at* perma.cc/59Y6-HYVS.

¹⁰⁸ 2014 Guidance, *supra* note 38, at 18.

¹⁰⁹ STRATUS CONSULTING, GREENHOUSE GAS EMISSIONS FROM FOSSIL ENERGY EXTRACTED FROM FEDERAL LANDS AND WATERS: AN UPDATE (2014) ("2014 Stratus Report"), *archived at* perma.cc/59G3-Z3BX. A copy of the 2014 Stratus Report is attached to this Petition as Ex. 9.

¹¹⁰ *Id.* at 10.

¹¹¹ *Id.*

¹¹² 2014 Guidance, *supra* note 38, at 18.



included in CEQ's April 2011 first-ever *Greenhouse Gas Emissions Inventory for the Federal Government*, which presented the total estimated GHG emissions resulting from federal government agencies' operations, including emissions from building electricity and water consumption, employee travel, and numerous other activities.¹¹³ According to the federal government's incomplete inventory, these emissions totaled approximately 66.4 million MTCO₂e in 2010.¹¹⁴ However, that inventory did not account for emissions associated with a range of activities that are under federal government control but are conducted by private entities, including BLM's oil and gas leasing program.¹¹⁵ Omitting GHG emissions from federal government leasing of oil and gas, and for that matter coal, results in a gross underestimation of GHG emissions associated with federal agency operations.¹¹⁶ As is evident from the Stratus Report, BLM's onshore oil and gas leasing program contributed nearly *two hundred million* MTCO₂e into the atmosphere in 2010, more than three times the sixty-six million MTCO₂e listed by CEQ in April 2011 as representing the emissions resulting from federal government agencies' operations in the same year. Had BLM properly disclosed the GHG emissions of its oil and gas leasing program, CEQ could have released a more accurate picture of the GHG emissions resulting from federal government agencies' operations.

BLM's GHG disclosure lapse is particularly stark given the agency's existing data on the amount of oil and gas extracted from leased lands and the economic benefits from such extraction.¹¹⁷ Leaseholders must report the volume of oil and gas produced from leased land and pay royalties based on that production volume. Therefore, BLM receives quantitative data on the amount of oil and gas extracted pursuant to its oil and gas leasing program. Just as BLM, based on that data, can and does quantify the economic benefits derived from the oil and gas extracted under its leasing program, BLM can and must calculate the amount of carbon dioxide equivalent released by the extracted oil and gas and report it to the public in a PEIS.

E. Climate Change is an Existential Threat to Human Health and the Environment.

No serious scientific dispute exists that climate change threatens human health and the environment. The science of climate change and its consequences are well documented. The potential future effects of global climate change likely include more frequent wildfires, longer periods of drought in some regions, and an increase in the number, duration, and intensity of tropical storms.¹¹⁸ Climate change is having an observable impact on the environment. Glaciers have shrunk, plant and animal ranges have shifted, ice on rivers and lakes has been thawing more quickly, and trees have been flowering earlier in spring.¹¹⁹ Further, the earth is experiencing the

¹¹³ 2012 Stratus Report, *supra* note 13, at 1.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ See BLM, Oil & Gas Statistics, *archived at* perma.cc/UVS8-5P4G.

¹¹⁸ Nat'l Aeronautics & Space Admin., *The Current and Future Consequences of Global Climate Change*, *archived at* perma.cc/6FCR-2AGH.

¹¹⁹ *Id.*



scientific community's long-predicted effects of global climate change, including accelerated sea level rise and longer, more intense, heat waves.¹²⁰

The effects of global climate change reach beyond the states in which BLM conducts oil and gas leasing, and carry observable regional consequences. The following are some of the impacts that are ongoing throughout the U.S. and will continue to affect these regions, according to the Third National Climate Assessment Report,¹²¹ released by the U.S. Global Change Research Program ("USGCRP"):



Photo Credit: Minnesota Department of Agriculture

Northeast: Heat waves, heavy downpours, and sea level rise pose growing challenges to many aspects of life in the Northeast.

Infrastructure, agriculture, fisheries, and ecosystems will be increasingly compromised. Many states and cities are beginning to incorporate climate change into their planning.¹²²

Northwest: Changes in the timing of streamflow reduces water supplies for competing demands. Sea level rise, erosion, inundation, risks to infrastructure, and increasing ocean acidity pose major threats. Increasing wildfire, insect outbreaks, and tree diseases are causing widespread tree die-off.¹²³

Southeast: Sea level rise poses widespread and continuing threats to the region's economy and environment. Extreme heat will affect health, energy, agriculture, and more. Decreased water availability will have economic and environmental impacts.¹²⁴

Midwest: Extreme heat, heavy downpours, and flooding will affect infrastructure, health, agriculture, forestry, transportation, air and water quality, and more. Climate change will also exacerbate a range of risks to the Great Lakes.¹²⁵

¹²⁰ *Id.*

¹²¹ U.S. GLOBAL CHANGE RESEARCH PROGRAM (USGCRP), CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT (2014), *archived at* perma.cc/CWE6-FVYE. A copy of this report is attached to this Petition as Ex. 10.

¹²² *Id.* at Chapter 16: Northeast, *archived at* perma.cc/X36D-QANY.

¹²³ *Id.* at Chapter 21: Northwest, *archived at* perma.cc/LF28-YQKV.

¹²⁴ *Id.* at Chapter 17: Southeast, *archived at* perma.cc/DTF5-2NHT.

¹²⁵ *Id.* at Chapter 18: Midwest, *archived at* perma.cc/2M8P-YNUE.



Southwest: Increased heat, drought, and insect outbreaks, all linked to climate change, have increased wildfires. Declining water supplies, reduced agricultural yields, health impacts in cities due to heat, and flooding and erosion in coastal areas are additional concerns.¹²⁶

The IPCC, which includes more than 1,300 scientists from the United States and other countries, forecasts a temperature rise of 2.5 to 10 degrees Fahrenheit over the next century.¹²⁷ The IPCC predicts that increases in global mean temperature of less than 1.8 to 5.4 degrees Fahrenheit (1 to 3 degrees Celsius) above 1990 levels will produce significant negative effects on many regions.¹²⁸

Further, global climate change will have a disproportionate impact upon coastal communities. The National Oceanic and Atmospheric Administration (“NOAA”), for example, released a technical report that global climate change will “continue to threaten the health and vitality of U.S. coastal communities’ social, economic and natural systems.”¹²⁹ The report “examines and describes climate change impacts on coastal ecosystems and human economies and communities, as well as the kinds of scientific data, planning tools and resources that coastal communities and resource managers need to help them adapt to these changes.”¹³⁰ NOAA notes that

A key finding in the report is that all U.S. coasts are highly vulnerable to the effects of climate change such as sea-level rise, erosion, storms and flooding, especially in the more populated low-lying parts of the U.S. coast along the Gulf of Mexico, Mid-Atlantic, northern Alaska, Hawaii, and island territories. Another finding indicated the financial risks associated with both private and public hazard insurance are expected to increase dramatically.¹³¹

The U.S. Geological Survey (“USGS”) has also documented the effects of climate change and its impacts on coastal tribes and indigenous communities.¹³² Doug Beard, acting associate director of the USGS Climate and Land Use program, notes that “[t]ribes and indigenous cultures and communities across the nation are already being challenged by drought, sea level rise, coastal erosion, altered snow regimes and more frequent and severe storms.”¹³³ And, in March 2015,

¹²⁶ *Id.* at Chapter 20: Southwest, *archived at* perma.cc/TRB2-TD55.

¹²⁷ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), Summary for Policymakers, in CLIMATE CHANGE 2007: IMPACTS, ADAPTATION AND VULNERABILITY 17. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge Univ. Press 2007), *archived at* perma.cc/3HFL-MJF7. A copy of this summary is attached to this Petition as Ex. 11.

¹²⁸ *Id.*

¹²⁹ Nat’l Oceanic & Atmospheric Admin., *Climate Change Impacts to U.S. Coasts Threaten Public Health, Safety and Economy* (Jan. 28, 2013), *archived at* perma.cc/3R5D-7E95.

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² U.S. Geological Survey, *Climate Change, Coastal Tribes and Indigenous Communities* (2015) *archived at* perma.cc/FE77-4V6P.

¹³³ *Id.*



U.S. Secretary of the Interior, Sally Jewell, announced that the Interior Department would make monies available to fund projects that promote tribal climate change adaptation and ocean and coastal management planning through its Tribal Climate Resilience Program.¹³⁴ That BLM has not yet conducted a PEIS studying the significant climate change impacts of its oil and gas leasing program, is legally and morally untenable.

Finally, CEQ's 2014 Guidance documents the urgency of climate change and reaffirms NEPA's role in addressing climate change. CEQ begins by noting that, in its first Annual Report in 1970, it discussed climate change and concluded that "[m]an may be changing his weather."¹³⁵ "At that time," CEQ notes, "the mean level of atmospheric carbon dioxide had been elevated to 325 parts per million (ppm). Since 1970, the concentration of atmospheric carbon dioxide has increased at a rate of about 1.6 ppm per year (1970–2012) to approximately 395 ppm in 2014 (current globally averaged value)."¹³⁶ CEQ states

It is now well established that rising global atmospheric GHG emission concentrations are significantly affecting the Earth's climate. These conclusions are built upon a scientific record that has been created with substantial contributions from the [USGCRP], formerly the Climate Change Science Program, which informs our response to climate and global change through coordinated Federal programs of research, education, communication, and decision support. Studies have projected the effects of increasing GHGs on water availability, ocean acidity, sea-level rise, ecosystems, energy production, agriculture and food security, and human health.¹³⁷

Based upon the scientific assessments of the USGCRP and the National Research Council, the U.S. Environmental Protection Agency has found that global climate change "endanger[s] public health and welfare."¹³⁸ Finally, reiterating the conclusions reached by the IPCC and the USGCRP, CEQ provides

Broadly stated, the effects of climate change observed to date and projected to occur in the future include more frequent and intense heat waves, more severe wildfires, degraded air quality, more heavy downpours and flooding, increased drought, greater sea-level rise, more intense storms, harm to water resources, harm to agriculture, and harm to wildlife and ecosystems.¹³⁹

¹³⁴ *Id.*

¹³⁵ 2014 Guidance, *supra* note 38, at 6.

¹³⁶ *Id.* (citing U.S. Dep't of Commerce, Nat'l Oceanic & Atmospheric Admin. Earth Sys. Research Lab., *archived at* perma.cc/LKN8-XR9P).

¹³⁷ 2014 Guidance, *supra* note 38, at 6–7.

¹³⁸ *Id.* at 7.

¹³⁹ *Id.* at 7–8.



Climate change poses an immediate and accelerating existential threat to human health and the environment, and BLM must, under NEPA, consider and mitigate the climate change impacts of its oil and gas leasing program.

F. Non-climate Impacts of BLM's Oil and Gas Leasing Program Also Should Be Evaluated in the PEIS.

In addition to GHG emissions, onshore oil and gas extraction is linked to a host of other environmental impacts that should also be evaluated in the PEIS. As described below, these impacts include: seismic activity linked to hydraulic fracturing (“fracking”); public health and safety impacts associated with fracking; and environmental harm related to improperly abandoned and unplugged and unreclaimed wells.

1. Fracking Increases Seismic Activity

The PEIS should evaluate the impacts of underground injection of fracking wastewater and fracking itself on increased seismic activity. Fracking is on the rise as the method of choice for oil and gas extraction. As BLM notes, “There are more than 100,000 oil and gas wells on federally managed lands. Of wells currently being drilled, over 90 percent use hydraulic fracturing.”¹⁴⁰ This practice is linked to increased seismic activity in Oklahoma, Texas, Ohio, Pennsylvania, and California, resulting in fracking restrictions in some of those areas.¹⁴¹ A recent study published in the journal “Science Advances” examined the correlation between increases in seismicity and fracking saltwater disposal in Oklahoma.¹⁴² The authors note that “[t]he number of small- to moderate-sized earthquakes in much of the central and eastern United States began to increase markedly around 2009 . . . [and] some of this seismicity appears to be associated with increases in saltwater disposal that originates as ‘flow-back’ water after multistage hydraulic fracturing operations.”¹⁴³ Because flow-back water is usually quite saline, the authors note, it is often disposed of through injection into class II underground injection control (“UIC”) wells.¹⁴⁴ Class II UIC wells are also used to inject “produced water,” or saline pore water that is coproduced with oil and then injected into deeper sedimentary formations.¹⁴⁵ “Increased pore pressure at depth resulting from fluid injection can trigger slip on preexisting,

¹⁴⁰ BLM, *Interior Department Releases Final Rule to Support Safe, Responsible Hydraulic Fracturing Activities on Public and Tribal Lands* (Mar. 20, 2015), *archived at* perma.cc/8TD2-3TPQ.

¹⁴¹ For a discussion of pending, passed, or defeated fracking-related legislation and restrictions, see JACQUELYN PLESS, NAT’L CONFERENCE OF STATE LEGISLATURES, NATURAL GAS DEVELOPMENT AND HYDRAULIC FRACTURING: A POLICYMAKER’S GUIDE (Revised June 2012), *archived at* perma.cc/WVZ6-LFKK. A copy of this report is attached to this Petition as Ex. 12.

¹⁴² F. Rall Walsh III and Mark D. Zoback, *Oklahoma’s Recent Earthquakes and Saltwater Disposal*, 1(5) SCI. ADVANCES (June 5, 2015). A copy of this article is attached to this Petition as Ex. 13.

¹⁴³ *Id.* at 1.

¹⁴⁴ *Id.* Class II wells are used to inject fluids associated with oil and natural gas production. EPA, Class II Wells – Oil and Gas Related Injection Wells, *archived at* perma.cc/Z6YV-LU62. Most of the injected fluid is saltwater, which is brought to the surface in the process of extracting oil and gas. *Id.* In addition, saltwater and other fluids are injected to enhance oil and gas production. *Id.*

¹⁴⁵ *Id.*



already-stressed faults,” the authors note.¹⁴⁶ In other words, saline produced water from wells alters active fault lines when it is injected into deeper sedimentary formations. Through three study areas that encompass the vast majority of recent seismic activity in Oklahoma, the authors show that “the increases in seismicity follow 5- to 10-fold increases in the rates of saltwater disposal.”¹⁴⁷ Similarly, the authors conclude, “[a]djacent areas where there has been relatively little saltwater disposal have had comparatively few recent earthquakes.”¹⁴⁸

The link between fracking and increased seismic activity is well supported and affirmed by other studies. For example, M. Weingarten (et al.) examined the relationship between wastewater injection and U.S. mid-continent seismicity using a newly assembled injection well database for the central and eastern United States.¹⁴⁹ They conclude that “the entire increase in earthquake rate is associated with fluid injection wells. High-rate injection wells (>300,000 barrels per month) are much more likely to be associated with earthquakes than lower-rate wells.”¹⁵⁰ The impacts of BLM’s oil and gas leasing program on fracking-induced seismicity should be evaluated in the PEIS.

2. Fracking Carries Public Health and Safety Impacts



Photo Credit: WildEarth Guardians

The PEIS should also evaluate the public health and safety impacts associated with fracking. A new, extensive report conducted by Concerned Health Professionals of New York and Physicians For Social Responsibility outlines scientific, medical, and media findings demonstrating the risks and harms of fracking.¹⁵¹ This compendium is “a fully referenced compilation of the evidence outlining the risks and harms of fracking.”¹⁵² As the compendium points out, evidence to date indicates that fracking operations pose severe threats to human health and the environment, both from water pollution and air pollution.¹⁵³ It states:

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ M. Weingarten et al., *High-rate Injection is Associated With the Increase in U.S. Mid-Continent Seismicity*, 348 SCIENCE 1336 (2015). A copy of this article is attached to this Petition as Ex. 14.

¹⁵⁰ *Id.* For an additional, thorough treatment of fracking-induced seismicity, see STATES FIRST, POTENTIAL INJECTION-INDUCED SEISMICITY ASSOCIATED WITH OIL & GAS DEVELOPMENT (2015), *archived at* perma.cc/5LVV-UWN3. A copy of this report is attached to this Petition as Ex. 15.

¹⁵¹ CONCERNED HEALTH PROFESSIONALS OF N.Y. AND PHYSICIANS FOR SOCIAL RESPONSIBILITY, COMPENDIUM OF SCIENTIFIC, MEDICAL, AND MEDIA FINDINGS DEMONSTRATING RISKS AND HARMS OF FRACKING (UNCONVENTIONAL GAS AND OIL EXTRACTION) (Third Ed. Oct. 14, 2015), *archived at* perma.cc/L6R3-ML7T. A copy of this compendium is attached to this Petition as Ex. 16.

¹⁵² *Id.* at 2.

¹⁵³ *Id.* at 4.



In the United States, more than two billion gallons of fluid are injected daily under high pressure into the earth with the purpose of enabling oil and gas extraction via fracking or, after the fracking is finished, to flush the extracted wastewater down any of the 187,570 disposal wells across the country that accept oil and gas waste. All of those two billion daily gallons of fluid is toxic, and it all passes through our nation's groundwater aquifers on its way to the deep geological strata below where it can demonstrably raise the risk for earthquakes. In the air above drilling and fracking operations and their attendant infrastructure, researchers have measured strikingly high levels of toxic pollutants, including the potent carcinogen benzene and the chemical precursors of smog. In some cases, concentrations of fracking-related air pollution in communities where people live and work far exceed federal safety standards. Research shows that air emissions from fracking can drift and pollute the air hundreds of miles downwind. With more than 15 million Americans already living within a mile of a fracking well that has been drilled since 2000, and with more than 50,000 new wells fractured per year over the past 15 years, the potential for exposure and accompanying adverse impacts is significant.¹⁵⁴

For this compendium, the authors collected and compiled findings from articles from peer-reviewed medical and scientific journals, investigative reports by journalists, and reports from or commissioned by government agencies.¹⁵⁵ As noted above, extensive studies have demonstrated air and water pollution from fracking activities. These serious health hazards should be studied and mitigated in the PEIS.

3. Abandoned, Unplugged and Unreclaimed Oil Wells Cause Environmental Impacts

Third, the PEIS should also evaluate the environmental impacts of improperly abandoned and unplugged and unreclaimed wells. Pursuant to 43 C.F.R. § 3162.3-4, well operators must properly plug and abandon a well once it is no longer producing in paying quantities. Lease owners and well operators must, by regulation, plug the well, remove related facilities and equipment, recontour disturbed sites, administer stored topsoil to the area and revegetate the site to near natural vegetation.¹⁵⁶

The reasons to return non-productive well sites and other associated energy land disturbance activities to near natural surface conditions are numerous, and implicate both environmental and multiple use concerns. For example, plugging prevents potential spills, soil and water contamination, and the release of volatile hydrocarbons. Reclamation prevents invasive weeds and fugitive dust, provides new forage for wildlife and livestock, reduces soil erosion, and provides a more scenic setting for humans. Thus, proper reclamation improves air and water quality, reduces erosion, provides wildlife and livestock more forage and cover,

¹⁵⁴ *Id.* at 4–5.

¹⁵⁵ *Id.* at 5.

¹⁵⁶ 43 C.F.R. § 3162.3-4.



prevents the release of radiant energy into the atmosphere, and provides for greater carbon sequestration.

To this end, BLM instructs its employees to conduct an idle-well review and data entry into the Automated Fluid Minerals Support System to document wells with more than 7 years of non-production.¹⁵⁷ However, a report conducted by a former BLM employee, named Stan Olmstead, at the Vernal, UT Field Office, found large numbers of unplugged, unreclaimed wells in Utah.¹⁵⁸ Mr. Olmstead notes that while working at the Vernal Field Office he, along with other BLM employees, “developed concern over the lack of priority placed on the plugging of non-producing energy wells and upon conducting appropriate and final reclamation.”¹⁵⁹ According to Mr. Olmstead, a number of wells that sat idle in 1992 were still not producing in 2012 and “[Vernal Field Office] management was not requiring the operator to plug and reclaim these non-productive locations with the appropriate interest to serve the American public.”¹⁶⁰ As a result of Mr. Olmstead’s concerns, he conducted several Freedom of Information Act (“FOIA”) requests to the Vernal, Moab, and Price Field Offices and the Utah State Office. His findings are concerning. “Using an estimate (sic) four acres for each well site and its related infrastructure, [he] calculated that, based on the 2013 FOIA responses from the three Field Offices, there were an estimated 2,888 acres of un-reclaimed land in Utah for wells more than 10 years in non-production at that time.”¹⁶¹ This figure includes a reported 355 wells without production for 10 or more years over approximately 1,420 acres of unreclaimed public lands within the jurisdiction of the Vernal Field Office, 304 wells over approximately 1,216 acres within the jurisdiction of the Moab Field Office, and 63 wells over approximately 252 acres within the jurisdiction of the Price Field Office.¹⁶² Based on a 2015 FOIA response from the Utah State Office, Mr. Olmstead calculated that, using the estimated four acres for each well site, there are currently an estimated 2,228 acres of unreclaimed land in Utah for wells in non-production for more than 10 years.¹⁶³

Thus, there are thousands of acres of unreclaimed public land with unreclaimed wells in Utah alone, despite BLM’s obligations to ensure the plugging and reclamation of oil and gas wells that have not been producing in paying quantities for ten years. Professional land managers are obligated to fulfill their public trust responsibility not only to authorize land use and development for energy-related resources, but also to assure the reclamation of public lands for the American public after the extraction of subsurface oil and gas resources.

¹⁵⁷ BLM, Instructional Memorandum No. 2012 – 181 (2012), *archived at* perma.cc/9EGT-3TED.

¹⁵⁸ STAN OLMSTEAD, REPORT OF OIL & GAS WELL ABANDONMENT AND RECLAMATION ON FEDERAL LANDS ADMINISTERED BY BLM-UTAH 4–5 (Mar. 14, 2015), *archived at* perma.cc/QPH3-RYR9. A copy of this report is attached to this Petition as Ex. 17.

¹⁵⁹ *Id.* at 1.

¹⁶⁰ *Id.* at 1–2.

¹⁶¹ *Id.* at 4.

¹⁶² *Id.* at 4–5. Note that the Moab and Price Field Offices provided information only on federal wells and, consequently, the number of other land management agency wells overseen by BLM is unknown. *Id.*

¹⁶³ *Id.* at 4. Mr. Olmstead also documented other irregularities from his FOIA requests, including varying degrees of cooperation amongst offices, different information and documents provided by each office, and differences in prices charged for the FOIA requests. *Id.* at 3. These irregularities indicate a lack of consistency in applying FOIA’s mandates. *Id.* at 3 n.2.



In sum, the PEIS should also evaluate and mitigate the non-climate related environmental impacts associated with BLM's oil and gas leasing program, including seismic activity linked to fracking, public safety and health impacts associated with fracking, and environmental harm stemming from improperly abandoned and unplugged and unreclaimed wells.

G. BLM's Tiered Oil and Gas Leasing Approvals Would Benefit From Programmatic Overlay.

NEPA encourages agencies to tier their EISs to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.¹⁶⁴ A PEIS allows for a broader discussion of impacts from tiered activities.

The organization of BLM's oil and gas leasing program supports tiered review under NEPA. As noted in section II.C above, BLM organizes its oil and gas leasing program into five separate, well-defined phases, and each phase is further subdivided into subparts. Such a structure is well suited for tiering. Project or site-specific EAs or EISs can incorporate by reference or tier a PEIS. BLM could, thus, create a PEIS for its oil and gas leasing program addressing the direct, indirect, and cumulative effects of the program on climate change and climate change's impact on the program and then incorporate by reference or tier to that PEIS when addressing climate change in site-specific EAs or EISs.

CEQ's 2014 Guidance recognizes the importance of tiering and its usefulness for land and resource management:

A tiered, analytical decision-making approach using a programmatic NEPA review is used for many types of Federal actions and can be particularly relevant to addressing proposed land, oceanic, and resource management plans. Under such an approach, a broad-scale programmatic NEPA analysis is conducted for actions such as USDA Forest Service land and resource management plans, Bureau of Land Management resource management plans, or Natural Resources Conservation Service conservation programs. Subsequent NEPA analyses for site-specific decisions—such as projects that implement land, oceanic, and resource management plans—are tiered from the broader programmatic analysis, drawing upon its basic framework analysis to avoid repeating analytical efforts for each tiered decision.¹⁶⁵

Further, CEQ provides that:

In the context of long-range energy, transportation, and resource management actions, for example, an agency may decide that it would be useful and efficient to

¹⁶⁴ 40 C.F.R. § 1502.20.

¹⁶⁵ 2014 Guidance, *supra* note 38, at 29.



provide an aggregate analysis of GHG emissions or climate change effects in a programmatic analysis and then incorporate by reference that analysis into future NEPA reviews.¹⁶⁶

Indeed, CEQ expressly contemplates a PEIS for BLM's oil and gas leasing program:

Examples of project- or site-specific actions that can benefit from a programmatic NEPA review include: constructing transmission towers; conducting prescribed burns; approving grazing leases; granting a right-of-way; *authorizing leases for oil and gas drilling*; authorizing construction of wind turbines; and approving hard rock mineral extraction.¹⁶⁷

Thus, the 2014 Guidance creates an expectation that BLM would undertake a PEIS of its oil and gas leasing program. Further, where an agency has chosen to ignore programmatic analysis in favor of site-specific climate analysis, it is required to "set forth a reasoned explanation" for doing so.¹⁶⁸

BLM has previously recognized the value of PEISs and tiering in NEPA reviews. For example, BLM issued a PEIS associated with the designation of energy corridors on federal lands in eleven Western states.¹⁶⁹ In it, BLM stated that:

Individual project analyses, reviews, and approvals and denials may tier off the PEIS, thus using and referencing the information, analyses, and conclusions presented in the PEIS to supplement the project-specific reviews and analyses. However, individual project-specific decision making will not be supplanted by the PEIS.¹⁷⁰

Similarly, discussion of climate change impacts in individual RMPs, land leases, and approvals and denials of APDs may tier off a PEIS that addresses the impacts BLM's oil and gas leasing program has on climate change. This tiering can supplement project-specific reviews and analyses.

In fact, Interior has long recognized the value and importance of PEISs, and has conducted them for other energy-related decisions. For example, Interior has conducted PEISs for geothermal resources leasing,¹⁷¹ oil shale and tar sands resources,¹⁷² alternative energy

¹⁶⁶ *Id.*

¹⁶⁷ *Id.* at 29–30 (emphasis added).

¹⁶⁸ *Id.* at 4.

¹⁶⁹ BLM, WEST-WIDE ENERGY CORRIDOR PROGRAMMATIC EIS (2008), *archived at* perma.cc/QC6F-NWJ7.

¹⁷⁰ *Id.* at Chapter 1: Why Are Federal Agencies Proposing to Designate Energy Corridors In the West? 21, *archived at* <https://perma.cc/7PBP-4A8Q>.

¹⁷¹ BLM, FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR GEOTHERMAL LEASING IN THE WESTERN UNITED STATES (last updated Oct. 20, 2009), *archived at* perma.cc/HJ6Q-FD3T.

¹⁷² BLM, 2012 OIL SHALE AND TAR SANDS FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (2012), *archived at* <https://perma.cc/9JJ4-2ENY>.



development and production on the outer continental shelf,¹⁷³ and coal.¹⁷⁴ In light of Interior's longstanding use of PEISs for energy development and production projects, it is unusual that BLM has *not* conducted a PEIS of its onshore oil and gas leasing program. WildEarth Guardians' request to BLM to correct this untenable oversight is, thus, entirely reasonable and comports with Interior's history of conducting programmatic review of energy development and production programs.

H. A PEIS Will Not Be Duplicative, a Reason for Delay, or Speculative.

1. A PEIS Will Not Be Duplicative

A PEIS of BLM's oil and gas leasing program will not be duplicative. BLM has yet to conduct an overarching PEIS of the program and its ill effects on climate change. While BLM is able to conduct an analysis of climate change in environmental reviews at the RMP, lease, or APD stages, it has not adequately done so and there are compelling reasons for conducting such an analysis as early in the process as possible.

First, BLM has not conducted a meaningful review of the direct, indirect, and cumulative impacts of its oil and gas leasing program on climate change in its RMPs. For example, a review of the final EIS ("FEIS") accompanying the RMP for the oil rich BLM district of Vernal, UT, yields two small sections discussing climate change.¹⁷⁵ Combined, the sections entail six paragraphs that span less than two full pages. Chapter 3 (Affected Environment) Section 2 (Air Quality) has a four-paragraph discussion of climate change that provides a short, mechanical recitation of the science behind climate change before concluding with a perfunctory statement:

The BLM recognizes the importance of climate change and the potential effects it may have on the natural environment. Several activities occur within the planning area that may generate emissions of climate changing pollutants. For example, oil and gas development, large fires, and recreation using combustion engines, can potentially generate CO₂ and methane. Wind erosion from disturbed areas and fugitive dust from roads along with entrained atmospheric dust has the potential to darken glacial surfaces and snow packs resulting in faster snowmelt.¹⁷⁶

In its final sentence, BLM attempts to ameliorate these "potential" ill effects on climate change by adding that "[o]ther activities may help sequester carbon, such as managing vegetation to

¹⁷³ BUREAU OF OCEAN ENERGY MGMT., OCS ALTERNATIVE ENERGY FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (2007), *archived at* <https://perma.cc/894D-44YE>.

¹⁷⁴ BLM, FINAL ENVIRONMENTAL IMPACT STATEMENT SUPPLEMENT FEDERAL COAL MANAGEMENT PROGRAM (1985), *archived at* <https://perma.cc/HTD9-AKN9>.

¹⁷⁵ BLM VERNAL FIELD OFFICE, PROPOSED RESOURCE MANAGEMENT PLAN AND FINAL ENVIRONMENTAL IMPACT STATEMENT (2008), *archived at* perma.cc/9GV9-DQNT.

¹⁷⁶ *Id.* at 3–9, *archived at* perma.cc/8L2P-U726. Given that the Stratus Reports have quantified the amount of CO₂ and methane released from onshore oil and gas development by private leaseholders, BLM's statement that "oil and gas development, large fires, and recreation using combustion engines, *can potentially generate* CO₂ and methane" seems particularly disingenuous.



favor perennial grasses and increase vegetative cover, which may help build organic carbon in soils and function as ‘carbon sinks.’”¹⁷⁷

Chapter 4 (Environmental Consequences) Section 2 (Air Quality) contains a two-paragraph discussion of climate change that is even more equivocal. “The assessment of climate-changing pollutant emissions and climate change is in its formative phase,” BLM states, “therefore, it is not yet possible to know with confidence the net impact to climate.”¹⁷⁸ BLM also states that “[t]he lack of scientific tools designed to predict climate change on regional or local scales limits the ability to quantify potential future impacts. Currently BLM does not have an established mechanism to accurately predict the effect of resource management-level decisions from this planning effort on global climate change.”¹⁷⁹ As with section 3.2, BLM devotes a few sentences to possible impacts from its program.

Such a cursory treatment of climate change does not comport with the letter or spirit of NEPA. For major federal actions significantly affecting the quality of the human environment NEPA requires the completion of “a detailed statement” that considers the environmental impact of, adverse environmental effects of, and alternatives to the proposed action, as well as the relationship between short-term uses of the environment versus its long-term maintenance and enhancement and any irreversible and irretrievable commitments of resources involved in the proposed action.¹⁸⁰ BLM has provided no such “detailed statement” addressing these requirements in the eight paragraphs it devotes to climate change in its Vernal, UT RMP/FEIS. As a threshold matter, BLM has failed to quantify the program’s emissions, let alone “[r]igorously explore and objectively evaluate] all reasonable alternatives” that could mitigate the adverse climate change effects of its program¹⁸¹ or “[d]evote substantial treatment to each alternative considered in detail . . . so that reviewers may evaluate their comparative merits.”¹⁸² Nor do these eight paragraphs include discussions of the direct and indirect effects of the program and their significance to climate change¹⁸³ or the environmental effects, energy requirements, and mitigation potential of alternatives and mitigation measures.¹⁸⁴ These requirements are mirrored in Interior’s NEPA implementing regulations, all of which BLM ignores in its failure to conduct a PEIS that analyzes the effects of its oil and gas leasing program on climate change.¹⁸⁵ BLM’s eight-paragraph treatment of climate change in its Vernal, UT RMP/FEIS falls short of the “focused and effective consideration of climate change in NEPA reviews” CEQ contemplates.¹⁸⁶

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 4–8, archived at <https://perma.cc/NL3J-3KY5>.

¹⁷⁹ *Id.*

¹⁸⁰ 42 U.S.C. § 4332(2)(C)(i)–(v).

¹⁸¹ 40 C.F.R. § 1502.14(a).

¹⁸² *Id.* at 1502.14(b).

¹⁸³ *Id.* at 1502.16(a)–(b).

¹⁸⁴ *Id.* at 1502.16(d)–(e).

¹⁸⁵ See 43 C.F.R. § 46.415 (providing the required content of EISs and informing drafters that the statement must be “in accordance with 40 C.F.R. § 1502.10”).

¹⁸⁶ 2014 Guidance, *supra* note 38, at 2.



Unfortunately, BLM's superficial treatment of climate change in its Vernal, UT RMP/FEIS represents the rule rather than the exception. For example, BLM provided the same level of review of climate change in its RMP/FEIS for the Taos Field Office in New Mexico.¹⁸⁷ There, climate change was given one subsection of seven paragraphs over less than two pages¹⁸⁸ with a few additional mentions of climate change sprinkled throughout when discussing, for example, the impacts of drought on soils and fish.¹⁸⁹ Especially when compared to the treatment of other categories of impact studied in that 517-page document, BLM did not give climate change the requisite attention under NEPA.¹⁹⁰

BLM also fails to adequately address climate change at the leasing stage of its oil and gas program. Illustrative is an environmental assessment ("EA") prepared by the Vernal, UT Field Office for a November 2015 oil and gas lease sale.¹⁹¹ Climate change receives *even less* attention there than at the RMP stage. Climate change is addressed in two sections, each a paragraph long and titled "Greenhouse Gas."¹⁹² No scientific data or background is provided, and no GHG emissions impacts associated with the lease are discussed. In fact—and most troubling—both paragraphs contain the following: "Drilling and development activities as a result of the proposed leasing are anticipated to release a negligible amount of greenhouse gases into the local air-shed."¹⁹³ Thus, the EA appears to deny that the studied oil and gas lease sale will contribute to climate change in any significant way. By denying any significant contribution to climate change from individual lease sales while providing nothing more than perfunctory and conclusory statements in its EISs at the RMP stage, BLM shirks its disclosure obligations at every implementation stage of its oil and gas leasing program, in violation of NEPA.¹⁹⁴

As noted in section II.D above, BLM's oil and gas leasing program contributed 612,309,429 MTCO₂e into the atmosphere over the span of three years—an average of 204,103,143 metric tons a year. These emissions are anything but "negligible." BLM's failure to determine the impacts of its oil and gas leases on climate change at the leasing or RMP stages is precisely the reason why BLM should and must conduct this review on a broad, programmatic level. Moreover, by neglecting to conduct its review of the program's impact on climate change at the programmatic level and by failing to recognize and assess its cumulative impacts, BLM's approach is impermissibly myopic.

¹⁸⁷ BLM TAOS FIELD OFFICE, PROPOSED TAOS RESOURCE MANAGEMENT PLAN AND FINAL ENVIRONMENTAL IMPACT STATEMENT (2011), *archived at* perma.cc/G5T4-TVFR.

¹⁸⁸ *Id.* at 485–86.

¹⁸⁹ *Id.* at 487–88.

¹⁹⁰ See 40 C.F.R. Part 1502 (setting forth the requirements for EISs).

¹⁹¹ BLM VERNAL FIELD OFFICE, ENVIRONMENTAL ASSESSMENT: NOVEMBER 2015 LEASE SALE DOI-BLM-UT-G010-2015-089-EA (2015), *archived at* perma.cc/EG93-AS32.

¹⁹² *Id.* at 32–33, 43.

¹⁹³ *Id.*

¹⁹⁴ See 42 U.S.C. § 4332(2)(C) (All agencies of the Federal Government shall prepare an EIS for all "major Federal actions significantly affecting the quality of the human environment."); 2014 Guidance at 8 ("Federal agencies, to remain consistent with NEPA, should consider the extent to which a proposed action and its reasonable alternatives contribute to climate change through GHG emissions and take into account the ways in which a changing climate over the life of the proposed project may alter the overall environmental implications of such actions.").



CEQ's 2014 Guidance specifically counsels against BLM's myopic analytical approach, which only serves to obscure the full, cumulative climate change impacts of its expansive and coordinated oil and gas leasing program. In its 2014 Guidance, CEQ states:

CEQ recognizes that many agency NEPA analyses to date have concluded that GHG emissions from an individual agency action will have small, if any, potential climate change effects. Government action occurs incrementally, program-by-program and step-by-step, and climate impacts are not attributable to any single action, but are exacerbated by a series of smaller decisions, including decisions made by the government. Therefore, the statement that emissions from a government action or approval represent only a small fraction of global emissions is more a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether to consider climate impacts under NEPA. Moreover, these comparisons are not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations. This approach does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual sources of emissions each make relatively small additions to global atmospheric GHG concentrations that collectively have huge impact.¹⁹⁵

Thus, BLM cannot rely on statements such as "[d]rilling and development activities as a result of the proposed leasing are anticipated to release a negligible amount of greenhouse gases into the local air-shed."¹⁹⁶ While each individual lease may only contribute small amounts of GHGs into the atmosphere, collectively the program contributes significant amounts of GHGs into the atmosphere. As the 2014 Guidance notes, "diverse individual sources of emissions each make relatively small additions to global atmospheric GHG concentrations that collectively have huge impact."¹⁹⁷ Moreover, when the cumulative impact of multiple leasing decisions is undeniably large, limiting focus to relatively small individual leasing actions "is *not* an appropriate basis for deciding whether to consider climate impacts under NEPA."¹⁹⁸ CEQ thus counsels BLM to properly conduct a NEPA review of its oil and gas leasing program's effects on climate change instead of continuing to provide inadequate reviews that to date have "concluded that GHG emissions from an individual agency action will have small, if any, potential climate change effects."¹⁹⁹

Second, a review of BLM's oil and gas leasing program's effects on climate change should be conducted on a programmatic level at the outset of the program and not down the line at the RMP, leasing, or APD stages. As CEQ notes, "The primary purpose of an [EIS] is to serve as an action-forcing device to insure that the policies and goals defined in [NEPA] are infused

¹⁹⁵ 2014 Guidance, *supra* note 38, at 9.

¹⁹⁶ ENVIRONMENTAL ASSESSMENT: NOVEMBER 2015 LEASE SALE, *supra* note 191 at 32–33, 43.

¹⁹⁷ 2014 Guidance, *supra* note 38, at 9.

¹⁹⁸ *Id.*

¹⁹⁹ *Id.*



into the ongoing programs and actions of the Federal Government.”²⁰⁰ EISs are intended to “be used by Federal officials in conjunction with other relevant material to plan actions and make decisions.”²⁰¹ Thus, as an “action-forcing device” to be used by federal officials to “plan actions and make decisions,” including actions to mitigate adverse environmental effects, EISs are best used early on at the outset of a program where these actions and decisions can be taken and made *before* the program is already underway and causing the harm to human health and the environment NEPA is intended to force officials to consider and mitigate. 40 C.F.R. § 1502.5 requires the EIS “be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made (§§ 1500.2(c), 1501.2, and 1502.2).” Section 1502.5(a) also provides that “For projects directly undertaken by Federal agencies the environmental impact statement shall be prepared at the feasibility analysis (go-no go) stage and may be supplemented at a later stage if necessary.” This timing fulfills NEPA’s goals of “promot[ing] disclosure and consideration of potential environmental effects on the human environment resulting from proposed actions [and providing] decisionmakers with alternatives to mitigate these effects.”²⁰² This timing also fulfills NEPA’s goal of “ensur[ing] that agencies take account of environmental effects as an integral part of the agency’s own decision-making process *before decisions are made*.”²⁰³

Moreover, review of the oil and gas leasing program’s effects on climate change should be conducted on a programmatic level because climate change is by nature transboundary and thus not well suited for fragmented review at the RMP, leasing, or APD stages. EISs at the RMP stage cover environmental impacts within the individual BLM district for which the RMP is being developed. Due to the nature of climate change, the environmental impacts of GHG emissions associated with oil and gas leasing in Wyoming or Montana can have significant effects on coastal communities in Alaska or Washington. Those effects cannot as easily be addressed in environmental impact statements at the RMP stage, much less environmental impact statements or environmental assessments at the leasing or APD stages, which are even narrower in scope and application. Moreover, the necessary expertise clearly does not reside in state and field offices that have thus far failed to analyze climate emissions or impacts, and in some cases, even denied climate change’s scientific consensus as recently as this year. Rather, the impacts of BLM’s oil and gas leasing program on climate change are best addressed at the national, programmatic level.

Finally, Interior’s move to implement reforms to BLM’s oil and gas leasing program underscores the need and opportunity for a PEIS.²⁰⁴ As a practical matter, any reforms must be supported by comprehensive environmental review to ensure the best decisions are rendered. It makes sense for Interior to prepare a PEIS as it moves forward with reforms to ensure that, like

²⁰⁰ 40 C.F.R. § 1502.1.

²⁰¹ *Id.*

²⁰² 2014 Guidance, *supra* note 38, at 5.

²⁰³ *Id.* (emphasis added).

²⁰⁴ See BLM’s Advanced Notice of Proposed Rulemaking & Extension of Comment Period, Oil and Gas Leasing; Royalty on Production, Rental Payments, Minimum Acceptable Bids, Bonding Requirements, and Civil Penalty Assessments, 80 Fed. Reg. 31560 (proposed June 3, 2015), *archived at* <https://perma.cc/A6RP-XMCS>.



the federal coal program, BLM's oil and gas program is managed consistent with our nation's climate objectives.

2. A PEIS Will Not Be A Reason For Undue Delay

A PEIS would serve to streamline the oil and gas leasing program's environmental review process and thus will not cause undue delays in the leasing process. Because project, or site-specific, EISs can tier off an overarching PEIS, conducting a PEIS now may save time down the line. CEQ encourages agencies to tier their EISs and expressly provides that, when tiering an EIS or EA to a broader PEIS, agencies need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference.²⁰⁵ Such incorporation by reference will "cut down on bulk," allowing BLM to conduct NEPA review more efficiently at the RMP, leasing, and APD stages.²⁰⁶

CEQ also reassures agencies that the science behind climate change need not cause undue delay. CEQ provides

[A]gencies need not undertake exhaustive research or analysis of potential climate change impacts in the project area or on the project itself, but may instead summarize and incorporate by reference the relevant scientific literature. Incorporation by reference is of value in considering GHG emissions where an agency is considering the implications of climate change for the environmental effects of the proposed action. For example, agencies may summarize and incorporate by reference the major peer-reviewed assessments from the USGCRP and underlying technical reports such as their Synthesis and Assessment Products. Particularly relevant are the reports on climate change impacts on water resources, ecosystems, agriculture and forestry, health, coastlines, and arctic regions in the United States.²⁰⁷

Thus, BLM may ease the administrative burden of a programmatic review of its oil and gas leasing program by incorporating the relevant scientific literature on climate change.

Conducting a PEIS of BLM's oil and gas leasing program consistent with the 2014 CEQ Guidance may also minimize controversy and reduce delays and costs associated with litigation. As the Guidance points out, "[m]ore consistent and appropriately proportioned NEPA reviews can help agencies minimize controversy, thereby avoiding potential project delays. This guidance should also reduce the risk of litigation driven by uncertainty in the assessment process as it will provide a clearer expectation of what agencies should consider and disclose."

²⁰⁵ 40 C.F.R. § 1502.20.

²⁰⁶ 40 C.F.R. § 1502.21.

²⁰⁷ 2014 Guidance, *supra* note 38, at 26–27.



3. A PEIS Will Not Be Speculative

As described above, an indisputable and ever-growing body of scientific literature confirms the existence and consequences of climate change, thereby eliminating uncertainty on the subject. Just as Stratus Consulting did for its report,²⁰⁸ BLM is similarly able to calculate the amount of carbon dioxide and carbon dioxide equivalent released under this program based on the amount of oil and gas extracted from leases authorized by BLM. This information will better allow BLM, other agencies, and the public to assess the climate change impact of BLM's actions, consistent with NEPA, its implementing regulations, and CEQ's 2014 Guidance.

I. The PEIS Should Include Quantification of Downstream Combustion and a Calculation of the Program's Social Cost of Carbon.

The PEIS should include a quantification of emissions from the combustion of the extracted oil and natural gas. As CEQ's 2014 Guidance makes clear, actual estimates of emissions are required even when they are uncertain and can at best be "projected";²⁰⁹ there is a presumption under NEPA that climate emissions will be quantitatively analyzed.²¹⁰ Moreover, this quantification must include the "reasonably foreseeable effects" of the program, including those that come from "using the [extracted] resource."²¹¹ Downstream emissions should be accounted for in the NEPA analysis.²¹²

Combustion of the oil and gas extracted by private leaseholders is a reasonably foreseeable, if not intended, consequence of BLM's oil and gas leasing program. The U.S. Energy Information Administration provides that "about 76% of the 6.97 billion barrels of petroleum products that were consumed in the United States in 2014 were gasoline (47% of total petroleum consumption; includes biofuels), heating oil and diesel fuel (21%), and jet fuel (8%)."²¹³ Similarly, the largest uses of natural gas in the United States are for electric power generation, industrial consumption, and residential consumption.²¹⁴ These primary uses of oil and gas require combustion of the fossil fuel, and this combustion releases significant amounts of GHGs. Thus, the combustion of extracted oil and gas is a reasonably foreseeable consequence of the program, and as such must be accounted for in the PEIS.

²⁰⁸ 2012 Stratus Report, *supra* note 13, at 13–14.

²⁰⁹ 2014 Guidance, *supra* note 38, at 8.

²¹⁰ *Id.* at 16.

²¹¹ *Id.* at 12.

²¹² *Id.* at 11.

²¹³ U.S. Energy Info. Admin. ("EIA"), *What are the products and uses of petroleum?* (last updated Sept. 21, 2015), archived at perma.cc/F7L3-YEY3.

²¹⁴ EIA, *Natural Gas Consumption by End Use* (last updated Dec. 31, 2015), archived at perma.cc/ZJK6-T9M2. The EIA defines "industrial consumption" as "[n]atural gas used for heat, power, or chemical feedstock by manufacturing establishments or those engaged in mining or other mineral extraction as well as consumers in agriculture, forestry, and fisheries. Also included in industrial consumption are generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities." EIA, *Definitions, Sources and Explanatory Notes*, archived at perma.cc/U9GK-5N97. The EIA defines residential consumption as "[g]as used in private dwellings, including apartments, for heating, air-conditioning, cooking, water heating, and other household uses." *Id.*



The PEIS should also put the program's emissions into context using an evaluation of the program's social cost of carbon ("SCC"). An estimate of emissions presented without any context means little to decisionmakers or to the public. A ton or gigaton of CO₂e has little meaning to all but those most deeply steeped in climate science. The SCC evaluation is a simple tool that contextualizes emissions by translating tons of carbon into estimates of the costs to society of emitting that carbon. Proper consideration of the SCC is not only good governance and good stewardship of public resources, but is also legally required.

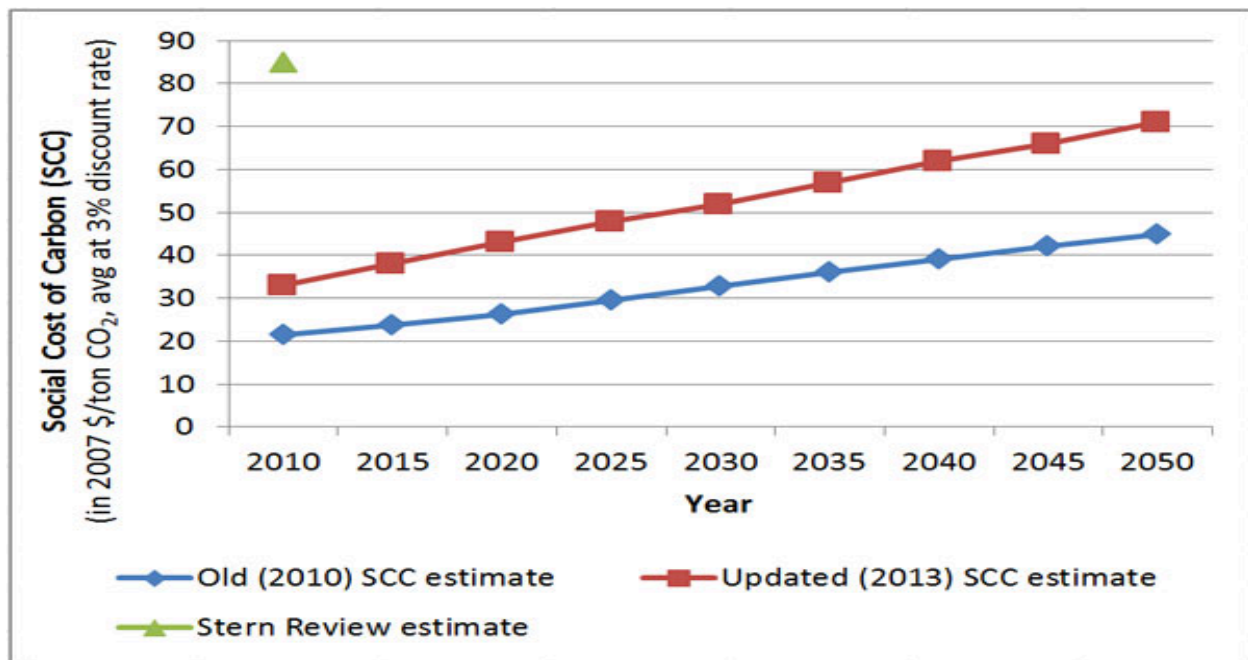


Photo Credit: Frack Check WV

The requirement to analyze the SCC is supported by the general requirements of NEPA and specifically supported in federal case law. NEPA requires agencies take a “hard look” at the consequences of proposed agency actions.²¹⁵ Consequences that must be considered include direct, indirect, and cumulative consequences.²¹⁶ Any NEPA analysis of BLM’s oil and gas leasing program that fails to use the government-wide protocol for assessing the costs to society of carbon emissions from the proposed action has failed to take the legally required “hard look.”

Courts have also ordered agencies to assess the SCC pollution, even before a federal protocol for such analysis was adopted. In 2008, the Ninth Circuit ordered the National Highway Traffic Safety Administration (“NHTSA”) to include a monetized assessment of carbon emissions reductions in an EA prepared under NEPA.²¹⁷ NHTSA had proposed a rule setting corporate average fuel economy standards for light trucks. A number of states and public interest

²¹⁵ 42 U.S.C. § 4321 *et seq.*; *Morris v. U.S. Nuclear Regulatory Comm’n*, 598 F.3d 677, 681 (10th Cir. 2010).

²¹⁶ 40 C.F.R. §§ 1502.16, 1508.7, 1508.8.

²¹⁷ *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1203 (9th Cir. 2008).



groups challenged the rule for, among other things, failing to monetize the benefits that would accrue from a decision that led to lower CO₂ emissions. NHTSA monetized the employment and sales impacts of the proposed action, but failed to monetize the benefits of reduced carbon emissions, arguing that valuing the costs of carbon emissions was too uncertain.²¹⁸ The court found this argument arbitrary and capricious, noting that while estimates of the value of carbon emissions reductions occupied a wide range of values, the correct value was certainly not zero.²¹⁹ The court noted that NHTSA had also monetized other uncertain benefits.²²⁰

More recently, a federal court required the U.S. Forest Service and BLM to monetize the cost of carbon emissions from a proposed coal lease modification in its cost-benefit analysis.²²¹ In the lease modification's EA, the agencies included a quantification of the project's benefits, but failed to include a quantification of the project's SCC. The agencies' decision to rely on the stated benefits of the project to justify its approval while wholly ignoring the societal costs that will accrue through climate change, the court held, was arbitrary and capricious.²²² An agencies' cost-benefit analysis cannot be misleading, and any such project approval would be based on a NEPA analysis with misleading economic assumptions, an approach long disallowed by courts throughout the country.²²³

Similarly, BLM has long touted the economic benefits of its oil and gas leasing program. It has not, however, used the SCC to monetize the costs to society of its program, creating a misleading picture of the program's costs and benefits. Putting the program's emissions into context using this useful, accepted tool better informs agency decisionmakers, the public, and comports with NEPA's requirement to take a "hard look" at the environmental consequences of agency action.

J. BLM Should Place a Moratorium On All New Oil and Gas Leasing and APDs.

WildEarth Guardians requests that a moratorium be placed on all new oil and gas leasing and approvals of APDs pending completion of the PEIS. Leasing and approval of APDs cannot continue absent adequate NEPA analysis. CEQ's NEPA implementing regulations instruct agencies to undergo NEPA review "at the earliest possible time to insure that planning and decisions reflect environmental values."²²⁴ Interior's NEPA implementing regulations reiterate the requirement to apply NEPA early: "For any potentially major proposed Federal action that may have potentially significant environmental impacts, bureaus must coordinate, as early as feasible, with [other bureaus or Federal agencies, State, local, and tribal governments]."²²⁵ Bureaus must also "solicit the participation of all those persons or organizations that may be

²¹⁸ *Id.* at 1199–1200.

²¹⁹ *Id.* at 1200.

²²⁰ *Id.* at 1202.

²²¹ *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F.Supp. 3d 1174 (D. Colo. 2014).

²²² *Id.* at 1191, 1196.

²²³ *Id.* at 1182.

²²⁴ 40 C.F.R. § 1501.2.

²²⁵ 43 C.F.R. § 46.200(a)(1)–(2).



interested or affected as early as possible.”²²⁶ CEQ’s 2014 Guidance directs agencies to “take account of environmental effects as an integral part of the agency’s own decisionmaking process before decisions are made.”²²⁷ NEPA is intended to “inform decisionmakers by ensuring agencies consider environmental consequences of a proposed action *as they decide whether to proceed with the action and, if so, how to take appropriate steps to eliminate or mitigate adverse effects.*”²²⁸ Thus, NEPA analysis is supposed to be conducted at the earliest possible opportunity, *before action is taken.*

BLM’s oil and gas leasing program, however, is already being implemented without the required NEPA climate change analysis. As the legally insufficient discussions of climate change in BLM’s current environmental impact statements at the RMP stage and environmental assessments at the land leasing and APD stages demonstrate, “planning and decisions [on the program are not] reflect[ing] environmental values.”²²⁹ Nor is BLM attempting to mitigate the adverse climate change impacts of its program in an EIS.

BLM cannot continue issuing land leases and permits to drill absent adequate NEPA analysis, as Interior recognized for the federal coal program. For that reason, and consistent with Interior’s moratorium on the coal program, BLM should place a moratorium on all new oil and gas leasing and approvals of APDs pending completion of the PEIS.

III. CONCLUSION

Global climate change represents an immediate, existential threat to human health and the environment. The grave consequences of climate change have been extensively researched and thoroughly documented. Those impacts include: more frequent and intense heat waves; more severe wildfires; degraded air quality; more heavy downpours and flooding; increased drought; greater sea-level rise; more intense storms; harm to water resources; harm to agriculture; and harm to wildlife and ecosystems.²³⁰ CEQ has made clear that climate change is a “fundamental issue,” and that “the relation of Federal actions to it falls squarely within NEPA’s focus.”²³¹ It is undeniable that BLM’s oil and gas leasing program contributes to the emission of GHGs and to climate change. BLM has admitted as much in its bare-bones discussions of climate change in its RMPs. Further, reports by Stratus Consulting documented and quantified the GHG emissions from fossil fuels extracted from federal lands.

The results of the Stratus Report are astonishing. Over just three years (2008–2010), extracted onshore oil and gas from federal lands by private leaseholders contributed a total of 49,885 MTCH₄, 612,240,176 MTCO₂, and 9,684 MTN₂O into the atmosphere, for a total release of 612,309,429 MTCO₂e. In light of this data and CEQ’s directive requiring the consideration of

²²⁶ *Id.* at 46.200(b).

²²⁷ 2014 Guidance, *supra* note 38, at 5.

²²⁸ *Id.* (emphasis added).

²²⁹ 40 C.F.R. § 1501.2.

²³⁰ 2014 Guidance, *supra* note 38, at 7–8.

²³¹ *Id.* at 2.



climate change under NEPA, BLM's failure to conduct a PEIS of its oil and gas leasing program is legally untenable. NEPA requires the preparation of a PEIS where multiple projects share similar or cumulative effects, and BLM's failure to conduct a PEIS for its program violates the letter and spirit of NEPA.

Moreover, a programmatic review of BLM's oil and gas leasing program would also benefit the agency. BLM's tiered oil and gas leasing approvals would benefit from a programmatic overlay. Tiering to a PEIS for its environmental reviews at the RMP, leasing, and APD stage would increase efficiency in the NEPA process and would allow BLM to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.²³² Further, a PEIS will not be duplicative, a reason for delay, or speculative, and it may reduce litigation risks.

For all of the above reasons, WildEarth Guardians hereby petitions BLM to evaluate the direct, indirect, and cumulative impacts of its oil and gas leasing program on climate change in a PEIS. WildEarth Guardians also petitions BLM to evaluate the programmatic non-climate impacts of its oil and gas leasing program, including increased seismic activity related to fracking, public health and safety impacts associated with fracking, and environmental impacts associated with large numbers of improperly abandoned and unplugged and unreclaimed wells. Pending completion of the PEIS, and consistent with Interior's decision on its federal coal leasing program, WildEarth Guardians requests a moratorium on all new oil and gas leasing or approvals of APDs "so that decisions about those leases can benefit from the recommendations that come out of the review."²³³ Pursuant to APA section 553(e), WildEarth Guardians further requests that DOI amend its NEPA regulations to incorporate CEQ's 2014 Guidance. Lastly, due to the critically important and accelerating effects of climate change, WildEarth Guardians, consistent with APA section 555(e) and 43 C.F.R. § 14.3, requests a prompt response to this Petition.

²³² See 40 C.F.R. § 1502.20.

²³³ DOI, *Secretary Jewell Launches Comprehensive Review of Federal Coal Program*, *supra* note 8.



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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a copy of this forgoing citizen petition was served on this ____ day of _____, 2016, by certified mail upon the parties listed below:

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