

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

WILDEARTH GUARDIANS, and)
PHYSICIANS FOR SOCIAL RESPONSIBILITY,)

Plaintiffs,)

v.)

Case No. 1:16-cv-01724-RC
The Honorable Rudolph Contreras

DAVID BERNHARDT,)
WILLIAM PERRY PENDLEY,¹ and)
U.S. BUREAU OF LAND MANAGEMENT)

Defendants,)

WESTERN ENERGY ALLIANCE,)
PETROLEUM ASSOCIATION OF WYOMING,)
AMERICAN PETROLEUM INSTITUTE,)
STATE OF WYOMING, and)
STATE OF UTAH,)

Defendant-Intervenors.)

**AMENDED AND SUPPLEMENTED COMPLAINT FOR
DECLARATORY AND INJUNCTIVE RELIEF**

INTRODUCTION

1. Plaintiffs WildEarth Guardians and Physicians for Social Responsibility (collectively, “Conservation Groups”) timely file this Amended and Supplemented Complaint pursuant to Federal Rule of Civil Procedure 15(a)(2), this Court’s July 19, 2019 Memorandum Opinion granting leave to amend, ECF No. 121, and this Court’s September 9, 2019 Minute Order setting a briefing schedule. Conservation Groups seek declaratory and injunctive relief against David Bernhardt, in his official capacity as Secretary of the U.S. Department of the Interior, William Perry Pendley, in his official capacity as Acting Director of the U.S. Bureau of

¹ Pursuant to Federal Rule of Civil Procedure 25(d), Plaintiffs substitute William Perry Pendley.

Land Management (BLM), and the BLM (collectively, “Federal Defendants”), for their leasing authorizations re-approving the issuance of 283 oil and gas leases covering more than 300,000 acres of federal public lands in Wyoming, in violation of the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4370h, and its implementing regulations.

2. This lawsuit originally challenged Federal Defendants’ approval of 473 oil and gas leases through 11 oil and gas lease sales encompassing 463,553 acres of public lands across three western states—Colorado, Utah, Wyoming—without properly analyzing, at the programmatic or project level, the ensuing direct, indirect, and cumulative impacts to our climate.

3. To streamline litigation of this matter, the parties agreed to brief the case on a state-by-state basis, beginning with the Wyoming leases. ECF No. 20 (proposed briefing schedule); ECF No. 24 (order adopting state-by-state briefing). After Conservation Groups’ claims with respect to the Wyoming leases were fully briefed, the Court issued an order holding that Federal Defendants violated NEPA by failing to take a hard look at the climate impacts of greenhouse gas (GHG) emissions resulting from the challenged leases, and remanding the Environmental Assessments (EAs) and Findings of No Significant Impact (FONSI) for the Wyoming leases to BLM so that the agency could address the identified deficiencies. ECF Nos. 98 (order), 99 (memorandum opinion).

4. Within a matter of weeks of the Court’s remand, BLM issued a new EA purporting to address the Court’s mandate to take a hard look at the direct, indirect, and cumulative climate impacts of GHG emissions resulting from its Wyoming leasing decisions, DOI-BLM-WY-0000-2019-0007-EA (2019 Supplemental EA), and a Finding of No Significant Impact (2019 FONSI). The 2019 Supplemental EA and 2019 FONSI both concluded that oil and

gas development on the 283 Wyoming leases—totaling 303,995.7 acres of public lands—would have no significant climate impact.

5. Through this amended and supplemented complaint, Conservation Groups now challenge the 2019 Supplemental EA, 2019 FONSI, and Federal Defendants’ rushed decision to reapprove the Wyoming leases. The 2019 Supplemental EA underlying the new leasing authorization continues to fail to properly analyze the direct, indirect, and cumulative impacts on our climate as required by this Court and NEPA.

6. In re-authorizing the Wyoming leases, BLM repeats the errors found in the original lease authorizations by: (1) failing to calculate direct and indirect emissions for the full duration of any future development; (2) relying on broad, field-office wide emissions as opposed to site-specific emissions to assess direct and indirect emissions; and (3) failing to fully analyze the cumulative impacts from reasonably foreseeable (a) BLM lease sales within Wyoming, (b) private and state actions within Wyoming, and (c) BLM lease sales within the region but outside of Wyoming.

7. Thus, Plaintiffs ask this Court to set aside the Wyoming approvals as violating NEPA and to ensure that future federal oil and gas leasing decisions continue to comply with the law.

JURISDICTION & VENUE

8. This action arises under NEPA, 42 U.S.C. §§ 4321-4370h, and the Administrative Procedure Act (APA), 5 U.S.C. §§ 701-706.

9. Jurisdiction is proper in this Court pursuant to 28 U.S.C. § 1331, because the action raises a federal question. The Court has authority to issue the requested declaratory and injunctive relief pursuant to 28 U.S.C. §§ 2201, 2202, and 5 U.S.C. §§ 705, 706.

10. This action reflects an actual, present, and justiciable controversy between Conservation Groups and Federal Defendants within the meaning of the Declaratory Judgment Act, 28 U.S.C. § 2201. Conservation Groups' interests will be adversely affected and irreparably injured if Federal Defendants continue to violate NEPA as alleged herein, and if they affirmatively implement the decisions challenged herein. These injuries are concrete and particularized, and fairly traceable to Federal Defendants' challenged decisions, providing the requisite personal stake in the outcome of this controversy necessary for this Court's jurisdiction.

11. The requested relief would redress the actual, concrete injuries to Conservation Groups caused by Federal Defendants' failure to comply with duties mandated by NEPA and its implementing regulations.

12. The challenged agency actions are final and subject to judicial review pursuant to 5 U.S.C. §§ 702, 704, 706.

13. Conservation Groups have exhausted any and all available and requested administrative remedies.

14. Venue in this Court is proper pursuant to 28 U.S.C. § 1391(e) because officers of the United States are named as Defendants in their official capacities and reside in this judicial district, Plaintiff Physicians for Social Responsibility resides in this judicial district, and a substantial part of the events or omissions giving rise to the claims, as well as the underlying decisionmaking and guidance with respect to BLM's Oil and Gas Leasing Program as disseminated to the agency's field offices, has occurred in this district due to decisions made here by Federal Defendants.

PARTIES

15. Plaintiff WILDEARTH GUARDIANS (Guardians) is a non-profit membership organization based in Santa Fe, New Mexico, with offices throughout the West. Guardians has 238,458 members and activists, some of whom live, work, or recreate on public lands on and near the leases challenged herein. Guardians and its members are dedicated to protecting and restoring the wildlife, wild places, wild rivers, and health of the American West. Towards this end, Guardians and its members work to replace fossil fuels with clean, renewable energy in order to safeguard public health, the environment, and the Earth's climate.

16. Plaintiff PHYSICIANS FOR SOCIAL RESPONSIBILITY (PSR) is a nonprofit organization based in Washington, D.C., with chapters across the country and over 30,000 members and activists. PSR works to create a healthy, just, and peaceful world for current and future generations. PSR uses its medical and public health expertise to reverse the Earth's trajectory toward climate change and protect the public from the effects of climate change, protect the public and the environment from toxic chemicals, and eliminate the use of nuclear power.

17. Conservation Groups' members use and enjoy the cultural resources, wildlands, wildlife habitat, rivers, streams, and healthy environment on BLM and other public lands in Wyoming that include lands in and adjacent to the lease sale parcels that are the subject of this Complaint, as well as areas outside the lease parcels that are affected by development of the leases in each lease sale, for hiking, fishing, hunting, camping, photographing scenery and wildlife, wildlife viewing, aesthetic enjoyment, and engaging in other vocational, scientific, and recreational activities.

18. Conservation Groups' members frequently recreate on public lands throughout Wyoming that include the leases that are the subject of the leasing authorizations challenged herein, or lands that are around or within view of lands affected by the leasing authorizations challenged herein. Conservation Groups' members have recreated on leased lands in Carbon and Sweetwater Counties, the Battle Springs Draw area, and the Adobe Town/Kinney Rim area. In addition, Conservation Groups' members enjoy wildlife viewing and photography on and around leased lands in the Red Desert, Bighorn Basin, and BLM's Lander Field Office. Oil and gas development in these areas has negatively impacted wildlife by reducing their populations (making it more difficult to view and photograph wildlife) and causing behavioral shifts in wildlife that increase their avoidance of roads, resulting in fewer wildlife viewing opportunities.

19. Conservation Groups' members derive recreational, inspirational, scientific, educational, and aesthetic benefit from their activities on lands that include the leases that are the subject of the leasing authorizations challenged herein, or on lands that are around or within view of lands affected by the leasing authorizations challenged herein as well as by subsequent lease development. The affected lands within or near the lease sale parcels include very popular and iconic landscapes, including, but certainly not limited to the Bighorn Mountains near Wyoming's Bighorn Basin leases and the Wind River Range near Wyoming's Pinedale Field Office leases.

20. Conservation Groups' members intend to continue to use and to enjoy BLM and other public lands in Wyoming that include the leases that are the subject of the leasing authorizations challenged herein, and lands that are around or within view of lands affected by the leasing authorizations challenged herein as well as by subsequent lease development, to enjoy cultural resources, wildlands, wildlife habitat, rivers, streams, and healthy environments frequently and on an ongoing basis long into the future, including this fall, winter, and spring.

21. Conservation Groups' members' enjoyment of public lands in and adjacent to the leases challenged herein will be adversely affected and diminished as a result of Federal Defendants' leasing actions. Conservation Groups' members have not only recreated on public lands that include the lease sale parcels that are the subject of this lawsuit, but they enjoy public lands adjacent to these parcels. The reasonably foreseeable development of these lease parcels stands to directly alter the natural state of public lands within the lease areas, produce air pollution that is offensive, create noise that disrupts wildlife and recreational enjoyment, and lead to connected development that will further adversely impact nearby public lands, including road construction, truck traffic, and the construction of oil and gas processing facilities needed to sustain the production of oil and gas on the lease parcels that are the subject of this lawsuit.

22. The development of the oil and gas leases challenged herein will bring not only new industrial activity into undeveloped landscapes, but will also bring noise, destruction of wildlife habitat, surface disturbance, air pollution, and water contamination. These impacts can be far-reaching. For example, air pollution from oil and gas development can create extensive visible emissions that create haze and smog in large regions. Wyoming's Red Desert area (where a number of the leases at issue are located) was nearly pristine 15 years ago but today, on most days, experiences some degree of smog. The increased number of smoggy days corresponds with increased oil and gas development over the last decade in the Red Desert area.

23. A favorable ruling in this case would redress the harms that Conservation Groups and their members stand to suffer as a result of Federal Defendants' actions. If Federal Defendants properly took into account the climate impacts of their actions, they likely would have rejected offering leases for sale and issuance. This would have eliminated the threat of reasonably foreseeable oil and gas development, preventing the diminishment of the enjoyment

of public lands used by Conservation Groups' members. A favorable ruling would ensure that as Conservation Groups' members continue to use and enjoy public lands affected by Federal Defendants' actions, their harms would be reduced, if not eliminated.

24. Conservation Groups and their members have a procedural interest in Federal Defendants' full compliance with NEPA's planning and decisionmaking processes when authorizing oil and gas development on public lands in the Interior West, including Wyoming in general, and in and around the lease sale areas in particular, and Federal Defendants' attendant duty to substantiate its decisions in the record for these authorizations.

25. Defendant DAVID BERNHARDT is sued in his official capacity as the Secretary of the U.S. Department of the Interior and is responsible for managing the public lands and resources in the Interior West—and Colorado, Utah, and Wyoming in particular—and, in that official capacity, is responsible for implementing and complying with federal law, including the federal laws implicated by this action.

26. Defendant WILLIAM PERRY PENDLEY is Acting Director of the Bureau of Land Management, an agency within the United States Department of the Interior, and is responsible for managing the public lands, resources, and public mineral estate of the United States, including lands and resources in the Interior West, including Colorado, Utah, and Wyoming. In his official capacity, Director Pendley is responsible for implementing and complying with federal law, including the federal laws implicated by this action.

27. Defendant UNITED STATES BUREAU OF LAND MANAGEMENT is an agency within the United States Department of the Interior and is responsible for managing public lands and resources in Colorado, Utah, and Wyoming, including federal onshore oil and gas resources and the leasing program for those resources. In this managerial capacity, BLM is

responsible for implementing and complying with federal law, including the federal laws implicated by this action.

LEGAL BACKGROUND

I. National Environmental Policy Act

28. NEPA is our “basic national charter for the protection of the environment.” 40 C.F.R. § 1500.1(a). It was enacted—recognizing that “each person should enjoy a healthful environment”—to ensure that the federal government uses all practicable means to “assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings,” and to “attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences,” among other policies. 42 U.S.C. § 4331(b), (c). NEPA aims “to promote efforts which will prevent or eliminate damage to the environment and biosphere.” *Id.* § 4321.

29. NEPA regulations explain, in 40 C.F.R. §1500.1(c), that:

Ultimately, of course, it is not better documents but better decisions that count. NEPA’s purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.

30. NEPA achieves its purpose through “action forcing procedures... requir[ing] that agencies take a *hard look* at environmental consequences.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citations omitted) (emphasis added).

31. “Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.” 40 C.F.R. § 1501.2.

32. Federal agencies must comply with NEPA before there are “any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.” 42 U.S.C. § 4332(2)(C)(v); *see also* 40 C.F.R. §§ 1501.2, 1502.5(a).

33. NEPA requires Federal Defendants to consider “any adverse environmental effects which cannot be avoided.” 42 U.S.C. § 4332(2)(C)(ii). In so doing, Federal Defendants must “identify and develop methods and procedures... which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations.” *Id.* § 4332(2)(B).

34. To accomplish these purposes, NEPA requires that all federal agencies prepare a “detailed statement” regarding all “major federal actions significantly affecting the quality of the human environment.” *Id.* § 4332(2)(C). This statement, known as an Environmental Impact Statement (EIS), must, among other things, rigorously explore and objectively evaluate all reasonable alternatives, analyze all direct, indirect, and cumulative environmental impacts, and include a discussion of the means to mitigate adverse environmental impacts. 40 C.F.R. §§ 1502.14, 1502.16. The scope of the analysis must include “[c]umulative actions,” or actions that “when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement,” and “[s]imilar actions,” or actions that “when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together.” *Id.* § 1508.25(a)(2), (3).

35. Direct effects include those that “are caused by the action and occur at the same time and place.” *Id.* § 1508.8(a). Indirect effects include effects that “are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” *Id.* §

1508.8(b). Cumulative effects are “the impact on the environment which 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.” *Id.* § 1508.7. “Effects” are synonymous with “impacts.” *Id.* § 1508.8.

36. These effects include “ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative” effects. *Id.* § 1508.8.

37. BLM’s analysis must do more than merely identify impacts; it must also “evaluate the severity” of effects. *Methow Valley Citizens Council*, 490 U.S. at 352; 40 C.F.R. § 1502.16(a)-(b) (recognizing that agency must explain the “significance” of effects).

38. An agency may prepare an EA to determine whether an EIS is necessary. *Id.* §§ 1501.3, 1508.9. An EA must include a discussion of alternatives and the environmental impacts of the action. *Id.* § 1508.9; 42 U.S.C. § 4332(2)(E).

39. If an agency decides not to prepare an EIS, an EA must “provide sufficient evidence” to support a Finding of No Significant Impact (FONSI). 40 C.F.R. § 1508.9(a)(1). Such evidence must demonstrate that the action “will not have a significant effect on the human environment.” *Id.* § 1508.13. An assessment of whether or not an impact is “significant” is based on a consideration of the “context and intensity” of the impact. *Id.* § 1508.27. “Context” refers to the scope of the proposed action, including the interests affected. *Id.* § 1508.27(a). “Intensity” refers to the severity of the impact and must be evaluated with a host of factors in mind, including but not limited to “[u]nique characteristics of the geographic area[,]” “[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or

unknown risks[,]” and “[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” *Id.* § 1508.27(b).

40. In certain circumstances, NEPA allows an agency to “tier” a site-specific environmental analysis for a project to a broader EIS for a program or plan under which the subsequent project is carried out. *Id.* § 1508.28. When an agency tiers a site-specific analysis to a broader EIS, “the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action.” *Id.* § 1502.20.

41. The Department of the Interior’s NEPA regulations for using tiered documents specify that site-specific EAs “can be tiered to a programmatic or other broader-scope [EIS].” 43 C.F.R. § 46.140(c). As a general rule, an EA that tiers to another NEPA document “must include a finding that the conditions and environmental effects described in the broader NEPA document are still valid or address any exceptions.” *Id.* § 46.140. If the programmatic EIS analyzes the impacts of the site-specific action, the agency is not required to perform additional analysis of impacts. *Id.* § 46.140(a). However, if the impacts analysis in the programmatic EIS “is not sufficiently comprehensive or adequate to support further decisions,” the agency’s EA must explain this and provide additional analysis. *Id.* § 46.140(b).

II. The Administrative Procedure Act

42. The Administrative Procedure Act (APA) provides a right to judicial review for any “person suffering legal wrong because of agency action.” 5 U.S.C. § 702. Actions that are reviewable under the APA include final agency actions “for which there is no other adequate remedy in a court.” *Id.* § 704.

43. Under the APA, a reviewing court shall “hold unlawful and set aside agency action... found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Id.* § 706(2)(A). A court must also compel agency action unlawfully withheld or unreasonably delayed. *Id.* § 706(1).

III. Legal Framework for Federal Oil and Gas Lease Authorizations

A. Mineral Leasing Act

44. Under the Mineral Leasing Act of 1920 (MLA), as amended, the Secretary of the Interior is responsible for managing and overseeing mineral development on public lands, not only to ensure safe and fair development of the mineral resource, but also to “safeguard[]...the public welfare.” 30 U.S.C. § 187.

45. The Secretary has discretion, though constrained by the laws at issue in this case, to determine where, when, and under what terms and conditions mineral development should occur. 43 C.F.R. § 3101.1-2. The grant of rights in a federal mineral lease is subject to a number of reservations of authority to the federal government, including reasonable measures concerning the timing, pace, and scale of development. *Id.*

46. BLM regulations implementing the MLA provide: “Each proper BLM State office shall hold sales at least quarterly if lands are available for competitive leasing” and “[I]ease sales shall be conducted by a competitive oral bidding process.” *Id.* § 3120.1-2.

47. Not all of the parcels offered for sale in any given BLM lease sale are awarded through competitive bidding. For example, for fiscal year 2015 BLM reported that of the 1,286 lease parcels offered for sale, only 690 of the parcels received bids. This trend continues even under the Trump Administration. For example, in 2018, BLM reported that of the 3,073 lease sale parcels offered for sale, only 1,336 received bids.

48. BLM regulations further state that “[t]he authorized officer may suspend the offering of a specific parcel while considering a protest or appeal against its inclusion in a Notice of Competitive Lease Sale.” *Id.* § 3120.1-3.

B. BLM’s Oil and Gas Planning and Management

49. BLM manages onshore oil and gas development through a three-phase process. Each phase is distinct, serves distinct purposes, and is subject to distinct rules, policies, and procedures.

50. In the first phase, BLM prepares a Resource Management Plan (RMP) in accordance with 43 C.F.R. §§ 1600-1610.8, along with additional guidance found in BLM’s Land Use Planning Handbook (H-1601-1) (BLM Handbook). An RMP envisions present and future use of public lands and their resources by establishing management priorities, as well as guiding and constraining BLM’s implementation-stage management. With respect to fluid minerals leasing decisions, in the RMP, BLM determines which public lands containing federal minerals will be open to leasing and under what conditions. The basis for such land designations is the detailed hard look analysis of the direct, indirect, and cumulative impacts to the human environment of predicted implementation-stage development in the RMP’s corresponding EIS.

51. A reasonably foreseeable development scenario (RFDS) underlies BLM’s assumptions regarding the pace and scope of fluid minerals development within the RMP planning area. An RFDS does not include any analysis of environmental impacts and is not a NEPA document.

52. In the second phase, BLM identifies the boundaries for lands to be offered for lease and proceeds to sell and execute leases for those lands through a lease sale and issuance. Leases are sold in accordance with 43 C.F.R. §§ 3120-3120.7-3, with additional agency guidance

outlined in relevant BLM Instruction Memorandums. For the 2015 and 2016 lease sale decisions, Instruction Memorandum No. 2010-117 was in effect. For the 2019 reauthorization of the Wyoming lease parcels, Instruction Memorandum No. 2018-034 was in effect. While BLM state offices manage lease sales, the BLM field offices where specific lease parcels are located conduct NEPA review, solicit public comment, and apply appropriate site-specific leasing stipulations.

53. BLM's Leasing Reforms establish a timeline for public engagement, culminating in the public's opportunity to protest the sale of specific parcels. Although BLM may proceed with a lease sale after a Protest has been filed, BLM must resolve any and all Protests received prior to issuing a lease parcel to a successful bidder.

54. At any point prior to the lease sale, BLM may refuse to lease public lands, even if public lands were made available for leasing pursuant to the RMP. *Udall v. Tallman*, 380 U.S. 1, 5 (1965).

55. Prior to a BLM lease sale, BLM has the authority to subject leases to terms and conditions, which can serve as "stipulations" to protect the environment. 43 C.F.R. § 3101.1-3. Once BLM issues leases, it may only impose conditions of approval (COAs), which are delimited by the terms and conditions of the lease. *Id.* § 3101.1-2.

56. Once sold, the lease purchaser has the right to use as much of the leased land as is necessary to explore and drill oil and gas within the lease boundaries, subject to stipulations attached to the lease. *Id.* § 3101.1-2.

57. The Secretary of the Interior has the authority to cancel leases that have been "improperly issued." *Id.* § 3108.3(d). A lease may be canceled where BLM has not complied with NEPA prior to lease issuance. *Clayton W. Williams, Jr.*, 103 IBLA 192 (1988).

58. Oil and gas operations are conducted in accordance with BLM regulations at 43 C.F.R. §§ 3160-3165.4.

59. The third-phase occurs after BLM issues a lease when the lessee submits an application for permit to drill (APD) to BLM. 43 C.F.R. § 3162.3-1(c). At this stage, BLM may condition the approval of the APD on the lessees' adoption of "reasonable measures" whose scope is delimited by the lease and the lessees' surface use rights. 43 C.F.R. § 3101.1-2.

PROCEDURAL BACKGROUND

I. Administrative Process for the Wyoming Lease Sales

60. BLM held five oil and gas lease sales in Wyoming between May 2015 and August 2016. Pursuant to these sales, BLM sold and issued 30 parcels in the May 5, 2015 sale; 60 parcels in the August 4, 2015 sale; 38 parcels in the November 3, 2015 sale; 74 parcels in the May 3, 2016 sale; and 76 parcels in the August 2, 2016 sale—for a combined total of 282 oil and gas leases encompassing 302,827.2 acres of federal minerals across 16 counties in Wyoming.

61. Guardians commented on the various Leasing EAs on the following dates: November 19, 2014; February 23, 2015; May 22, 2015; August 19, 2015; December 2, 2015; and February 22, 2016.

62. On March 4, 2015, Guardians filed a timely protest of BLM's May 5, 2015 oil and gas lease sale. On May 4, 2015, BLM denied Guardians' protest of the May lease sale. BLM held the lease sale the day after it denied Guardians' protest, and issued the sold leases to Lessees on June 24, 2015.

63. On June 5, 2015, Guardians filed a timely protest of BLM's August 4, 2015 oil and gas lease sale. On July 29, 2015, BLM denied Guardians' protest of the August lease sale.

BLM held the lease sale on August 4, 2015, and issued the sold leases to Lessees on September 16, 2015.

64. On September 4, 2015, Guardians filed a timely protest of BLM's November 3, 2015, oil and gas lease sale. On November 2, 2015, BLM denied Guardians' protest of the November lease sale. BLM held the lease sale on the same day that it denied Guardians' protest, and issued the sold leases to Lessees on December 15, 2015.

65. On March 4, 2016, Conservation Groups filed a timely protest of BLM's May 3, 2016, oil and gas lease sale. On May 2, 2016, BLM denied Conservation Groups' protest of the May lease sale. BLM held the lease sale the day after it denied Conservation Groups' protest and issued the sold leases to Lessees on June 24, 2016.

66. On June 3, 2016, Guardians filed a timely protest of BLM's August 2, 2016, oil and gas lease sale. On July 29, 2016, BLM denied Guardians' protest of the August lease sale. BLM held the lease sale the day after it denied Guardians' protest, and issued the sold leases to Lessees on September 15, 2016.

67. After this Court remanded the Wyoming EAs to BLM, ECF Nos., 98, 99, BLM's Wyoming State Office initiated a public comment period on the draft supplemental EA on the evening of April 12, 2019, with comments due April 22, 2019, 5 business days later. *See* ECF No. 102, 103. Despite the unreasonably short comment period, the Conservation Groups submitted timely comments on the 2019 Supplemental EA for the Wyoming leases. BLM did not offer any additional comment periods or a protest period for these leases.

II. Procedural History of this Litigation

68. This lawsuit originally challenged Federal Defendants' approval of 473 oil and gas leases through 11 oil and gas lease sales encompassing 463,553 acres of public lands across

three western states—Colorado, Utah, Wyoming—without properly analyzing, at the RMP or lease level, the ensuing direct, indirect, and cumulative impacts to our climate. ECF No. 22.

69. To streamline litigation of this matter, the parties agreed to brief the case on a state-by-state basis, beginning with Wyoming. ECF No. 20 (proposed briefing schedule); ECF No. 24 (order adopting state-by-state briefing). After Plaintiffs' claims regarding the Wyoming leases were fully briefed, the Court issued an order holding that Federal Defendants failed to take a hard look at the impacts of greenhouse gas emissions resulting from the challenged leases and remanded the Wyoming EAs, FONSI, and other NEPA analyses to BLM to address the identified deficiencies. ECF No. 99.

70. Within weeks, BLM issued its draft supplemental EA for all of the Wyoming leasing decisions, DOI-BLM-WY-0000-2019-0007-EA, and the draft FONSI. BLM's Wyoming State Office initiated a public comment period on the draft EA on evening of April 12, 2019 with comments due April 22, 2019, 5 business days later. *See* ECF No. 102, 103.

71. Conservation Groups submitted comments detailing how BLM's 2019 Supplemental EA failed to comply with this Court's March 19, 2019 Order, ECF No. 99, on April 22, 2019. Conservation Groups' alleged that BLM (1) failed to calculate direct and indirect emissions for the full duration of any future development; (2) illegally relied on broad, field-office wide emissions as opposed to site-specific per well emissions to assess direct and indirect emissions; (3) failed to fully analyze the cumulative impacts from reasonably foreseeable (a) BLM lease sales within Wyoming, (b) private and state actions within Wyoming, and (c) BLM lease sales within the region but outside of Wyoming; and (4) failed to assess the significance of the proposed action using readily available tools such as the social cost of carbon and carbon

budgeting. Many of these deficiencies are similar to the deficiencies highlighted in the original set of lease sales.

72. On May 7, 2019, BLM finalized and issued the 2019 Supplemental EA along with the 2019 FONSI and a signed final decision record reauthorizing all nine of the Wyoming lease sales at issue.

73. BLM then sought a voluntary remand of its leasing authorizations for the Colorado and Utah leases at issue in this litigation, ECF No. 107, based on the agency's recognition that "[t]he analyses of climate change impacts in the NEPA documents supporting the Colorado and Utah leasing decisions are similar to those in the Wyoming EAs," which were found by this Court to violate NEPA. ECF No. 99.

74. BLM's supplemental NEPA reviews for the Colorado and Utah lease sales have yet to be completed; accordingly this Amended and Supplemented Complaint targets BLM's updated, yet still inadequate, analysis of climate impacts in the 2019 Supplemental EA for the Wyoming leases.

FACTUAL BACKGROUND

I. The Climate Crisis

75. Global climate change is the greatest threat that humanity has ever faced. The scientific consensus is clear: as a result of greenhouse gas emissions, our climate is rapidly destabilizing with potentially catastrophic results. Rising seas, more extreme heatwaves, increased drought and flooding, larger and more devastating wildfires and hurricanes, and other terrifying changes are now upon us, the deadly consequence of humanity's reckless interference with the stability of the global climate. It is now well-established that greenhouse gas (GHG)

emissions—in particular carbon dioxide and methane—from the production and combustion of fossil fuels, such as coal, oil, and gas, are the predominant drivers of climate change.

76. Carbon dioxide (CO₂) is the most emitted greenhouse gas in the United States. According to a 2018 EPA report, *Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2016* (“2016 GHG Inventory Report”), CO₂ comprised 82 percent of total U.S. greenhouse gas emissions, or 5,311 million metric tons. EPA’s data indicates that fossil fuel combustion accounted for 93.5 percent of CO₂ emissions in 2016.

77. The Intergovernmental Panel on Climate Change (IPCC) is a Nobel Prize-winning scientific body within the United Nations that reviews and assesses the most recent scientific, technical, and socio-economic information relevant to our understanding of climate change. In its 2014 report to policymakers, the IPCC provided a summary of our understanding of human-caused climate change. Among other things, the IPCC summarized:²

- Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems.
- Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen.
- Anthropogenic greenhouse gas emissions have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever. This has led to atmospheric concentrations of CO₂, methane, and nitrous

² IPCC, *Climate Change 2014 Synthesis Report, Summary for Policymakers*, 1, 2, 4, 6, 9, 10, http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century.

- In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Impacts are due to observed climate change, irrespective of its cause, indicating the sensitivity of natural and human systems to changing climate.
- Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, *increasing the likelihood of severe, pervasive, and irreversible impacts for people and ecosystems. Limiting climate change would require substantial and sustained reductions in greenhouse gas emissions which, together with adaptation, can limit climate change risks.* (emphasis added)
- Surface temperature is projected to rise over the 21st century under all assessed emission scenarios. It is *very likely* that heat waves will occur more often and last longer, and that extreme precipitation events will become more intense and frequent in many regions. The ocean will continue to warm and acidify, and global mean sea level to rise. (emphasis in original)

78. The IPCC also recently issued a special report³ in October 2018 that examined in more depth, the impacts of global warming of 1.5°C above pre-industrial levels as compared to 2.0°C above pre-industrial levels. The IPCC found:

- Climate models project robust differences in regional climate characteristics between present-day and global warming of 1.5°C, and between 1.5°C and 2°C. These differences include increases in: mean temperature in most land and ocean regions (high confidence), hot extremes in most inhabited regions (high confidence), heavy precipitation in several regions (medium confidence), and the probability of drought and precipitation deficits in some regions (medium confidence).
- Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C.
- For example, nearly 450 million fewer people could face extreme heatwaves and 65 million fewer people could face exceptional heatwaves with global warming limited to 1.5°C compared to 2°C (medium confidence).
- Warming of 2°C is projected to result in the loss of 99% of coral reefs (compared to 70-90% loss if warming is limited to 1.5°C). Coral reefs support a significant percentage of all marine life, providing a major food source for hundreds of millions of people.
- *Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and*

³ IPCC, *Global Warming of 1.5°: Summary for Policy Makers* 1, 7, 9, 11, 17, 20 (2018), http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf.

infrastructure (including transport and buildings), and industrial systems (high confidence). These systems transitions are unprecedented in terms of scale, but not necessarily in terms of speed, and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investments in those options (medium confidence).

- Estimates of the global emissions outcome of current nationally stated mitigation ambitions as submitted under the Paris Agreement would lead to global greenhouse gas emissions in 2030 of 52–58 [billion tons CO₂e⁴ per year] (medium confidence). Pathways reflecting these ambitions would not limit global warming to 1.5°C, even if supplemented by very challenging increases in the scale and ambition of emissions reductions after 2030 (high confidence). Avoiding overshoot and reliance on future large-scale deployment of carbon dioxide removal (CDR) can only be achieved if global CO₂ emissions start to decline well before 2030 (high confidence).
- Equally troubling, even limiting warming to 1.5°C, which would require an ambitious and rapid mobilization of resources, is not considered safe for most nations, communities, ecosystems, and sectors, but poses significant risks to natural and human systems as compared to current warming of 1°C (high confidence). (emphasis added)

⁴ Agencies use “carbon dioxide equivalents” or “CO₂e” to compare the warming influence of different greenhouse gases. Converting methane and other non-carbon dioxide greenhouse gases to CO₂e is common practice in NEPA documents and allows for a unified comparison of methane and carbon dioxide from federal projects. Under this method, carbon dioxide is assigned a value of 1, and methane between 28 and 36, based on a 100-year timeframe. When measured over a 20-year period, methane has a global warming potential of 87.

79. The western U.S. is particularly susceptible to the effects of climate change. The West is experiencing increasing temperatures and prolonged droughts. The impacts of these changes are widespread across our forests, wildlife, and communities, threatening the West's resilience in the face of continued warming. These impacts also have significant importance to local economies that are reliant on consistent precipitation and snowfall for surface and groundwater recharge, agriculture, recreation, tourism, and other uses.

80. Scientific studies also indicate that the impacts from climate change are accelerating. According to volume II of the Fourth National Climate Assessment, ice mass loss in Antarctica and Greenland has accelerated since 2000, reaching record lows in 2014 and 2015. Sea level rise has accelerated by a factor of three, with significant rises between 2010 and 2011. The decline in groundwater supplies has accelerated from 2001 to 2008.

II. Federal Climate Policy and Initiatives

81. In 2001, at the start of the George W. Bush Administration, the Secretary of the Interior issued Secretarial Order 3226, *Evaluating Climate Change Impacts in Management Planning* (January 19, 2001). This order provided “[t]here is a consensus in the international community that global climate change is occurring and that it should be addressed in governmental decision making.” Secretarial Order 3226 also established the responsibility of Interior agencies, such as BLM, to “consider and analyze potential climate change impacts when undertaking long-range planning exercises, when setting priorities for scientific research and investigations, when developing multi-year management plans, and/or when making major decisions regarding potential utilization of resources under the Department’s purview.”

82. In a 2007 report entitled *Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources*, the U.S. Governmental

Accountability Office, concluded that the Department of the Interior had not provided specific guidance to implement Secretarial Order 3226, that officials were not even aware of Secretarial Order 3226, and that Secretarial Order 3226 had effectively been ignored.

83. Secretarial Order 3289, *Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources* (September 14, 2009), reinstated the provisions of Order 3226, and recognized that “the realities of climate change require us to change how we manage the land, water, fish and wildlife, and cultural heritage and tribal lands and resources we oversee,” and acknowledged that Interior is “responsible for helping protect the nation from the impacts of climate change.”

84. In 2009, the Environmental Protection Agency (EPA) issued a formal finding under the Clean Air Act, 42 U.S.C. § 7521(a), that the changes in our climate caused by elevated concentrations of greenhouse gases in the atmosphere are reasonably anticipated to endanger the public health and welfare of current and future generations. 74 Fed. Reg. 66,496 (Dec. 15, 2009). EPA concluded that “the body of scientific evidence compellingly supports” the finding and recognized the potential human-induced climate change to have “far-reaching and multidimensional” impacts. *Id.* at 66,497. In 2015, EPA acknowledged more recent scientific assessments that “highlight the urgency of addressing the rising concentrations of CO₂ in the atmosphere.” 80 Fed. Reg. 64,661 (Oct. 23, 2015). The D.C. Circuit upheld this decision as supported by the vast body of scientific evidence on the subject. *See Coal. for Responsible Regulation, Inc. v. EPA.*, 684 F.3d 102, 120-22 (D.C. Cir. 2012).

85. The Council on Environmental Quality (CEQ) has also recognized the unique nature of climate change and the challenges it imposes on NEPA compliance. On August 1, 2016, CEQ released *Final Guidance for Federal Departments and Agencies on Consideration of*

Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (2016 Climate Guidance). Applicable to all proposed federal agency actions, “including land and resource management actions,” *id.* at 9, the 2016 Climate Guidance recognized that:

Climate change results from the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global scale. CEQ recognizes that the totality of climate change impacts is not attributable to any single action, but are exacerbated by a series of actions including actions taken pursuant to decisions of the Federal Government. *Therefore, a statement that emissions from a proposed Federal action represent only a small fraction of global emissions is essentially a statement about the nature of the climate change challenge, and is not an appropriate basis for deciding whether or to what extent to consider climate change impacts under NEPA.* Moreover, these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because 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 a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact.

Id. at 10-11 (emphasis added).

86. The 2016 Climate Guidance also provided that “[i]n the context of long-range energy, transportation, and resource management strategies ... it would be useful and efficient to 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.” *Id.* At 31. n particular, CEQ identifies “issuing leases for oil and gas drilling” as a “site-specific action[] that may benefit from being able to tier to a programmatic NEPA review.”

87. Although the Trump Administration withdrew the 2016 Climate Guidance on April 5, 2017, 82 Fed. Reg. 16,576, courts continue to find the Guidance persuasive. *See Sierra Club v. Fed. Energy Regulatory Comm’n*, 867 F.3d 1357, 1374 (D.C. Cir. 2017); *San Juan Citizens All. v. U.S. Bureau of Land Mgmt.*, 326 F. Supp. 3d 1227, 1243 at n.5 (D.N.M. 2018).

88. In December 2015, President Obama joined with 194 other nations in recognizing “that climate change represents an urgent and potentially irreversible threat to human societies and the planet” and pledged to reduce its GHG emissions 26-28 percent below 2005 levels by 2020 through the Paris Agreement.

89. Although President Trump’s has attempted to reverse the course the Obama Administration set to address climate change, the United States remains a signatory to the Paris Climate Agreement through November 2020 and is bound by the Agreement to take action to confine global warming within 2.0°C and ideally, 1.5°C.

A. Social Cost of Carbon

90. In recognition of the consequences of human-caused climate change, federal agencies have developed a protocol for assessing the social cost of CO₂ emissions. The social cost of carbon is “an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year.”⁵ Conversely, the social cost of carbon can represent “the value of damages avoided for a small emission reduction (i.e., the benefit of a CO₂ reductions).”

The EPA has explained:

The [social cost of carbon protocol] is meant to be a comprehensive estimate of climate change damages and includes changes in net agricultural productivity, human health, property damages from increased flood risk, and changes in energy system costs, such as reduced costs for heating and increased costs for air conditioning. However, given current modeling and data limitations, it does not include all important damages.⁶

91. A federal Interagency Working Group (IWG)—consisting of the EPA, Center for Environmental Quality, Department of Energy, National Economic Council, Office of

⁵ EPA, *Fact Sheet: Social Cost of Carbon*, 1, 1 (2016), https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf.

⁶ *Id.*

Management and Budget, Department of Agriculture, Department of Commerce, Department of Transportation, and other agencies—has prepared estimates of the cost that carbon pollution has on society. The IWG prepared their first “Social Cost of Carbon” estimates in 2010. The IWG subsequently updated these estimates in 2013, 2015, and most recently in 2016.⁷

92. IWG’s Social Cost of Carbon estimates vary according to assumed discount rates and presumptions regarding the longevity and damages caused by carbon pollution in the atmosphere, which for 2020 produced a range of between \$12 and \$123 per metric ton of CO₂. Accepted practice typically applies the median value (\$42 per metric ton) to determine the social costs of a given project, although the four values provided by the IWG offer a means of comparing alternative courses of action.

93. Although the Trump Administration, through Executive Order 13783, disbanded the IWG, the Social Cost of Carbon protocol is still accepted within the scientific community as a useful tool for assessing the impacts of GHG emissions.

B. Carbon Budgeting

94. Carbon budgeting is another well-established method for estimating the impacts of GHG emissions.

95. A “carbon budget” offers a cap on the remaining amount of greenhouse gases that can be emitted while still keeping global average temperature rise below scientifically-based warming thresholds.

96. The October 2018 IPCC Global Warming of 1.5°C special report provided a revised carbon budget, for a 66 percent probability of limiting warming to 1.5°C, estimated at

⁷ Interagency Working Group, *Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* at 1, 4 (2016), https://www.epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf.

420 gigatons⁸ (Gt) CO₂ and 570 GtCO₂ depending on the temperature dataset used, from January 2018 onwards. One gigaton is equivalent to 1 billion tons. The IPCC also explained the global emissions rate has increased to 42 GtCO₂ per year. At this rate, the global carbon budget would be expended in just 10 to 14 years, underscoring the urgent need for transformative global action to transition from fossil fuel use to clean energy.

97. To put these global carbon budgets in the specific context of domestic U.S. emissions and the United States' obligation to reduce emissions, the United States is the world's largest historic emitter of greenhouse gas pollution, responsible for 26 percent of cumulative global CO₂ emissions since 1870, and is currently the world's second highest emitter on an annual and per capita basis. Between 2003 and 2014, approximately 25% of all United States and 3-4% of global fossil fuel GHG emissions are attributable to federal minerals leased and developed by the Department of the Interior.

98. To meet the 1.5°C target, the estimated total U.S. carbon budget (for all time) is 25 GtCO₂ to 57 GtCO₂ on average, depending on the sharing principles used to apportion the global budget across countries. The estimated U.S. carbon budget consistent with limiting temperature rise to 2°C ranges from 34 GtCO₂ to 123 GtCO₂, depending on the sharing principles used. EPA estimated 6.5 GtCO₂e total U.S. GHG emissions in 2017. Thus, under any scenario, the remaining U.S. carbon budget compatible with the Paris climate targets is extremely small.

99. Not accounting for revised calculations from its 2018 report, the IPCC, in its 2014 AR5 Synthesis Report, found that carbon emissions from burning existing fossil fuel reserves—the known belowground stock of extractable fossil fuels—would considerably exceed both 2°C

⁸ A gigaton is one billion tons.

and 1.5°C of warming. “For the 2°C or 1.5°C limits, respectively 68% or 85% of reserves must remain in the ground.” The reserves in currently operating oil and gas fields alone, even with no coal, would take the world beyond 1.5°C of warming. In raw magnitude, global coal, oil and gas resources considered currently economically recoverable contain potential greenhouse gas emissions of 4,196 GtCO_{2e}, with the IPCC indicating they are as high as 7,120 GtCO_{2e}.

100. These findings—in particular by the IPCC—are echoed by other research. To constrain warming within the 2°C guardrail, a 2015 study found that “a third of oil reserves, half of gas reserves and over 80 percent of current coal reserves should remain unused from 2010-2050.” In a 2016 analysis, Oil Change International found that burning the oil, gas, and coal in the world’s currently operating fields and mines would fully exhaust and exceed carbon budgets calibrated to constrain warming below 1.5°C or 2°C. Moreover, Oil Change International found that burning the reserves in currently operating oil and gas fields, excluding coal mines, would alone lead to warming beyond 1.5°C.

101. Oil Change International reaffirmed this conclusion in a report released in January 2019.⁹ Specifically, it found that using existing fossil fuel reserves would again push the world far beyond warming or 1.5°C and 2°C. The report also found that:

- Between now and 2030, the United States is on track to account for 60 percent of world growth in oil and gas production, expanding extraction at least four times more than any other country. This is the time period over which climate scientists say global CO₂ emissions should be roughly halved to stay in line with the 1.5°C target in the Paris Agreement.

⁹ Kelly Trout & Lorne Stockman, Oil Change International, *Drilling Towards Disaster* 1, 26–27 (2019), <http://priceofoil.org/2019/01/16/report-drilling-towards-disaster/>.

- Between 2018 and 2050, the United States is set to unleash the world’s largest burst of CO₂ emissions from new oil and gas development. U.S. drilling into new oil and gas reserves—primarily shale—could unlock 120 GtCO₂ of emissions, which is equivalent to the lifetime CO₂ emissions of nearly 1,000 coal-fired power plants.
- If not curtailed, U.S. oil and gas expansion will impede the rest of the world’s ability to manage a climate-safe, equitable decline of oil and gas production. Under an illustrative 1.5°C pathway for oil and gas taken from the IPCC, U.S. production would exhaust nearly 50 percent of the world’s total allowance for oil and gas by 2030 and exhaust more than 90 percent by 2050.

III. Greenhouse Gas Pollution from BLM’s Oil and Gas Program

102. 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.” 40 C.F.R. § 1508.18(b)(3). 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 MLA for the purpose of exploration or development of oil and natural gas resources. *Id.*

103. All of the leasing authorizations challenged herein are part of BLM’s comprehensive Oil and Gas Leasing Program to implement the Mineral Leasing Act. BLM expressly refers to its oil and gas leasing activities as a program. For example, according to the “About the BLM Oil and Gas Program” section of BLM’s website, BLM notes that it is

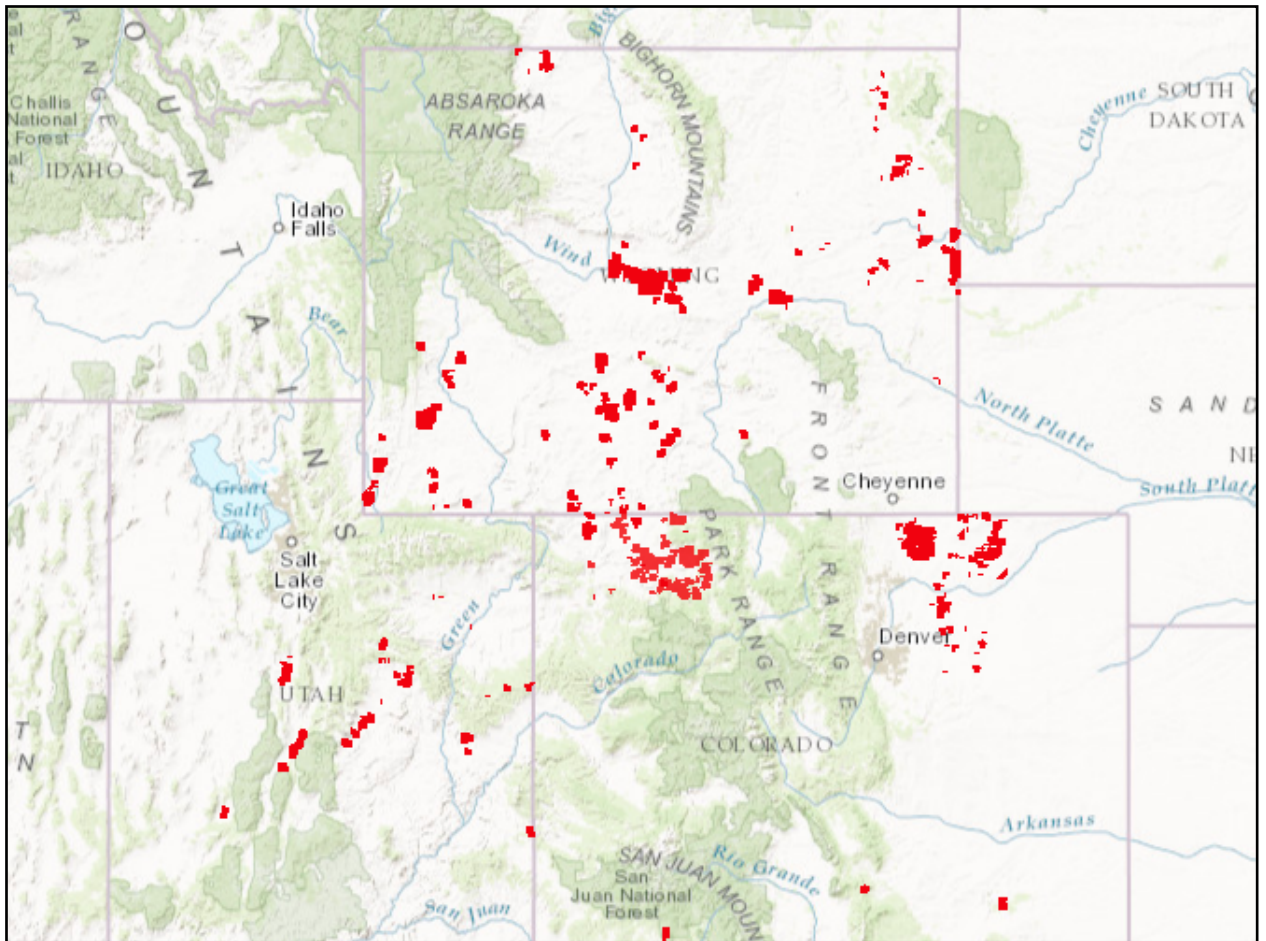
responsible for the management of nearly 700 million acres of federal onshore subsurface minerals, about half of which the agency estimates contains oil and/or natural gas.

104. As of 2018, BLM managed lands contained 38,147 individual oil and gas lease parcels, covering over 25.5 million acres of public lands, on which 96,199 active producible wells are drilled. This is an area larger than the combined acreage of Connecticut, Massachusetts, New Hampshire, New Jersey, Rhode Island, Vermont, and the District of Columbia.

105. BLM's Oil and Gas Leasing Program contributes vast amounts of GHG pollution to the atmosphere, posing a threat to our climate, the natural environment, and public health. According to a 2018 report from the U.S. Geological Survey, fossil fuel development on federal lands in 2014 released 1.279 GtCO₂ emissions or 23.7% of the nation's CO₂ emissions. Based on EPA data, this is the equivalent of annual greenhouse gas emissions from over 329 coal-fired power plants.

106. In spite of the worsening climate crisis, Federal Defendants continue to authorize the sale and issuance of hundreds of federal oil and gas leases on public lands across the Interior West without meaningfully acknowledging or fully evaluating the climate change implications of their actions.

107. In addition to the 11 oil and gas lease sales in Colorado, Utah, Wyoming authorizing the sale and issuance of 473 new leases encompassing 463,553 acres of public lands at issue in the original complaint, in 2019, BLM has proposed for lease and leased approximately 4,445,534 acres of leases across the American West, not including the 300,000 acres re-authorized in the 2019 Supplemental EA. The map on the following page shows the distribution of the challenged lease authorizations.



IV. BLM’s Oil and Gas Leasing Program and the Wyoming Leasing Decisions Fail to Consider Climate Change.

108. BLM has never analyzed the vast contribution of GHG emissions or climate impacts of its Oil and Gas Leasing Program at the programmatic level. Likewise, BLM has not done so in the Resource Management Plans to which the challenged Wyoming lease authorizations respectively tier. This failure is carried forward to the agency’s site-specific leasing decisions, including the decisions challenged herein, which fail to sufficiently quantify or analyze the direct, indirect, or cumulative impacts of foreseeable GHG emissions that will result from BLM’s leasing authorizations and the impact of these emissions on the environment, human health, and our climate.

A. Direct Impacts of Oil and Gas Leasing

109. In the 2019 Supplemental EA, BLM admits that “oil and gas leasing may lead to the installation and production of new wells, which may consequently result in direct GHG emissions associated with installing and producing new wells, and indirect emissions associated with any downstream use of any lease product.” As this Court has already recognized in this case, it is well-established that oil and gas leasing represents an “irretrievable commitment of resources” after which BLM can no longer prevent development altogether. ECF No. 99, at 25–27.

110. The 2019 Supplemental EA, however, continues to include the same two fundamental deficiencies as in the previously-rejected EAs regarding BLM’s treatment of direct impacts of GHG emissions and resulting oil and gas development: (1) BLM failed to quantify reasonably foreseeable GHG emissions from the lease sale by failing to estimate the total number of projected wells and then applying available per-well GHG emissions estimates to determine the direct, production-level GHG emissions levels that were reasonably foreseeable from each lease sale; and (2) BLM failed to consider the reasonably foreseeable effects of those GHG emissions on resource values in Wyoming.

111. BLM continues to refuse to determine direct GHG emissions by estimating the total number of projected wells per lease parcel. Instead, BLM relies on the top down emissions estimates from the respective RMPs and divides those by the total acreage available in each lease sale. However, each BLM field office has available a reasonably foreseeable development scenario, which is applied at the resource management planning stage, that projects reasonably foreseeable oil and gas well development across the planning area. In other words, the relevant data is available to project reasonably foreseeable well development from each lease sale. BLM

has simply refused to apply that information and disclose the resulting effects to the public.

BLM's approach erroneously assumes that each leased acre will have the same direct emissions, ignoring variability in projected well densities across the 300,000 leased acres.

112. BLM also continues to obscure the full impacts from its lease sale by solely calculating annual emissions. This approach fails to account for emissions for the entire lifespan (20 to 30 years) of the oil and gas wells that will result.

B. Indirect Impacts of Oil and Gas Leasing

113. Although BLM completes an indirect emissions analysis in the 2019 Supplemental EA, this analysis remains deficient because BLM again uses top-down emissions numbers from the respective RMPs to reach a per-acre indirect GHG emissions rate and total annual emissions indirect emissions for all of the lease parcels. This approach assumes that each leased acre will have the same indirect emissions. This approach also obscures the full impacts of the lease sales by failing to account for emissions for the entire lifespan (20 to 30 years) of the oil and gas wells that will result.

114. Because downstream impacts caused by the oil and gas extracted from the leases are reasonably foreseeable on a parcel by parcel basis, NEPA requires BLM to analyze the impacts of downstream GHG emissions resulting from its leasing decisions. BLM's failure to properly do so here violates NEPA.

C. Cumulative Impacts of Oil and Gas Leasing

115. The issuance of the 283 Wyoming leases challenged herein will result in new oil and gas development on more than 300,000 acres of public lands. BLM is also currently undergoing supplemental NEPA review over more than 150,000 additional acres of oil and gas leases in Colorado and Utah originally challenged in this litigation. Moreover, BLM has been

rapidly leasing public lands for oil and gas development throughout the West during the course of this litigation. BLM must consider the cumulative impacts of the challenged Wyoming leases in the context of ongoing and reasonably foreseeable future oil and gas production across our public lands, as necessary to understand both the contribution the GHG emissions from these leasing decisions, as well as the contribution of BLM's Oil and Gas Leasing Program to state, national, and global GHG emissions and their associated effects.

116. BLM data for fiscal year 2018 shows 8.1 million acres (of the 25.6 million total acres) of public lands already leased for oil and gas development are in Wyoming alone. About 4.1 million acres of these leased acres on federal public lands in Wyoming were actively producing oil and gas in fiscal year 2018.

117. Although BLM provides a generalized discussion of anticipated climate impacts within the region, the 2019 Supplemental EA does not fully estimate the contribution of GHG emissions from the Wyoming lease authorizations when added to cumulative GHG emissions from past, present, and reasonably foreseeable GHG-emitting oil and gas activities on public lands. Nor did BLM analyze the climate impacts of cumulative GHG emissions from these activities.

118. For the 2019 Supplemental EA, although BLM includes GHG emissions calculations for four reasonably foreseeable BLM lease sales occurring in Wyoming, BLM arbitrarily limits its cumulative impacts analysis to federal lease sales "currently undergoing internal review." NEPA more broadly requires BLM to consider "past, present, and reasonably future foreseeable actions regardless of what agency (Federal or non-Federal) or persona undertakes such other actions." 40 C.F.R. § 1508.7. Because of this, BLM's 2019 Supplemental EA fails to consider four other reasonably foreseeable oil and gas projects, six coal leasing

amendments, and two BLM Wyoming lease sales completed just before the Supplemental EA. BLM also fails to assess the cumulative impacts from reasonably foreseeable BLM lease sale occurring in the region (outside of Wyoming) and over a similar time period as the 2019 Supplemental EA.

119. Additionally, in its original leasing EAs as well as the 2019 Supplemental EA, BLM consistently cites state, national, and global emission levels to conclude emissions from a particular lease sale represent only a small fraction of these emissions, and are therefore insignificant. In so doing, however, BLM is defining the cumulative impacts area with respect to GHG emissions at a state, national, and global scale. Using this baseline, then the appropriate scope of the agency's cumulative analysis must similarly be at this scale, which would include disclosing and considering the cumulative emissions from BLM's entire Oil and Gas Leasing Program—including emissions from all active producible wells managed by BLM—and the incremental contribution to these emissions from a challenged lease sale. BLM must not only disclose and quantify these emissions, but also consider the effect that these emissions will have to resource values and communities across the planning areas, and to our nation as a whole.

120. BLM's per acre estimates of direct and indirect emissions in its 2019 Supplemental EA fail to provide decisionmakers or the public with the context for understanding the effects to climate from BLM's leasing authorizations either individually or in the aggregate. Climate data and GHG quantification tools and methodologies, such as the Social Cost of Carbon and carbon budgeting, are readily available to BLM, easy to apply, and are already in widespread use throughout the Federal and private sectors, state and local governments, and globally. The Social Cost of Carbon estimates the cost to society of each additional ton of GHG pollution emitted into the atmosphere, thereby providing a fairly comprehensive estimate of

climate change damage resulting from a project's GHG emissions. Comparing a lease sale's total cumulative GHG emissions to the United States' remaining carbon budget can also provide a measurement by which to assess significance.

121. The 2019 Supplemental EA fails to employ a Social Cost of Carbon protocol, carbon budgeting, or any other economic or scientific tools, for assessing the potential impacts of leasing decisions on climate. BLM's failure to address the climate costs of leasing and subsequent development undermines NEPA's purpose of informed decisionmaking "based on [an] understanding of environmental consequences." 40 C.F.R. § 1500.1(c).

CLAIMS FOR RELIEF

FIRST CLAIM FOR RELIEF

Failure to Take a Hard Look at the Severity of Direct, Indirect, and Cumulative Impacts of Greenhouse Gas Pollution (Violation of NEPA)

122. Conservation Groups incorporate by reference all preceding paragraphs and Table A below.

123. Pursuant to NEPA and NEPA's implementing regulations, Federal Defendants must take a hard look at the direct, indirect, and cumulative environmental consequences of their proposed actions. 42 U.S.C. §§ 4332(2)(C)(i)-(v); 40 C.F.R. §§ 1502.14(a), 1502.16, 1508.7, 1508.8, 1508.14.

124. For all of the leasing authorizations identified in Table A, and the 2019 Supplemental EA, DOI-BLM-WY-0000-2019-0007-EA, BLM failed to take the required hard look at the direct, indirect, and cumulative GHG emissions and the impacts of those emissions on climate change. BLM failed to sufficiently quantify and account for direct GHG emissions, and failed to analyze the effect of those emissions on other resource values. BLM failed to properly address the foreseeable indirect impacts from downstream combustion of oil and gas resources

leased and developed from the challenged lease authorizations. BLM also failed to fully analyze and discuss the cumulative effects of these emissions across federal public lands managed through BLM's Oil and Gas Leasing Program.

125. For all of the leasing authorizations identified in Table A, and the 2019 Supplemental EA, DOI-BLM-WY-0000-2019-0007-EA, BLM also failed to analyze the similar environmental effects of these leasing authorizations, even though the lease authorizations are similar in terms of their climate impacts, timing, and geography. 40 C.F.R. § 1508.25(a)(3).

126. To comply with NEPA, BLM was required to take a hard look at the direct, indirect, and cumulative GHG emissions and the severity of the impacts of those emissions on climate change for the leasing authorizations identified in Table A, and the 2019 Supplemental EA DOI-BLM-WY-0000-2019-0007-EA. BLM has never taken a comprehensive hard look at the climate impacts of its Oil and Gas Leasing Program at the programmatic level, therefore BLM's leasing EAs cannot tier to a broader programmatic analysis in lieu of doing a comprehensive analysis of climate impacts at the leasing stage. BLM is required to provide a hard look analysis of these impacts before there are "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(C)(v); *see also* 40 C.F.R. §§ 1501.2, 1502.5(a).

127. It is reasonably foreseeable that the combined lease sales could result in thousands of new wells across public lands in the Interior West, adding significant levels of GHG emissions to the atmosphere and further endangering our climate.

128. BLM failed to take a hard look at the direct, indirect, and cumulative impacts to the climate from GHG emissions, and failed to discuss the severity of these impacts, when authorizing hundreds of new oil and gas leases through the challenged leasing decisions. More

broadly, BLM has demonstrated a systemic failure to account for these impacts in the agency's Oil and Gas Leasing Program affecting federal lands across the Interior West. Federal Defendants' systemic and site-specific failures are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," in violation of NEPA, 42 U.S.C. § 4332(C)(ii), its implementing regulations, 40 C.F.R. §§ 1508.7, 1508.8, 1508.25, 1508.27, and the APA, 5 U.S.C. § 706(2)(A).

SECOND CLAIM FOR RELIEF
Failure to Prepare an EIS
(Violation of NEPA)

129. Conservation Groups incorporate by reference all preceding paragraphs.

130. Federal Defendants' authorizations and issuance of the leases sold through the leasing authorizations challenged herein constitute major federal actions under NEPA.

131. Federal Defendants do not have to prepare an EIS where they have demonstrated that the proposed action "will not have a significant effect on the human environment." 40 C.F.R. § 1508.13. To assess whether or not an impact is significant, Federal Defendants must consider the "context and intensity" of the impact. *Id.* § 1508.27.

132. Federal Defendants failed to evaluate the context and intensity of the environmental impacts resulting from its leasing authorizations challenged herein, and in particular effects to climate change, as required by NEPA. Federal Defendants also failed to provide convincing statements of reasons justifying their decisions to forgo an EIS analyzing the impacts of the leasing authorizations challenged herein, as required by NEPA.

133. Federal Defendants' leasing authorizations will result in high levels of GHG emissions that could significantly impact climate. NEPA requires Federal Defendants to identify

such impacts and assess their context and intensity, and to support their decisions to forego an EIS, which BLM failed to do.

134. Federal Defendants violated NEPA by failing to prepare an EIS before approving the leasing authorizations challenged herein. Federal Defendants' failure was arbitrary, capricious, an abuse of discretion, in excess of statutory authority and limitations, short of statutory right, and not in accordance with the law and procedures required by law. 5 U.S.C. §§ 706(2)(A), (C), (D).

RELIEF REQUESTED

WHEREFORE, Plaintiff Conservation Groups respectfully request that this Court:

A. Declare that Federal Defendants' leasing authorizations challenged herein violate NEPA and its implementing regulations;

B. Vacate Federal Defendants' leasing authorizations and void the issued leases challenged herein;

C. Enjoin Federal Defendants from approving or otherwise taking action on any applications for permits to drill on the leases included in the lease sales challenged herein until Federal Defendants have fully complied with NEPA and its implementing regulations, and prepared an EIS analyzing the direct, indirect, and cumulative effects of the leasing authorizations challenged herein and of the agency's Oil and Gas Leasing Program;

D. Retain continuing jurisdiction of this matter until Federal Defendants fully remedy the violations of law complained of herein, in particular to ensure Federal Defendants take a meaningful hard look at the direct, indirect, and cumulative impacts of climate change relative to BLM's Oil and Gas Leasing Program;

E. Award Conservation Groups their fees, costs, and other expenses as provided by applicable law;

F. Issue such relief as Conservation Groups subsequently request or that this Court may deem just, proper, and equitable.

Respectfully submitted on this 27th day of September 2019,

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Attorneys for Plaintiffs

Table A of challenged agency actions on next page.

CERTIFICATE OF SERVICE

I hereby certify that on September 27, 2019 I electronically filed the foregoing AMENDED AND SUPPLEMENTED COMPLAINT with the Clerk of the Court via the CM/ECF system, which will send notification of such filing to all counsel of record.

/s/ Samantha Ruscavage-Barz
Attorney for Plaintiffs

Table A. List of Agency Actions Challenged Herein.

Lease Parcel	Lease Parcel	Lease Parcel	Lease Parcel	Lease Parcel
WYW 184215	WYW 184358	WYW 184356	WYW 185132	WYW 185112
WYW 184216	WYW 184359	WYW 184357	WYW 185109	WYW 185113
WYW 184217	WYW 184360	WYW 184403	WYW 185120	WYW 185114
WYW 184218	WYW 184361	WYW 184404	WYW 185132	WYW 185115
WYW 184219	WYW 184362	WYW 184247	WYW 185109	WYW 185116
WYW 184220	WYW 184363	WYW 184532	WYW 185120	WYW 185117
WYW 184221	WYW 184364	WYW 184533	WYW 184401	WYW 185118
WYW 184222	WYW 184365	WYW 184534	WYW 184402	WYW 185119
WYW 184223	WYW 184366	WYW 184535	WYW 185122	WYW 185181
WYW 184224	WYW 184367	WYW 184536	WYW 185129	WYW 185121
WYW 184225	WYW 184368	WYW 184537	WYW 185130	WYW 185123
WYW 184226	WYW 184369	WYW 184538	WYW 185298	WYW 185124
WYW 184227	WYW 184370	WYW 184539	WYW 185299	WYW 185126
WYW 184228	WYW 184371	WYW 184540	WYW 185300	WYW 185127
WYW 184229	WYW 184372	WYW 184541	WYW 185301	WYW 185296
WYW 184230	WYW 184373	WYW 184542	WYW 185302	WYW 185297
WYW 184231	WYW 184374	WYW 184543	WYW 185303	WYW 185275
WYW 184232	WYW 184375	WYW 184544	WYW 185135	WYW 185276
WYW 184233	WYW 184376	WYW 184545	WYW 185136	WYW 185277
WYW 184234	WYW 184377	WYW 184546	WYW 185137	WYW 185278
WYW 184235	WYW 184378	WYW 184547	WYW 185138	WYW 185279
WYW 184236	WYW 184379	WYW 184548	WYW 185139	WYW 185280
WYW 184237	WYW 184380	WYW 184549	WYW 185140	WYW 185281
WYW 184238	WYW 184381	WYW 184550	WYW 185141	WYW 185282
WYW 184239	WYW 184382	WYW 184551	WYW 185142	WYW 185283
WYW 184240	WYW 184383	WYW 184552	WYW 185143	WYW 185287
WYW 184241	WYW 184384	WYW 184553	WYW 185144	WYW 185284
WYW 184242	WYW 184385	WYW 184554	WYW 185145	WYW 185285
WYW 184243	WYW 184386	WYW 184555	WYW 185147	WYW 185286
WYW 184244	WYW 184387	WYW 184556	WYW 185148	WYW 185287
WYW 184245	WYW 184388	WYW 184557	WYW 185098	WYW 185288
WYW 184246	WYW 184389	WYW 184558	WYW 185099	WYW 185289
WYW 184345	WYW 184390	WYW 184559	WYW 185100	WYW 185290
WYW 184346	WYW 184391	WYW 184560	WYW 185101	WYW 185291
WYW 184347	WYW 184392	WYW 184561	WYW 185102	WYW 185292
WYW 184348	WYW 184393	WYW 184562	WYW 185103	WYW 185293
WYW 184349	WYW 184394	WYW 184563	WYW 185104	WYW 185294
WYW 184350	WYW 184395	WYW 184564	WYW 185105	WYW 185295
WYW 184351	WYW 184396	WYW 184565	WYW 185106	WYW 185438
WYW 184352	WYW 184397	WYW 184566	WYW 185107	WYW 185439
WYW 184353	WYW 184398	WYW 184567	WYW 185108	WYW 185440
WYW 184354	WYW 184399	WYW 184568	WYW 185110	WYW 185441
WYW 184355	WYW 184400	WYW 184569	WYW 185111	WYW 185442

Lease Parcel		Lease Parcel	
WYW	185443	WYW	185411
WYW	185444	WYW	185412
WYW	185445	WYW	185413
WYW	185446	WYW	185414
WYW	185447	WYW	185415
WYW	185448	WYW	185416
WYW	185449	WYW	185417
WYW	185450	WYW	185418
WYW	185451	WYW	185419
WYW	185452	WYW	185420
WYW	185453	WYW	185421
WYW	185454	WYW	185422
WYW	185455	WYW	185423
WYW	185456	WYW	185424
WYW	185457	WYW	185425
WYW	185458	WYW	185426
WYW	185459	WYW	185427
WYW	185460	WYW	185428
WYW	185461	WYW	185429
WYW	185462	WYW	185430
WYW	185463	WYW	185431
WYW	185464	WYW	185432
WYW	185465	WYW	185433
WYW	185466	WYW	185434
WYW	185467	WYW	185435
WYW	185468	WYW	185436
WYW	185469	WYW	185437
WYW	185470		
WYW	185182		
WYW	185185		
WYW	185186		
WYW	185187		
WYW	185189		
WYW	185195		
WYW	185402		
WYW	185403		
WYW	185404		
WYW	185405		
WYW	185406		
WYW	185407		
WYW	185408		
WYW	185409		
WYW	185410		