

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

WILDEARTH GUARDIANS, and )  
 PHYSICIANS FOR SOCIAL RESPONSIBILITY, )  
 )  
 Plaintiffs, )  
 )  
 v. )  
 )  
 RYAN ZINKE, )  
 MICHAEL NEDD, and )  
 U.S. BUREAU OF LAND MANAGEMENT, )  
 )  
 Federal Defendants, )  
 )  
 WESTERN ENERGY ALLIANCE, )  
 PETROLEUM ASSOCIATION OF WYOMING, )  
 AMERICAN PETROLEUM INSTITUTE, )  
 STATE OF WYOMING, )  
 STATE OF COLORADO, and )  
 STATE OF UTAH, )  
 )  
 Intervenor Defendants. )

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

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**PLAINTIFFS’ MOTION FOR SUMMARY JUDGMENT**

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Pursuant to Federal Rule of Civil Procedure 56 and Local Rule 7, Plaintiffs  
 WILDEARTH GUARDIANS and PHYSICIANS FOR SOCIAL RESPONSIBILITY  
 (collectively “Plaintiffs”), hereby submit this motion for summary judgment. In support of this  
 motion, Plaintiffs are filing a memorandum of points and authorities and statement of facts,  
 along with supporting declarations, exhibits and a proposed order. As this is a record review case  
 brought under the Administrative Procedures Act (“APA”), 5 U.S.C. § 706, the undisputed facts  
 for purposes of summary judgment are the facts contained in the administrative record. *See*  
*Zarmach Oil Service, Inc., v. U.S. Dept. of the Treasury*, 750 F.Supp.2d 150, 154 (D.D.C., 2010).

Plaintiffs respectfully request that this Court grant summary judgment in their favor, declare BLM's actions arbitrary and capricious and in violation of NEPA, and set aside and enjoin BLM's actions pending full compliance with NEPA. Plaintiffs also request oral argument on this motion.

Respectfully submitted on the 30th day of June 2017,

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**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA  
CERTIFICATE OF SERVICE (CM/ECF)**

I hereby certify that on June 30, 2017, I electronically filed the foregoing PLAINTIFFS' MOTION FOR SUMMARY JUDGEMENT with the Clerk of the Court via the CM/ECF system, which will send notification of such filing to other participants in this case.

/s/ Samantha Ruscavage-Barz

*Counsel for Plaintiffs*

**IN THE UNITED STATES DISTRICT COURT  
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STATE OF WYOMING, )  
STATE OF COLORADO, and )  
STATE OF UTAH, )

Intervenor Defendants. )

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**PLAINTIFFS’ MEMORANDUM OF POINTS AND AUTHORITIES  
IN SUPPORT OF PLAINTIFFS’ MOTION FOR SUMMARY JUDGMENT**

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**GLOSSARY OF TERMS**

APD	Application for Permit to Drill
BLM	Bureau of Land Management
BLM Handbook	BLM's Land Use Planning Handbook (H-1601-1)
CEQ	Council on Environmental Quality
CO <sub>2</sub>	Carbon Dioxide
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FLPMA	Federal Land Policy and Management Act
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gas
GtCO <sub>2</sub> e	Gigaton of Carbon Dioxide Equivalent Emissions
IPCC	Intergovernmental Panel on Climate Change
MLA	Mineral Leasing Act
MTCO <sub>2</sub> e	Metric Ton of Carbon Dioxide Equivalent Emissions
NEPA	National Environmental Policy Act
NSO	No Surface Occupancy
RFDS	Reasonably Foreseeable Development Scenario
RMP	Resource Management Plan
SCC	Social Cost of Carbon
VOC	Volatile Organic Compound

## **INTRODUCTION**

The Bureau of Land Management (“BLM”) administers a Federal mineral estate of nearly 700 million acres across the United States—of which over 42 million acres exist in Wyoming. Fossil fuel extraction on federal lands by private leaseholders resulted in 1,344,059,388 metric tons of carbon dioxide equivalent emissions (“MTCO<sub>2</sub>e”) in 2012, accounting for approximately 21% of *total* U.S. greenhouse gas (“GHG”) emissions. There is no way to meaningfully address GHG pollution and the existential threat posed by climate change without taking a hard look at the role of federal fossil fuel resources leased and developed on our public lands. Yet, BLM has never taken this hard look, nor provided the required analysis of corresponding impacts, in violation of the National Environmental Policy Act (“NEPA”).

This case challenges BLM’s approval and issuance of 473 oil and gas lease parcels, through 11 oil and gas lease sales, encompassing 463,553 acres of public lands across three western states—Wyoming, Utah, and Colorado—without analyzing the direct, indirect, and cumulative impacts of GHG pollution and climate change from these decisions. This Court agreed to consider the merits of Plaintiffs’ claims concerning the Wyoming leasing decisions first, with briefing on the Utah and Colorado leasing decisions to follow. Dkt. 24 (Nov. 28, 2016). Accordingly, this brief concerns five Wyoming oil and gas lease sales held between May 2015 and August 2016, wherein BLM issued leases for 282 individual parcels encompassing over 302,827 acres of federal minerals. The Wyoming leases were considered by BLM through nine separate environmental assessments (“EAs”), prepared by three separate District Offices—High Desert, High Plains, and Wind River/Big Horn. Each of these EAs share common deficiencies, and none took a hard look at the impacts of GHG pollution and climate change impacts, as required by NEPA.

While these leasing decisions were made, and this case was filed, during the previous Presidential administration, we now find ourselves in a contrary political environment where the current administration has demonstrated open hostility to the fundamental principles and science of climate change. And while the current administration has taken measures through executive orders and political announcements to erode top-down federal policy regarding climate change, critically, these measures have not in any way altered the federal government’s obligation under NEPA to analyze the bottom-up environmental consequences of its decisions—including the true magnitude and scale of GHG pollution emanating from BLM-managed oil and gas resources. BLM has routinely failed to provide this hard look analysis in the oil and gas leasing decisions challenged herein.

Plaintiffs in this action, WildEarth Guardians and Physicians for Social Responsibility (collectively “Guardians”), therefore respectfully request the Court to declare Federal Defendants’ (collectively “BLM”)<sup>1</sup> approval of the subject oil and gas lease parcels and associated EAs arbitrary and capricious, void the issued leases, and enjoin any further leasing decisions pending BLM’s full compliance with NEPA and its implementing regulations.

## **STATUTORY BACKGROUND**

### **I. MINERAL LEASING ACT**

Under the Mineral Leasing Act (“MLA”), 30 U.S.C. §§ 181 *et seq.*, 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. The Secretary has discretion, though

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<sup>1</sup> Pursuant to Federal Rule of Civil Procedure 25(d), Secretary of the U.S. Department of the Interior Ryan Zinke is automatically substituted for former Secretary Sally Jewell, and Acting Director of the Bureau of Land Management Michael Nedd is automatically substituted for former Director Neil Kornze.



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; 30 U.S.C. § 226(a). 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.*

## **II. NATIONAL ENVIRONMENTAL POLICY ACT**

NEPA is our “basic national charter for the protection of the environment.” 40 C.F.R. § 1500.1. It is NEPA’s purpose, in part, “to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of [humans].” 42 U.S.C. § 4321. NEPA was enacted with the recognition 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).

“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; *see also Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989) (recognizing NEPA analysis “permits the public and other government agencies to react to the effects of a proposed action at a meaningful time”). To accomplish this purpose, NEPA requires that all federal agencies prepare a “detailed statement” regarding all “major federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). This statement, known as an Environmental Impact

Statement (“EIS”), must, among other things, describe the “environmental impact of the proposed action,” and evaluate alternatives to the proposal. *Id.* at § 4332(2)(C)(i).

To determine whether a proposed action significantly affects the environment, and whether an EIS is therefore required, regulations promulgated by the White House Council on Environmental Quality (“CEQ”) provide for preparation of an EA. Based on the EA, a federal agency either concludes its analysis with a finding of no significant impact (“FONSI”), or the agency goes on to prepare a full EIS. 40 C.F.R. § 1501.4. “If an agency decides not to prepare an EIS, it must supply a ‘convincing statement of reasons’ to explain why a project’s impacts are insignificant.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (internal citations omitted). “The statement of reasons is crucial to determining whether the agency took a ‘hard look’ at the potential environmental impact of a project.” *Id.*; *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976).

NEPA regulations explain, at 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.

Regulations also direct that BLM to the fullest extent possible “[e]ncourage and facilitate public involvement” in the NEPA process. *Id.* § 1500.2(d).

## **STATEMENT OF FACTS**

### **I. BLM’S OIL AND GAS PLANNING AND MANAGEMENT FRAMEWORK**

BLM manages onshore oil and gas (a.k.a. “fluid minerals”) leasing and development through a three-phase process of planning, leasing, and drilling. Each phase serves a distinct purpose, and is subject to unique rules, policies, and procedures, though the three phases,

ultimately, must ensure “orderly and efficient” development. 43 C.F.R. § 3160.0-4. Oil and gas development is a multiple use managed in accord with the Federal Land Policy and Management Act (“FLPMA”), 43 U.S.C. §§ 1701 *et seq.* FLPMA, in 43 U.S.C. § 1701(a)(8), provides that BLM must manage the public lands:

[I]n a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition, that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.

In the first phase of oil and gas decisionmaking BLM prepares a broad-scale resource management plan (“RMP”) in accordance with FLPMA, NEPA, and associated planning regulations, 43 C.F.R. §§ 1600 *et seq.*, with additional guidance from BLM’s Land Use Planning Handbook (H-1601-1). The RMP is not specific to oil and gas leasing and drilling, but establishes administrative priorities for all multiple use values, aiming to balance, guide, and constrain BLM’s management of these activities throughout the planning area. 43 U.S.C. § 1712(c)(1)-(9). With respect to fluid minerals leasing decisions, the RMP determines which lands containing federal minerals will be open to leasing and under what conditions, and analyzes the direct, indirect, and cumulative impacts from predicted implementation-stage development. 30 U.S.C. § 226(a); 40 C.F.R. §§ 1502.16, 1508.7, 1508.8. Developing an RMP requires BLM to predict the extent to which different activities, if permitted, would foreseeably occur. For fluid minerals, this prediction is premised on a reasonably foreseeable development scenario (“RFDS”) which forecasts the pace and scope of development. BLM’s regulations require development of an EIS when preparing an RMP, and that “wherever possible, the proposed resource management plan shall be published in a single document with the related environmental impact statement.” 43 C.F.R. § 1601.0-6.

In the second phase of oil and gas decisionmaking, at issue in this case, BLM accepts the nomination of lease parcels from the lands made available for mineral leasing through the RMP, and sells oil and gas development rights for particular lands, in accordance with 43 C.F.R. §§ 3120 *et seq.*, with additional agency guidance outlined in BLM Instruction Memorandum No. 2010-117. 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. Oil and gas leases confer “the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold.” 43 C.F.R. § 3101.1-2.

The third phase occurs when the lessee applies for a permit to drill or develop the lease. 43 C.F.R. § 3162.3-1(c). At this stage, BLM may condition approval of the permit (referred to as an application for permit to drill, or “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.

## **II. GREENHOUSE GAS POLLUTION FROM BLM’S OIL AND GAS PROGRAM**

All of the leasing authorizations challenged herein are a subset of what BLM refers to as its “Oil and Gas Leasing Program.” 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 notes that oil and gas from public lands administered under this program “provid[ed] 11 percent of the natural gas and 7 percent of the oil used in the U.S. during Fiscal Year 2015.”<sup>2</sup> BLM is responsible for the management of nearly

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<sup>2</sup> BLM, “About the BLM Oil and Gas Program”, available at: <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/about> (Exhibit 1). The Court may take judicial notice of this and other factual documents cited herein under Federal Rule of

700 million acres of federal onshore subsurface minerals.<sup>3</sup> As of Fiscal Year 2016, BLM-managed lands contained 40,143 individual oil and gas lease parcels, covering over 27 million acres of public lands, on which 94,096 active producible oil and gas wells are drilled.<sup>4</sup>

BLM's Oil and Gas Leasing Program already contributes vast amounts of GHG emissions into the atmosphere, posing a threat to our climate, the natural environment, and public health. In 2012, federal onshore oil and gas leases contributed emissions totaling 259,533,115 MTCO<sub>2</sub>e. AR32971. This is the equivalent of GHG emissions from 75.5 coal-fired power plants.<sup>5</sup> Existing federal leases contain enough proved oil and gas reserves to total emissions upwards of 20.8 gigatons of carbon dioxide equivalent ("GtCO<sub>2</sub>e"). AR41225. Notably, unleased federal oil and gas reserves contain almost 90 GtCO<sub>2</sub>e of additional, potential emissions. *Id.*

### III. BLM'S LEASING DECISIONS FOR WYOMING

As of fiscal year 2016, BLM's Oil and Gas Leasing Program in Wyoming managed 13,598 individual oil and gas lease parcels, covering over 8.7 million acres of public lands, on which 32,294 active producible oil and gas wells are drilled.<sup>6</sup> The Wyoming portion of this lawsuit challenges five separate BLM lease sales that, collectively, resulted in the issuance of 282 new oil and gas lease parcels across three Districts in Wyoming. Each BLM Wyoming District Office produced a separate EA/FONSI for the leases within the District, in some cases

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Evidence 201(b)(2), (c). *See New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 702 n.21-22 (10th Cir. 2009) (taking judicial notice of information on agency websites).

<sup>3</sup> *Id.*

<sup>4</sup> BLM, Oil and Gas Statistics, at Table 1, available at: <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/oil-and-gas-statistics> (Exhibit 2).

<sup>5</sup> Based on EPA's Greenhouse gas Equivalencies Calculator. Available at <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> (last accessed June 29, 2017).

<sup>6</sup> BLM, Oil and Gas Statistics, at Tables 2, 3, and 10 (Exhibits 3, 4, and 5).

resulting in multiple EAs/FONSI for a single lease sale. The table below provides the record cite for each Leasing EA/FONSI by District:

<b>BLM District</b>	<b>May 2015</b>	<b>August 2015</b>	<b>November 2015</b>	<b>May 2016<sup>7</sup></b>	<b>August 2016</b>
High Desert	EA: 3373 FONSI: 3470		EA: 18582 FONSI: 18696	EA: 34616 FONSI: 34716	
High Plains		EA: 11913 FONSI: 11973		EA: 28168 FONSI: 28233	EA: 54973 FONSI: 55027
Wind River/ Big Horn		EA: 12350 FONSI: 12417		EA: 28435 FONSI: 28509	EA: 55232 FONSI: 55272

The NEPA process for each sale included a public comment period on the draft EAs and a protest period before BLM held each sale. Plaintiff WildEarth Guardians participated in the comment and protest periods for each of the challenged leasing decisions. Comments: AR 1969, 8905, 16829, 23696, 32220; Protests: AR 2997, 12984, 18816, 27646, 34764, 54453.

### **STANDARD OF REVIEW**

Agency compliance with NEPA is judicially reviewed pursuant to the Administrative Procedure Act, and is set aside if agency action is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). “[I]n making the factual inquiry concerning whether an agency decision was ‘arbitrary or capricious,’ the reviewing court ‘must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.’” *Marsh*, 490 U.S. at 378 (quoting *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971)). The Court further considers “whether the agency acted within the scope of its legal authority, whether the agency has explained its decision, [and] whether the facts on which the agency purports to have relied have some basis in

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<sup>7</sup> The High Plains and Wind River/Big Horn leases were originally scheduled for the February 2016 lease sale, but that sale was canceled due to inclement weather. These leases were offered as part of the May 2016 lease sale instead. AR 34764.

the record. . . .” *Fund for Animals v. Babbitt*, 903 F. Supp. 96, 105 (D.D.C. 1995); *see also Volpe*, 401 U.S. at 415-16. “Summary judgment is an appropriate procedure for resolving a challenge to a federal agency’s administrative decision when review is based upon the administrative record . . . even though the Court does not employ the standard of review set forth in Rule 56, Fed. R. Civ. P.” *Babbitt*, 903 F. Supp. at 105 (citing *Richards v. I.N.S.*, 554 F.2d 1173, 1177 n.228 (D.C. Cir. 1977)).

### **STANDING**

Guardians have standing to bring this action. Standing under Article III of the Constitution requires plaintiffs to show that: (1) they have suffered an “injury in fact” due to defendants’ allegedly illegal conduct, (2) which can fairly be traced to the challenged conduct of the defendants, and (3) which can be redressed by a favorable decision. *Defenders of Wildlife v. Gutierrez*, 532 F.3d 913, 923-924 (D.C. Cir. 2008); *Friends of the Earth v. Laidlaw*, 528 U.S. 167, 180-81 (2000). The Court need only find standing for one plaintiff, and an organizational plaintiff must show that it or one of its members suffers injury in fact from the challenged agency action. *See U.S. Dep’t of Labor v. Triplett*, 494 U.S. 715, 720 (1990). “[E]nvironmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons ‘for whom the aesthetic and recreational values of the area will be lessened’ by the challenged activity.” *Laidlaw*, 528 U.S. at 183 (citations omitted). Actual environmental harm from complained-of activity need not be shown, as “reasonable concerns” that harm will occur are enough. *Id.*

Here, Guardians meet this standard. Guardians’ members are directly harmed from BLM’s unlawful authorizations and issuance of the subject oil and gas leases. Guardians’ members have extensively visited and recreated in the proximity of the lease tracts, and they have plans to

continue to do so regularly. *See, e.g.*, Molvar (Exhibit 6) and Nichols (Exhibit 7) Declarations. On such visits, Guardians' members have enjoyed the aesthetic and recreational qualities of public lands in Wyoming's Red Desert, Big Horn Basin, Wind River Basin, Adobe Town Wilderness Study Area, Thunder Basin National Grassland, and lands along the North Platte River between Casper and Glenrock by hiking and appreciating the area's remoteness and open skies, and by viewing wildlife. Molvar Decl. ¶¶ 7-8, 14-15, 17; Nichols Decl. ¶¶ 12-13, 22. Guardians' members have observed the effects of existing oil and gas development already occurring around the challenged leases, including drilling rigs spewing exhaust, the smell of oil in the air, endless truck traffic, haze and dust, and air pollution from engines and flaring. Molvar Decl. ¶¶ 9-11, 15; Nichols Decl. ¶¶ 16-17. Development of the challenged leases will degrade the air quality, scenic beauty, and solitude in the areas used by Guardians' members, and result in harm to the landscapes, resources, and wildlife enjoyed and visited by Guardians' members, ultimately reducing their enjoyment of these areas and likelihood of returning in the future. Molvar Decl. ¶¶ 16-17; Nichols Decl. ¶ 18.

Guardians' members' injuries can be traced to BLM's authorizations of the Wyoming leases. Lease development will degrade local air quality by producing air pollution from engines and other sources. Nichols Decl. ¶ 16. BLM's authorizations will also result in reasonably foreseeable increases in greenhouse gas ("GHG") emissions, which contribute to climate change impacts about which Guardians' members are concerned. Molvar Decl. ¶ 19; Nichols Decl. ¶ 24-25.

Guardians' injuries would be redressed by a favorable result in this suit because BLM would then be made to properly analyze the full impacts of lease development under NEPA. This analysis could lead to a denial of some or all of the Wyoming leases, or to modifications that



would lessen GHG pollution, associated impacts from climate change, and other resource impacts on public lands. *See Lujan v. Defenders of Wildlife*, 504 U.S. 555, 572-73 n.7 (1992); *Massachusetts v. Env'tl. Protection Agency*, 549 U.S. 497, 517-18 (2007); *Lemon v. Geren*, 514 F.3d 1312, 1315 (D.C. Cir. 2008) (“[I]f the agency’s eyes are open to the environmental consequences of its actions . . . it may be persuaded to alter what it proposed.”).

## ARGUMENT

### **I. BLM FAILED TO TAKE A HARD LOOK AT THE DIRECT, INDIRECT, AND CUMULATIVE IMPACTS OF GREENHOUSE GAS POLLUTION AND CLIMATE CHANGE**

NEPA requires that BLM take a hard look at the impacts of GHG pollution and climate change resulting from its leasing decisions, which the agency universally failed to do in EAs for the Wyoming leases. First, BLM failed to quantify or analyze direct GHG emissions from oil and gas production on lease parcels. Second, BLM failed to analyze the foreseeable indirect GHG emissions resulting from combustion or other end uses of the oil and gas extracted from the issued leases. Finally, BLM also failed to consider the cumulative, incremental contribution of GHG emissions associated with the issued leases, together with other past, present, and reasonably foreseeable oil and gas emissions managed and authorized by the agency, as required by NEPA.

Critically, NEPA mandates that BLM not only disclose the volume of projected direct, indirect, and cumulative emissions, but that the agency must also analyze the significance and severity of those emissions so that decisionmakers and the public can determine whether and how those emissions should influence BLM’s leasing decisions. *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351-52 (1989) (recognizing that NEPA analysis must discuss “adverse environmental effects which cannot be avoided[,]” which is necessary to “properly evaluate the severity of the adverse effects”). Here, BLM arbitrarily failed to analyze the direct,

indirect, and cumulative impacts of GHG emissions of oil and gas leasing—an omission admitted by the agency that requires no flyspecking of the record.

**A. BLM Failed to Satisfy NEPA’s Hard Look Requirement.**

NEPA imposes “action-forcing procedures ... requir[ing] that agencies take a hard look at environmental consequences.” *Robertson*, 490 U.S. at 350 (internal citations omitted). The purpose of the “hard look” requirement is to ensure that the “agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious.” *Balt. Gas & Elec. v. Natural Res. Def. Council*, 462 U.S. 87, 98 (1983); *see also Natural Res. Def. Council v. Hodel*, 865 F.2d 288, 294 (D.C. Cir. 1988) (holding that the agency’s “hard look” at environmental impacts must be “fully informed” and “well-considered”). These “environmental consequences” may be direct, indirect, or cumulative. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8; *see also Sierra Club v. Fed. Energy Reg. Comm’n*, 827 F.3d 36, 41 (D.C. Cir. 2016) (recognizing NEPA obligation for agency to consider direct, indirect, and cumulative effects). BLM determines whether direct, indirect, or cumulative impacts are significant by accounting for both the “context” and “intensity” of those impacts. 40 C.F.R. § 1508.27.

A federal action “affects” the environment when it “will or *may* have an effect” on the environment. *Id.* § 1508.3 (emphasis added). “If any significant environmental impacts might result from the proposed agency action then an EIS must be prepared before the [agency] action is taken.” *Sierra Club v. Peterson*, 717 F.2d 1409, 1415 (D.C. Cir. 1983). An environmental effect is “reasonably foreseeable” if it is “sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.” *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir.1992). An agency’s hard look examination “must be taken objectively and in good

faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made.” *Forest Guardians v. U.S. Fish & Wildlife Serv.*, 611 F.3d 692, 712 (10th Cir. 2010).

“Looking to the standards set out by regulation and by statute, assessment of all ‘reasonably foreseeable’ impacts must occur at the earliest practicable point, and must take place before an ‘irretrievable commitment of resources’ is made.” *Richardson*, 565 F.3d at 718; *see also* 42 U.S.C. § 4332(2)(C)(v) (stating agency must identify any irretrievable commitments of resources during the NEPA process, and must occur before a project is approved); 40 C.F.R. §§ 1501.2 (stating NEPA process must be integrated with other planning “at the earliest possible time”), 1502.22 (stating agency may avoid filling information gaps about reasonably foreseeable impacts only in special circumstances); *Sierra Club v. Hodel*, 848 F.2d 1068, 1093 (10th Cir. 1988) (holding agencies are to perform hard look NEPA analysis “before committing themselves irretrievably to a given course of action, so that the action can be shaped to account for environmental values.”). As detailed below, BLM failed to satisfy its NEPA obligation.

**B. BLM Cannot Defer Analysis of GHG Pollution and Climate Change Impacts to the Drilling Stage.**

Here, none of the EAs prepared for oil and gas leases in Wyoming takes a hard look at GHG pollution and climate change impacts from the development of the 282 lease parcels. The individual EAs for the Wyoming leases acknowledge, as they must, that the climate is changing, that these changes will have severe consequences, and that human emissions—in particular, emissions from fossil fuel combustion—are the primary driver of these changes. *See, e.g.*, AR03412 (citing the Intergovernmental Panel on Climate Change (“IPCC”) conclusion that “warming of the climate system is unequivocal” and that “the observed increase in global average surface temperature...was caused by the anthropogenic increase in

GHG concentrations”), 28458-59 (same), 19504 (same), 35323 (same); *see also, e.g.* AR03396 (recognizing the “industrialization and burning of fossil carbon sources have caused GHG concentrations to increase measurably”), 13752 (same), 19481 (same), 35300 (same), 53826 (same). Other federal agencies have also affirmed these basic principles. *See, e.g., Coal. for Responsible Reg. v. Env’tl. Protection Agency*, 684 F.3d 102, 120-22 (D.C. Cir. 2012) (holding that vast body of scientific evidence supports EPA’s determination that human emissions drive climate change). The need to evaluate the impacts of GHG emissions through NEPA is bolstered by the fact that “[t]he harms associated with climate change are serious and well recognized,” and environmental changes caused by climate change “have already inflicted significant harms” to many resources around the globe. *Mass. v. EPA*, 549 U.S. at 521; *see also id.* at 525 (recognizing “the enormity of the potential consequences associated with manmade climate change.”).

Despite BLM’s acknowledgement of the mechanisms of climate change, the agency universally disavows any responsibility for taking a hard look at the impacts of GHG emissions associated with the Wyoming oil and gas leasing decisions, concluding, for example:

- The administrative act of leasing all or part of 34 parcels covering 36,851.060 acres would not result in any direct GHG emissions. AR03432.
- Offering 57 parcels for competitive sale would have no direct impacts to GHG emissions. Any potential effects to GHG emissions would occur when the leases were sold and subsequently developed. AR13753.
- The administrative act of leasing all or part of 50 parcels covering 76,182.130 acres would not result in any direct GHG emissions. AR19525.
- The administrative act of leasing all or part of 32 parcels covering 29,736.220 acres would not result in any direct GHG emissions. AR35342.
- Offering all 39 parcels for competitive sale would have no direct impacts to GHG emissions. Any potential effects to GHG emissions would occur when the leases were sold and subsequently developed. AR53851.

In other words, although GHG emissions from lease development are foreseeable, BLM arbitrarily decided that such emissions are insignificant because the act of leasing is essentially a paper transaction—a decision premised on the belief that “[t]he administrative action of offering and issuing an oil and gas lease does not, in and of itself, directly result in an irreversible or irretrievable commitment of resources.” AR03458, 19554, 35368. This conclusion is demonstrably incorrect.

Federal courts have long rejected the idea of deferring site-specific analysis of oil and gas impacts to the permitting stage. *See, e.g., Sierra Club*, 717 F.2d at 1415 (holding that when a federal agency charged with administering oil and gas leasing no longer “retain[s] the authority to preclude all surface disturbing activities” subsequent to issuing an oil and gas lease, “an EIS assessing the full environmental consequences of leasing must be prepared” before “commitment to any actions which might affect the quality of the human environment.”); *Wyoming Outdoor Council v. U.S. Forest Serv.*, 165 F.3d 43, 49 (D.C. Cir. 1999) (same); *Ctr. for Biological Diversity v. U.S. Dep't of Interior*, 563 F.3d 466, 480 (D.C. Cir. 2009) (same); *Richardson*, 565 F.3d at 718 (holding where “BLM could not prevent the impacts resulting from surface use after a lease issued, it was required to analyze any foreseeable impacts of such use before committing the resources” and that “NEPA require[s] an analysis of the site-specific impacts of [a lease sale] prior to its issuance, and BLM act[s] arbitrarily and capriciously by failing to conduct one.”); *Conner v. Burford*, 848 F.2d 1441, 1451 (9th Cir.1988) (holding “unless surface-disturbing activities may be absolutely precluded, the government must complete an EIS before it makes an irretrievable commitment of resources by selling non-[no surface occupancy] leases”). Consistent with case law, BLM’s own fluid minerals planning handbook specifically states: “By law, [direct, indirect and cumulative] impacts must be analyzed before the agency makes an

irreversible commitment. In the fluid minerals program, this commitment occurs at the point of lease issuance.” AR55446 (BLM Handbook H-1624-1).

Not all of the leases at issue in this case contain no surface occupancy (“NSO”) stipulations. *See* 43 C.F.R. §3101.1-2 (recognizing that, once leases are issued, the lessee has the exclusive right to “use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold.”). Yet, in defiance of over three decades of judicial precedent and agency guidance to the contrary, BLM claims that such analysis is unnecessary. *See* AR03455 (“site-specific NEPA analysis will be conducted in the event a development proposal is submitted for one or more of the parcels addressed in this EA”), 18684 (same), 19550 (same), 34706 (same), 35366 (same), 54983 (same), 55247 (same). This conclusion, and the lack of requisite analysis are fatal to any defense the agency may proffer regarding the adequacy of the NEPA analysis for the Wyoming leases.

**C. BLM Failed to Quantify and Account for Direct GHG Emissions from Oil and Gas Leasing, and Failed to Analyze the Effect of those Emissions.**

BLM has failed to quantify direct GHG emissions associated with the Wyoming oil and gas leases, and similarly failed to analyze the effect of those emissions, in violation of NEPA. “Direct effects ... are caused by the action and occur at the same time and place.” 40 C.F.R. § 1508.8(a); *see also id.* § 1502.16(a) (recognizing agency consideration must include “any adverse environmental effects which cannot be avoided ... the relationship between short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitment of resources” within the context of “[d]irect effects and their significance”). *See also* 40 C.F.R. § 1508.27(a); *Friends of the Earth v. U.S. Army Corps of Eng’rs*, 109 F.Supp.2d 30, 38 (D.D.C. 2000) (chastising agency for failing to consider direct impacts of project implementation and thus failing to take a “hard look”). Here, BLM

refused to provide this required analysis, rationalizing its decision by claiming that “the assessment of GHG emissions and climate change is in its formative phase” and that “it is not possible to accurately quantify potential GHG emissions in the affected areas as a result of making the proposed tracks available for leasing.” *See, e.g.*, AR13753, 19525-26, 03432. The record belies this assertion.

BLM admits that oil and gas drilling is the foreseeable result of issuing oil and gas leases. *See* AR12753 (“issuing the proposed tracts may contribute to new wells being drilled”), 19525-26 (same), 03432 (same). And that the act of leasing parcels for oil and gas development “may contribute to the effects of climate change through GHG emissions.” AR03455, 19551. The record also contains the information necessary for BLM to quantify direct emissions from lease development. For example, BLM estimates the number of foreseeable oil and gas wells at a field office level through an RFDS prepared during the planning stage, using a methodology based on site-specific factors such as well spacing, historical rates of development, target formations, and applied stipulations to project future drilling and production in specific geographic areas. *See* AR03455 (recognizing that “development on [issued] leases would occur within the RFD level analyzed in the EISs for the governing RMPs”), 19550 (same), 35365-66 (same).<sup>8</sup>

Some of the Leasing EAs also quantify the existing number of producing oil and gas wells at a state and field office level. AR13754 (providing “59,500 producing oil and gas wells in the state” and well counts for Buffalo, Casper, and Newcastle Field Office), 53852 (same), 28503 (providing well counts for Lander and Worland Field Offices), 03455 (providing well

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<sup>8</sup> *See* AR55736-46 (IM No. 2004-089, describing BLM Policy for Reasonably Foreseeable Development Scenario for Oil and Gas), 55740 (recognizing that “[t]he RFD is based on a review of geologic factors that control the potential for oil and gas resource occurrence and past and present technological factors that control the type and level of oil and gas activity). *See also, e.g.*, AR75066-67 (identifying historical rates of drilling by formation), 75100 (projecting future oil and gas activity and production estimates), 75115 (summarizing baseline projection of oil and gas well development by type and forecasting production).

counts for High Desert District and Rawlins, Kemmerer, Rock Springs, and Pinedale Field Offices). BLM also identifies a per well emission factor and quantifies that “each potential well that may be drilled on these parcels, if leased, could emit approximately 0.00059 mt of CO<sub>2</sub>e.”<sup>9</sup> AR13754, 53852, 28487. Nevertheless, BLM uniformly refuses to take the critical next step and connect the dots. BLM is readily able to estimate the number of wells that could foreseeably be developed on specific lease parcels, apply its per well emission factor, and aggregate that information to offer the estimated direct emissions associated with the lease sales.<sup>10</sup> The agency simply refused to do so.

Notably, other BLM field offices routinely use these same factors, as well as other available tools, to quantify the direct GHG emissions from the agency’s leasing decisions. For example, in Idaho’s Four Rivers Field Office, BLM used an emissions calculator developed by the agency’s own air quality specialists at the BLM National Operations Center in Denver to estimate GHG emissions that would result from leasing five parcels. *See* AR27713 (excerpt from Four River Field Office Leasing EA). BLM also relied on the Kleinfelder report to estimate that each well drilled on the sale parcels would release 2,893.7 MTCO<sub>2</sub>e. AR27711. The agency then applied this per well estimate to the number of wells projected for each alternative, and estimated that the potential direct GHG emissions from the lease sale would range between 14,468.5 and 72,354.5 MTCO<sub>2</sub>e annually. *Id.* BLM field offices in Montana have also offered GHG emission estimates at the leasing stage by using the National Operations Center’s emissions calculator.

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<sup>9</sup> Notably, this per well estimate is itself questionable. BLM provides no support in the EA, nor could Guardians find support elsewhere in the record, for this estimate. To the contrary, a 2013 BLM report (“the Kleinfelder Report”) providing per well emissions estimates for oil and gas wells in the western U.S. determined that a representative well could emit GHGs ranging from 791 to 3,682 tons per year. AR27667 (Kleinfelder Report).

<sup>10</sup> *See, e.g.*, AR 12992 (using this information from Wyoming’s Caspar Field Office to calculate the range of annual GHG emissions based on the minimum and maximum numbers of wells that could be developed using the Southern Powder River Basin’s well spacing requirements.).



*See, e.g.*, AR 12990-91 (discussing GHG estimation methods for lease sales in Montana). Similarly, BLM field offices in Colorado and Utah have estimated GHG emissions from particular lease sales using per well GHG emissions estimates and projecting the number of wells that could be developed for all lease parcels in a given sale. *See* AR 27654-55 (discussing GHG estimation methods for lease sales in Colorado and Utah).<sup>11</sup>

Thus, the conclusion by BLM district offices in Wyoming that “it is not possible to accurately quantify potential GHG emissions” at the leasing stage is simply untrue. *See, e.g.*, AR13753. The agency need only look to other BLM field offices for the tools and methodology needed to complete this analysis. Moreover, refusing to take the necessary hard look, under the guise of uncertainty, is entirely insufficient. “Reasonable forecasting and speculation is...implicit in NEPA, and [courts] must reject any attempt by agencies to shirk their responsibilities under NEPA by labelling any and all discussion of future environmental effects as ‘crystal ball inquiry.’” *Scientists’ Inst. for Pub. Info. v. Atomic Energy Comm.*, 481 F.2d 1079, 1092 (D.C. Cir. 1973). NEPA requires government agencies to “consider every significant aspect of the environmental impact of a proposed action.” *Balt. Gas & Elec.*, 462 U.S. at 107. NEPA also requires that relevant information be made available to the public so that they “may also play a role in both the decision making process and the implementation of that decision.” *Robertson*, 490 U.S. at 349. As here, when “an EA is so procedurally flawed that we cannot determine whether the proposed ... project may have a significant effect, the court should remand for the preparation of a new [NEPA analysis].” *Ctr. for Biological Diversity v. Nat’l Highway Traffic*

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<sup>11</sup> *See also, e.g.*, BLM, Environmental Assessment DOI-BLM-F010-2016-0001-EA (Jan. 25, 2017) Competitive Oil and Gas Lease Sale, at 57, available at: [https://eplanning.blm.gov/epl-front-office/projects/nepa/68428/89393/106899/January\\_2017\\_Lease\\_Sale\\_DOI-BLM-NM-F010-2016-0001EA.pdf](https://eplanning.blm.gov/epl-front-office/projects/nepa/68428/89393/106899/January_2017_Lease_Sale_DOI-BLM-NM-F010-2016-0001EA.pdf) (Exhibit 8) (New Mexico Leasing EA quantifying potential direct GHG emissions from a proposed lease sale).

*Safety Admin.*, 538 F.3d 1172, 1225 (9th Cir. 2008). BLM’s refusal to quantify and evaluate direct GHG emissions from the Wyoming leases is arbitrary and capricious.

**D. BLM Failed to Analyze the Foreseeable Indirect Impacts of Oil and Gas Leasing.**

Similarly, BLM failed to analyze the foreseeable indirect GHG impacts that result from lease development. NEPA regulations require analysis of indirect effects, “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8(b). This includes “effects on air and water and other natural systems, including ecosystems.” *Id.* Such analysis is required whenever there is “‘a reasonably close causal relationship’ between the environmental effect and the alleged cause.” *Dept. of Transp. v. Public Citizen*, 541 U.S. 752, 767 (2004) (citing *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983)). With regard to oil and gas leasing and associated development, these indirect effects include the GHG emissions from downstream combustion or other end uses of the fuel.

The CEQ (whose interpretations of NEPA regulations receives judicial deference)<sup>12</sup> and numerous courts have held that the reasonably foreseeable effects of fossil fuel extraction on public lands include the emissions resulting from eventual combustion of that fuel. *See* AR57413 n.42 (providing “where the proposed action involves fossil fuel extraction ... the [indirect impacts] associated with the end-use of the fossil fuel being extracted would be the reasonably foreseeable combustion.”); *WildEarth Guardians v. OSMRE*, 104 F. Supp. 3d 1208, 1229-30 (D. Colo. 2015), vacated as moot, (recognizing that “combustion is therefore an indirect effect of the

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<sup>12</sup> *See Robertson*, 490 U.S. at 355 (recognizing CEQ regulations “are entitled to substantial deference”); *Wyoming v. U.S. Dep’t of Agric.*, 661 F.3d 1209, 1260 n.36 (10th Cir. 2011) (recognizing CEQ guidance is “persuasive authority” for interpreting NEPA and its implementing regulations) (citing *Richardson*, 565 F.3d at 705 n. 25).

approval of the mining plan modifications”); *Diné CARE v. OSMRE*, 82 F. Supp. 3d 1201, 1213 (D. Colo. 2015), vacated as moot, (holding that “combustion-related impacts ... are an ‘indirect effect’ requiring NEPA analysis.”); *High Country Conserv. Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1189-90 (D. Colo. 2014) (recognizing that the agencies “do not dispute that they are required to analyze the indirect effects of GHG emissions”); *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549-50 (8th Cir. 2003) (finding where agency action will foreseeably increase coal consumption, NEPA requires analysis of consumption emissions).

Here, there is a direct link between BLM’s authorization and issuance of oil and gas leases and the foreseeable emissions that will result from the processing, transmission, storage, distribution, and end use of hydrocarbons produced from those leases. *See Marsh*, 976 F.2d at 767. In fact, another BLM field office, in considering the indirect emissions from an oil and gas lease sale, recognized that “[i]ndirect GHG emissions are typically associated with combustion of either the oil or gas, either as direct fuel or produced fuel (e.g. gasoline from oil). EPA has developed indirect emissions calculators that can provide gross estimates based on established assumptions.”<sup>13</sup> BLM then proceeded to quantify those indirect emissions for the lease sale by applying emissions factors to total estimated production quantity. *Id.* Yet, here, BLM failed to even acknowledge the foreseeable indirect emissions from the Wyoming leases, let alone attempt to quantify or analyze the effect of those emissions. This wholesale omission violated NEPA. *See High Country*, 52 F. Supp. 3d at 1196–98 (finding where Forest Service action would enable additional coal mining, NEPA required analysis of impact of burning mined coal), *Border Power Plant Working Grp. v. U.S. Dep’t of Energy*, 260 F. Supp. 2d 997, 1013, 1028-29 (S.D. Cal. 2003) (finding agency failure to disclose project’s indirect carbon dioxide emissions violates NEPA).

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<sup>13</sup> *See* Exhibit 8 at 57 (NM Jan. 2017 oil and gas leasing EA).

**E. BLM Failed to Analyze the Cumulative Impacts of GHG Pollution and Climate Change.**

Adding to the shortcomings of BLM's EAs for its Wyoming leasing decisions is the agency's failure to analyze the cumulative, incremental contribution of GHG emissions from leases when added to other past, present, and reasonably foreseeable future oil and gas emissions emanating from the agency's management on a regional and national scale. *See* 40 C.F.R. § 1508.7. Here, BLM's authorization of 282 new oil and gas leases in Wyoming will result in new oil and gas development on over 300,000 acres of Wyoming public lands. BLM must consider the cumulative GHG impacts of these new oil and gas leasing authorizations in the relevant context, 40 C.F.R. § 1508.27(a), as required to inform the decisionmaking process and the public about the significance of GHG pollution and associated impacts from climate change. *See, e.g., Ctr. for Biological Diversity*, 538 F.3d at 1217 (“[T]he fact that climate change is largely a global phenomenon that includes actions that are outside of the agency's control does not release the agency from the duty of assessing the effects of *its* actions on global warming within the context of other actions that also affect global warming.”). Here, BLM failed to provide any “quantified or detailed information” on cumulative GHG impacts, *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1379 (9th Cir. 1998), which is far below the threshold of “meaningful analysis” this Circuit demands. *Grand Canyon Trust v. FAA*, 290 F.3d 339, 341, 345 (D.C. Cir.2002).

“NEPA's implementing regulations require an agency to evaluate ‘cumulative impacts’ along with the direct and indirect impacts of a proposed action.” *TOMAC v. Norton*, 433 F.3d 852, 864 (D.C. Cir. 2006) (citing *Grand Canyon Trust*, 290 F.3d at 341, 345). A cumulative impact is “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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7; *see also id.* § 1508.25(c) (stating actions that when viewed with other proposed actions have significant impacts should be considered together).

**1. BLM refused to analyze the cumulative GHG emissions from Wyoming leases, together with other BLM-managed oil and gas resources, and the impact of these emissions on climate change.**

Agencies have discretion to define the area of analysis for consideration of cumulative impacts to specific resources. *See Kleppe*, 427 U.S. at 414; *but cf. Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002) (holding “the choice of analysis scale must represent a reasoned decision and cannot be arbitrary.”). Here, BLM appropriately found that the scope of analysis for considering GHG emissions from leased parcels was “the incremental contribution [of those emissions] to the total regional and global GHG emission levels.” AR13763, 53859, 03456, 19552, 35366, 28503-04.<sup>14</sup> *See also, e.g.*, AR28487 (comparing incremental emission increases to “total national or global emissions” to conclude production from leases “would not have a measurable effect”). Yet, BLM fatally refused to analyze the cumulative impacts of its leasing decisions at this regional, national or global scale, instead concluding that “[o]ffering the subject parcels for lease, and the subsequent issuance of leases, in and of itself, would not result in cumulative impacts.” AR03455, 19551, 35366.<sup>15</sup>

Rather, by applying BLM’s chosen area and context for the consideration of cumulative climate change impacts, the agency’s analysis should have included the incremental GHG emissions increases from leased parcels, *added* to other past, present, and reasonably foreseeable

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<sup>14</sup> *Cf. Ctr. for Biological Diversity*, 538 F.3d at 1216-17 (holding that quantifying GHG emissions and calculating what “percentage” it represented of “U.S. greenhouse gas emissions” was inadequate).

<sup>15</sup> As detailed above, deferring analysis to the permitting stage is contrary to NEPA’s purpose of analyzing impacts before an irretrievable commitment is made. *Sierra Club*, 717 F.2d at 1415.

BLM-managed oil and gas emissions on a regional, national, and global scale. 40 C.F.R. §§ 1508.7, 1508.27(a). Particularly at the leasing stage—the point at which there is an irreversible and irretrievable commitment of federal oil and gas resources—BLM’s decision cannot be so myopic. Moreover, BLM’s practice of deferring analysis of cumulative GHG impacts to the subsequent drilling permit stage, where the agency considers permit applications for individual wells,<sup>16</sup> runs counter to NEPA’s requirement that agency decisions “must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum.” *See Grand Canyon Trust*, 290 F.3d at 342. BLM is required to account for the cumulative impacts of GHG emissions associated with the leasing and development of our public lands and minerals and, here, failed to do so in violation of NEPA. The court cannot “defer to a void.” *Or. Nat. Desert Ass’n v. Bureau of Land Mgmt.*, 625 F.3d 1092, 1121 (9th Cir. 2010).

Indeed, a cumulative effects analysis “must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum.” *Grand Canyon Trust*, 290 F.3d at 342. This Circuit has held that a “meaningful cumulative impact analysis must identify” five things:

(1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions—past, present, and proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate.

*Id.* at 345. Even assuming *arguendo* the environmental impacts of developing an individual lease were minimal, these impacts may nevertheless be significant when added to other environmental

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<sup>16</sup> The record shows BLM’s commitments in the Leasing EAs to analyze cumulative GHG impacts at the drilling permit stage are hollow. At the drilling stage, BLM either does a Categorical Exclusions or short EA that tier back to the Leasing EAs rather than doing a cumulative impacts analysis. *See, e.g.*, AR 32920-27 (categorical exclusion approving an oil well); AR 32896-919 (EA approving 36 wells).

impacts on existing and future federal oil and gas leases. In the context of climate change, it is precisely the incremental contribution of emissions across myriad sources that have, together, resulted in the current crisis. In fact, “[i]t is only at the lease sale stage that the agency can adequately consider cumulative effects of the lease sale on the environment, including ... the effects of the sale on climate change.” *Native Vill. of Point Hope v. Jewell*, 740 F.3d 489, 504 (9th Cir. 2014).

The record demonstrates not only the magnitude of the threat posed by climate change, but also the importance that federal decisionmaking consider how a given project’s impacts contribute to or otherwise amplify this threat.<sup>17</sup> Notably, BLM was aware of this threat, as demonstrated by its consistent citation in its Leasing EAs to the IPCC’s findings regarding the effects of GHG emissions on climate change. *See, e.g.*, AR03412, 28458-59, 28503, 19504, 35323. The IPCC is a Nobel Prize-winning scientific body within the United Nations that reviews and assesses the most recent scientific, technical, and socioeconomic information relevant to our understanding of climate change. The IPCC’s assessment concerning the state of warming is dire:

- “Anthropogenic greenhouse gas emissions ... has led to concentrations of carbon dioxide, methane and nitrous oxide that are unprecedented in at least the last 800,000 years.” AR81433
- “[C]hanges in climate have caused impacts on natural and human systems on all continents and across the oceans.” AR81435

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<sup>17</sup> *See* Sec. Order No. 3226 (Jan. 19, 2001) (stating “[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,” and establishing the responsibility of agencies “to consider and analyze potential climate change impacts when ... developing multi-year management plans, and/or when making major decisions regarding the potential utilization of resources under the Department’s purview.”); AR56346 (Sec. Order No. 3289 (Sept. 14, 2009) (reinstating Sec. Order 3226)); Exec. Order 13514, 74 Fed. Reg. 52117 (Oct. 8, 2009) (requiring federal agencies to “measure, report, and reduce their greenhouse gas emissions from direct and indirect activities”).

- “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.” AR81437
- “Many aspects of climate change and associated impacts will continue for centuries, even if anthropogenic emissions of greenhouse gases are stopped. The risks of abrupt or irreversible changes increase as the magnitude of warming increases.” AR81445.

Despite a robust body of scientific information and data before the agency warning about climate disruption and, indeed, BLM’s contributions to the problem through its Oil and Gas Leasing Program, the agency disclaimed responsibility and “failed to consider an important aspect of the problem” when it refused to provide any hard look analysis of GHG pollution and associated climate change impacts in its leasing decisions. *Motor Vehicle Mfrs. Ass’n v. State Farm*, 463 U.S. 29, 43 (1983).

**2. BLM ignored available measures for analyzing the magnitude and severity of GHG emissions from its leasing decisions.**

In BLM’s Leasing EAs, the agency arbitrarily dismissed the need to analyze cumulative GHG impacts, claiming that there were no scientific tools to measure incremental local or global climate impacts caused by these emissions. *See, e.g.*, AR03432, 11926, 12412, 18684, 28229, 28458-59, 34682, 54985. This is incorrect. Although climate attribution models continue to improve in their ability to assign specific *localized* impacts to climate change, focusing on any current shortcomings in these models to avoid analyzing the severity of emission impacts is not only disingenuous, but also misses the point of NEPA. *See Scientists’ Inst. for Pub. Info.*, 481 F.2d at 1092. Indeed, and contrary to BLM’s assertions, measures do exist for evaluating the extent and severity to which project-specific GHG emissions contribute to broader atmospheric and environmental degradation, even where those emissions make up only a small fraction of national or global emissions. Yet, for every lease sale challenged here, BLM arbitrarily



dismissed public comments both calling for the agency to estimate GHG emissions from its leasing decisions, as well as alerting BLM to available analytic tools for assessing the cumulative impacts of GHG emissions from development of the 282 leases encompassed by its leasing decisions.

Failing to account for the cumulative impacts of emissions from Wyoming leases (as well as the Utah and Colorado leases also challenged in this case), together with emissions from the 700 million acres of federal onshore subsurface minerals managed by BLM, violates NEPA by “impermissibly subject[ing] the decisionmaking process ... to the ‘tyranny of small decisions.’” *Kern v. Bureau of Land Mgmt.*, 284 F.3d 1062, 1078 (9th Cir. 2002). Nowhere has BLM provided the type of cumulative analysis of GHG emissions that NEPA demands, despite the ready availability of measures and the means to apply them.<sup>18</sup>

**a. BLM failed to measure incremental and cumulative oil and gas emissions against the remaining global carbon budget.**

One of the measuring standards available to the agency for analyzing the magnitude and severity of BLM-managed oil and gas emissions is by applying those emissions to the remaining global carbon budget. A “carbon budget” offers a cap on the remaining stock of GHGs that can be emitted while still keeping global average temperature rise below scientifically backed warming thresholds—beyond which climate change impacts may result in sever and irreparable harm to the biosphere and humanity. AR39606.

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<sup>18</sup> The EIS for Wyoming Greater Sage Grouse Proposed Land Use Amendment estimates the total number of oil and gas wells that could be drilled in nine Wyoming Field Offices between 2020 and 2031. AR 87262. The EIS also estimates for each Field Office the annual GHG emissions from these wells. AR 87265-93. However, the EIS contains no analysis of the severity of these emissions levels, either individually for each Field Office or cumulative across all Field Offices. The EIS dismisses doing any analysis with the statement, similar to the Leasing EAs, that “assessment of greenhouse gas (GHG) emissions and climate change is still in its formative phase.” AR 87311. To the extent that the Leasing EAs imply that they are tiering to the cumulative impacts analysis in this EIS for GHGs, there is simply no analysis to tier to.

The Paris Agreement codified among nations of the world the scientific understanding that “climate change represents an urgent and potentially irreversible threat to human societies and the planet,” while setting the goal of “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C.” AR46032-33.<sup>19</sup> The record shows that for an 80% probability of staying below the 2°C warming threshold, there was a global “carbon budget” of 890 GtCO<sub>2</sub>e emissions as of 2000. AR43213.<sup>20</sup> Globally we emitted 234 GtCO<sub>2</sub> between 2000 and 2006, with current annual energy sector emissions of approximately 36 GtCO<sub>2</sub>e per year. *Id.* Thus, the remaining global carbon budget to stay under the 2°C threshold of warming is currently around 310 GtCO<sub>2</sub>e, which, at current emissions levels, will be exceeded by 2025. Neither the math, nor the timeline, is encouraging.

Burning the world’s proven fossil fuel reserves would result in 2,800 GtCO<sub>2</sub>e of emissions. AR43214.<sup>21</sup> “Emitting the carbon from all proven fossil fuel reserves would therefore vastly exceed the allowable CO<sub>2</sub> emission budget for staying below 2°C.” *Id.* Approximately 80% of these reserves need to stay in the ground and unburned to stay below 2°C threshold of warming. AR40760. A subset of these fossil fuel reserves are held by the world’s coal, oil and gas companies—and listed on the world’s stock exchanges—representing potential emissions of 745 GtCO<sub>2</sub>e, which alone is more than twice the remaining carbon budget. AR40759.

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<sup>19</sup> See also AR43213 (recognizing that “2°C cannot be regarded as a ‘safe level’ ”); AR45688 (noting “vulnerabilities begin or continue to grow with increases in [global mean temperature] of less than 1°C.”).

<sup>20</sup> See also AR40757 (calculating a global carbon budget of 886 GtCO<sub>2</sub> as of 2000 for an 80% probability of staying below 2°C, and subtracting emissions from the first decade, leaving a budget of 565 GtCO<sub>2</sub>e from 2010 forward); AR81492 (according to the IPCC, global emissions must be limited to 1,000 GtCO<sub>2</sub>e as of 2000 for a 66% chance of staying below 2°C); AR45376 (providing an available carbon emissions quota from 2000 of “1,400, 2,300 and 3,200 GtCO<sub>2</sub> for warming limits of 2, 2.5 and 3°C at 50% chance of success”).

<sup>21</sup> See also AR40757 (calculating proven fossil fuel reserves of 2,795 GtCO<sub>2</sub>e).

Total U.S. emissions in 2012 were 6.500 GtCO<sub>2</sub>e, with emissions from fossil fuel extraction on federal lands approximately 1.344 GtCO<sub>2</sub>e in 2012 (accounting for approximately 21% of total U.S. GHG emissions). AR32970-72. The potential GHG emissions from federal fossil fuel reserves represents up to 492 GtCO<sub>2</sub>e. AR32356. Development of these federally managed reserves would surpass the entire world's budget to stay under 2°C of warming. And potential emissions from federal and non-federal fossil fuels are as much as 1,070 GtCO<sub>2</sub>. *Id.* Approximately 91% of federal reserves remain unleased, with already leased fossil fuel reserves representing up to 43 GtCO<sub>2</sub>e. *Id.* Existing federal oil and gas leases contain enough proved reserves to total emissions upwards of 20.8 GtCO<sub>2</sub>e, whereas unleased federal oil and gas reserves contain almost 90 GtCO<sub>2</sub>e of potential emissions. AR41225.

The record further establishes that (based on a more lenient carbon budget allowing for a 50% probability of staying under the 2°C warming threshold) the U.S. "share" of future global emissions is 176 GtCO<sub>2</sub>e based on the inertia of past emissions, but a negative 31 GtCO<sub>2</sub>e if the remaining carbon budget were equitably distributed amongst the world's population. AR45377.

In short, the global carbon budget is rapidly being spent, and every additional ton of GHG emissions is a debit against our future. As stated by CEQ, "[c]limate change results from the incremental addition of GHG emissions from millions of individual sources, which collectively have a large impact on a global scale." AR57407-08. These cumulative emissions must not only be quantified (which, as detailed above, BLM is capable of doing), but also measured against the remaining carbon budget, thereby providing BLM and the public the necessary context and information for understanding the of the extent to which BLM's leasing decision will significantly affect the environmental. 40 C.F.R. § 1508.27(a); *see also Robertson*, 490 U.S. at 349 (holding that relevant information must be made available to the

public). BLM could have provided this information in its Leasing EAs, but instead chose to bury its head in the sand.

President Trump's announcement of his intent to withdraw the U.S. from the Paris Agreement does not render moot Guardians' argument regarding scientifically-backed warming thresholds or that BLM should have applied carbon budgets consistent with these thresholds to the agency's analysis of its leasing decisions. First, withdrawal from the Paris Agreement does not change the science underlying the Agreement's goal of limiting warming to "well below 2°C" while "pursuing efforts to limit the temperature increase to 1.5°C." AR46033. These warming thresholds (and corresponding carbon budgets) were determined by scientific data and consensus, and are not arbitrary political calculations subject to shifting administration priorities.<sup>22</sup> Second, the administration's intent to withdraw from Paris is independent of BLM's obligation under NEPA to analyze a project's cumulative impacts. Finally, Article 28 of the Paris Agreement states that notification of an intent to withdraw from the Agreement can only occur "three years from the date on which the Agreement has entered into force for a Party" and that "such withdrawal shall take effect upon the expiry of one year from the date of receipt." AR46063. Because U.S. ratification of the Paris Agreement entered into force on November 4, 2016, the earliest an official U.S. exit can occur is on November 4, 2020—the day after the next U.S. presidential election.

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<sup>22</sup> *See also* Sec. Order 3289 (requiring BLM to "appl[y] scientific tools to increase understanding of climate change and to coordinate an effective response to its impacts," and mandating that "management decisions made in response to climate change impacts must be informed by [this] science.").

**b. BLM failed to use the social cost of carbon protocol as a measure for evaluating the magnitude and severity of GHG pollution impacts.**

The second measure available to BLM to evaluate the magnitude and severity of GHG emissions was the social cost of carbon protocol (“SCC”), which BLM arbitrarily failed to apply in its leasing decisions. An interagency working group comprised of several federal agencies and scientists created the protocol to evaluate the costs that a proposed action’s GHG emissions would have on society, and thus a proxy to the relative impacts of those emissions. AR56353.

Here, BLM failed to even disclose the amount of GHG emissions anticipated to result from its leasing decisions, let alone examine the “ecological[,]... economic, [and] social” impacts of those emissions, or provide an assessment of their “significance,” as NEPA demands. 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b). Moreover, having included in the Leasing EAs an assessment of the economic benefits from oil and gas leasing and development, BLM was obligated to also present available information about the economic downsides of the consequent GHG emissions.

Although BLM asserts that it is “not currently possible” to tie particular leasing decisions to “effects of climate change” due to a “lack of scientific tool,” *see, e.g.*, AR03455, the record squarely refutes that such analysis was not possible. At least one tool for doing so “is and was available: the social cost of carbon protocol” which was “designed to quantify a project’s contribution to costs associated with global climate change.” *High Country*, 52 F. Supp. 3d at 1190. BLM was aware of the social cost of carbon protocol when it prepared the leasing decisions, but arbitrarily refused to apply it to direct, indirect, and cumulative emissions.

As explained by Guardians’ comments to BLM, the protocol is “an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given

year[,]” that allows “agencies to incorporate the social benefits of reducing carbon dioxide (CO<sub>2</sub>) emissions into cost-benefit analyses...” AR56353. Although the social cost of carbon was initially designed as an analytical tool to assist agencies with rulemaking, EPA recommended that agencies use the social cost of carbon in NEPA reviews. *High Country*, 52 F. Supp. 3d at 1190.<sup>23</sup> Even if, as BLM suggests, it is infeasible to predict the precise physical changes to the environment that will result from specific oil and gas emissions, the protocol provides a method to “evaluat[e]” the emissions’ impacts which is “generally accepted in the scientific community,” and which BLM was not permitted to ignore. 40 C.F.R. § 1502.22(b)(4). The protocol is one available means of filling the essential but unmet need in the analysis of more “sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.” *Id.* at § 1502.14. Critically, the protocol not only contextualizes costs associated with climate change, but can also be used as a proxy for understanding climate impacts and to compare alternatives. *See id.* § 1502.22(a) (stating agency “shall” include all “information relevant to reasonably foreseeable significant adverse impacts [that] is essential to a reasoned choice among alternatives).

BLM was particularly obligated to address the economic impact of GHG emissions by estimating their social cost because the agency did include the economic benefits of oil and gas leasing and production in its leasing decisions. *See, e.g.*, AR03425, 13737, 19518, 28459, 35335-36. Although NEPA does not require BLM to conduct cost-benefit analysis, 40 C.F.R. § 1502.23, it is “arbitrary and capricious to quantify the benefits of [an action] and then explain that a similar analysis of the costs [is] impossible when such an analysis [is] in fact possible.”

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<sup>23</sup> *See also* Sarah E. Light, *NEPA’s Footprint: Information Disclosure as a Quasi-Carbon Tax on Agencies*, 87 Tul. L. Rev. 511, 545-46 & n.160 (Feb. 2013) (describing EPA recommendation that State Department, in evaluating impacts of Keystone XL Pipeline, “explore ... means to characterize the impact of the GHG emissions, including an estimate of the ‘social cost of carbon’ associated with potential increases of GHG emissions.”).

*High Country*, 52 F.Supp.3d at 1191; *see also Johnston v. Davis*, 698 F.2d 1088, 1094-95 (10th Cir. 1983) (holding agency may not present economic analysis in misleading way to give impression that benefits exceed costs, when evidence suggests the contrary); *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 446 (4th Cir. 1996) (stating “it is essential that the EIS not be based on misleading economic assumptions.”); *Sierra Club v. Sigler*, 695 F.2d 957, 979 (5th Cir. 1983) (holding if agency “trumpets” economic benefits, it must also disclose costs); *Ctr. for Biological Diversity*, 538 F.3d at 1200 (it is misleading to present economic analysis without assigning any cost to GHG emissions).

Thus, because BLM did not otherwise satisfy NEPA’s command to disclose the impact or significance of GHG emissions, and because BLM chose to quantify economic benefits of oil and gas leasing and development, BLM’s refusal to use available tools to similarly analyze the cost that carbon emissions have on society was arbitrary. Even if, counterfactually, BLM had articulated a reason for disagreeing with the dollar costs estimated by the interagency working group, BLM could not ignore this method of analysis entirely. “[B]y deciding not to quantify the costs at all,” BLM implied that there were no such costs—that the social cost of a ton of carbon dioxide emissions was \$0. *High Country*, 52 F.Supp.3d at 1192. Here, as in every other case considering the issue, that implication is unsupported and arbitrary. *Id.*; *Ctr. for Biological Diversity*, 538 F.3d at 1200; *Border Power Plant*, 260 F.Supp.2d at 1028-29. Thus, BLM’s treatment of GHG emissions was one-sided, misleading, and contrary to NEPA.

On March 28, 2017, President Trump, through Executive Order, disbanded the Interagency Working Group and withdrew its Technical Support Document (“TSD”) “as no longer representative of governmental policy.” Exec. Order. No. 13783 § 5(b), 82 Fed. Reg. 16,093 (Mar. 28, 2017). Notably, the Order did not refute or undermine the scientific or

economic basis of the TSD, rather withdrew the document for political reasons; therefore, the protocol remains a credible tool for assessing the impacts of GHG emissions under NEPA. Further, withdrawal of TSD does not absolve BLM of the responsibility to use “existing creditable scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse [environmental] impacts,” and thus remains a method for assessing GHG impacts that is “generally accepted in the scientific community.” 40 C.F.R. §§ 1502.22(b)(3), (b)(4).

## **II. BLM FAILED TO PROVIDE A CONVINCING STATEMENT OF REASONS TO JUSTIFY ITS DECISION TO FOREGO AN ENVIRONMENTAL IMPACT STATEMENT**

For “major federal actions significantly affecting the quality of the human environment,” federal agencies must prepare an EIS. 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.4. A federal action “affects” the environment when it “will or *may* have an effect” on the environment. 40 C.F.R. § 1508.3 (emphasis added); *see also Airport Neighbors Alliance v. U.S.*, 90 F.3d 426, 429 (10th Cir. 1996) (stating that an EIS is required if a “proposed action may ‘significantly affect’ the environment”); *Sierra Club*, 717 F.2d at 1415 (accord).

Federal agencies determine whether direct, indirect, or cumulative impacts are significant by accounting for both the “context” and “intensity” of those impacts. 40 C.F.R. § 1508.27. 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” and “varies with the setting of the proposed action.” 40 C.F.R. § 1508.27(a). Intensity “refers to the severity of the impact” and is evaluated according to several non-exclusive factors. *Id.* §§ 1508.27(b)(1)-(10). Courts have found that “[t]he presence of one or more of [the CEQ significance] factors should result in an agency decision



to prepare an EIS.” *Fund for Animals v. Norton*, 281 F. Supp. 2d 209, 218 (D.D.C. 2003) (quoting *Pub. Citizen v. Dep’t of Transp.*, 316 F.3d 1002, 1023 (9th Cir. 2003)). Several of these “significance factors” are implicated in the Wyoming lease sales.

Courts in this Circuit employ a four-part test to evaluate whether an agency’s decision to forgo preparation of an EIS is adequately supported by consideration of the relevant significance factors in its EA/FONSI:

First, the agency must have accurately identify the relevant environmental concern. Second, once the agency has identified the problem, it must have taken a “hard look” at the problem in preparing the EA. Third, if a finding of no significant impact is made, the agency must be able to make a convincing case for its finding. Last, if the agency does find an impact of true significance, preparation of an EIS can be avoided only if the agency finds that changes or safeguards in the project sufficiently reduce the impact to a minimum.

*Sierra Club v. Dep’t of Transp.*, 753 F.2d 120, 127 (D.C. Cir. 1985). Here, each of the Wyoming Leasing EAs identified GHG emissions from lease development as an environmental concern. AR 3396, 11935, 12370, 18636-37, 28195, 28458, 34662-63, 55015-16. However, as detailed above, none of BLM’s Leasing EAs took a “hard look” at direct, indirect, and cumulative GHG impacts from lease development. *See Sierra Club*, 717 F.2d at 1413 (stating “[j]udicial review of an agency’s finding of ‘no significant impact’ is not, however, merely perfunctory as the court must insure that the agency took a ‘hard look’ at the environmental consequences of its decision.”) (citing *Kleppe*, 427 U.S. at 410 n. 21).

Instead, BLM obscures the true extent of GHG emissions and climate change impacts through a systematic segmentation of its NEPA process for its leasing decisions. BLM obscures the true magnitude and significance of emissions by producing individual EAs for each District where parcels are made available for sale (see Table above) without including the requisite analysis of cumulative impacts from other past, present, and foreseeable oil and gas leasing and

development. Obscuration also results from BLM's decision to defer cumulative analysis to the subsequent permitting stage, while refusing to perform any analysis at the point where an irretrievable commitment of oil and gas resources is made. 42 U.S.C. § 4332(2)(C)(v). Together, BLM's NEPA process serves to conceal the true impacts of its leasing decisions by unlawfully "breaking it down into small component parts." 40 C.F.R. § 1508.27(b)(7). This shell game approach to NEPA compliance renders BLM unable to make a convincing case for its decision to forgo an EIS.

BLM has failed to justify its conclusion that the Wyoming leases will impact the environment no more than insignificantly, and the record contains no evidence that BLM considered the context and intensity of leasing impacts in reaching this decision. In particular, BLM failed to consider the intensity and severity of potential impacts, including factors such as (1) the cumulative impacts from oil and gas emissions, (2) whether leasing effects are highly controversial, or (3) whether effects are highly uncertain and involve unique or unknown risks. 40 C.F.R. §§ 1508.27(b)(7), (4), and (5).

First, BLM is required to consider whether its actions are "related to other actions with individually insignificant but cumulatively significant impacts." 40 C.F.R. § 1508.27(b)(7). In fact, this factor describes the nature of climate change. Significance "exists if it is reasonable to anticipate a cumulatively significant impact on the environment." *Id.* As detailed above, BLM has altogether failed to consider or analyze the reasonably foreseeable impacts from cumulative GHG emissions of its Wyoming leasing decisions. On this basis alone BLM's FONSI's are unsupported and the agency should have performed a more thorough EIS.

Second, a proposed action is highly controversial "where a substantial dispute exists as to the size, nature, or *effect* of the major federal action rather than to the existence of opposition to a

use.” *Town of Cave Creek v. FAA*, 325 F.3d 320, 331 (D.C. Cir. 2003) (emphasis original); *see also* 40 C.F.R. § 1508.27(b)(4). Such a controversy is measured by “scientific or other evidence that reveals flaws in the methods or data relied upon by the agency in reaching its conclusions.” *Nat’l Parks Conserv. Ass’n v. U.S.*, 177 F. Supp. 3d 1, 33 (D.D.C. 2016); *see also Standing Rock Sioux Tribe v. U.S. Army Corps of Eng’rs*, 2017 U.S. Dist. LEXIS 91297, at \*51 (D.D.C. June 14, 2017) (accord).

Here, such controversy is evident throughout the record. BLM has acknowledged that issuing the Wyoming leases will increase GHG emissions; *see, e.g.*, AR03412, 3455, 28458-59, 19504, 19551, 35323, yet refused to analyze the impacts of these emissions due to “the lack of scientific tools.” *See, e.g.*, AR12412, 18684, 28458. This conclusion is belied by the record, including by public comments providing the agency with well-established scientific methods for estimating GHG emissions from lease development—which have been applied by other BLM field offices—and for analyzing the magnitude and severity of those effects on climate change and the environment. *See, e.g.*, AR12990-96 (discussing methods for estimating GHG emissions), 16834-40 (same), 27653 (same), 27656-59 (same); AR39604-07 (discussing global carbon budgets as a means of assessing GHG impacts); AR39633-39 (discussing SCC as a method for assessing GHG impacts). These comments “reveal[ed] flaws in the methods and data relied upon by the agency in reaching its conclusions,” are highly controversial, and thus also warrant an EIS. *Nat’l Parks Conserv. Ass’n*, 177 F. Supp. 3d at 33.

Finally, BLM’s leasing decisions present highly uncertain and unknown risks, which further support more thorough NEPA review. 40 C.F.R. § 1508.27(b)(5). Indeed, BLM readily admits this fact. The Leasing EAs reference the degree of uncertainty associated with

both GHG emissions levels from the leases, and the impacts of those emissions on climate change and the environment. For example, BLM states:

[I]n regard to future development, the assessment of GHG emissions and climate change is in its formative phase. While it is not possible to accurately quantify potential GHG emissions in the affected areas as a result of making the proposed tracts available for leasing, some general assumptions can be made: offering the proposed parcels may contribute to the installation and production of new wells.

AR03432; *see also* 11926, 12412, 18684, 28459, 34682. Although BLM asserts that the “incremental contribution to global GHG gases cannot be translated into incremental effects on climate change globally or in the area of these site-specific actions,” AR03456, record evidence demonstrates that such measures are in fact available, as detailed above. Where, as here, an EA “is replete with references to the uncertainty inherent in” a proposed action, “the agency’s case for insignificance is far from convincing.” *Humane Soc. of the U.S. v. Dep’t of Comm.*, 432 F. Supp. 2d 4, 20-21 (D.D.C. 2006).

Accordingly, BLM has failed to “put forth a ‘convincing statement of reasons’ that explains why the project will impact the environment no more than insignificantly,” and failed to justify its decision to forego an EIS. *Ocean Advoc. v. U.S. Army Corps of Engrs.*, 402 F.3d 846, 864 (9th Cir. 2005).

### CONCLUSION

For the foregoing reasons, Plaintiffs WildEarth Guardians and Physicians for Social Responsibility respectfully request the Court to declare BLM’s Wyoming leasing decisions and associated EAs arbitrary and capricious and in violation of NEPA and its implementing regulations, void the issued leases, and suspend and enjoin BLM from any further leasing authorizations pending BLM’s full compliance with NEPA.

Respectfully submitted on the 30th day of June 2017,

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**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA  
CERTIFICATE OF SERVICE (CM/ECF)**

I hereby certify that on June 30, 2017, I electronically filed the foregoing PLAINTIFFS' MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGEMENT with the Clerk of the Court via the CM/ECF system, which will send notification of such filing to other participants in this case.

/s/ Samantha Ruscavage-Barz

*Counsel for Plaintiffs*