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

REPLY IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT AND RESPONSE IN OPPOSITION TO DEFENDANT'S AND INTERVENORS' CROSS MOTIONS FOR SUMMARY JUDGMENT

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GLOSSARY OF TERMS

BLM	Bureau of Land Management
BLM Handbook	BLM's Land Use Planning Handbook (H-1601-1)
CO_2	Carbon Dioxide
EA	Environmental Assessment
EIS	Environmental Impact Statement
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gas
$GtCO_2e$	Gigaton of Carbon Dioxide Equivalent Emissions
IPCC	Intergovernmental Panel on Climate Change
mt	Metric ton
$MTCO_2e$	Metric Ton of Carbon Dioxide Equivalent Emissions
$MMTCO_2e$	Million Metric Ton of Carbon Dioxide Equivalent Emissions
NEPA	National Environmental Policy Act
NSO	No Surface Occupancy
RMP	Resource Management Plan

ARGUMENT

I. PLAINTIFFS HAVE STANDING

Bureau of Land Management ("BLM") and American Petroleum Institute ("API") concede that Plaintiffs WildEarth Guardians and Physicians for Social Responsibility (collectively, "Guardians") have standing for all challenged parcels except those included in the August 2016 lease sale. BLM Resp.13-15; API Resp.21-22.[1] Because there is no debate about whether this Court should reach the merits of Guardians' claims, BLM and API's argument is essentially a question of whether the August 2016 parcels should be included in any relief this Court may grant. Their argument is that Guardians have not established—through their member declarants—a geographic nexus to any of the parcels in the August 2016 lease sale. *Id*. This is incorrect. Declarants Erik Molvar and Jeremy Nichols discuss recreating on lands in the Wind River and High Plains Districts respectively where at least four of the parcels in the August 2016 sale are located. Molvar Decl. ¶¶ 7, 15 (Dkt. 55-6), Nichols Decl. ¶¶ 13, 21-22 (Dkt. 55-7). This type of "regular" and "continuing" use of lease areas is sufficient to provide standing. *S. Utah Wilderness Alliance v. Palma*, 707 F.3d 1143, 1156 (10th Cir. 2013) (citing *Summers v. Earth Island Inst.,* 555 U.S. 488, 494 (2009)). Mr. Molvar offers further clarification and details of his visits to the August 2016 leases in a supplemental declaration, attached as Exhibit 9.

II. BLM FAILED TO TAKE A HARD LOOK AT THE DIRECT, INDIRECT, AND CUMULATIVE IMPACTS OF GHG POLLUTION AND CLIMATE CHANGE

NEPA's mandate is unambiguous: federal agencies must analyze the direct, indirect, and cumulative impacts of their actions significantly affecting environmental quality. 40 C.F.R. §§ 1502.16(b), 1508.7, 1508.8; *see also Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 96 (1983) (recognizing analysis as NEPA's "key requirement"). NEPA forces BLM to take a "hard

[1] None of the other Intervenor-Defendants raise standing.

look" at the environmental consequences of its actions, and "ensures that these environmental consequences, and the agency's consideration of them, are disclosed to the public." *Sierra Club v. FERC*, 867 F.3d 1357, 1367 (D.C. Cir. 2017) (citing 42 U.S.C. 4332(2)(C)(iii) and *WildEarth Guardians v. Jewell*, 738 F.3d 298, 302 (D.C. Cir. 2013)). Here BLM made crucial errors in its NEPA analyses by improperly concealing and refusing to disclose the true greenhouse gas ("GHG") emissions and climate impacts of oil and gas development authorized by the challenged leasing decisions, and by failing to inform the public of those impacts. As this Circuit recently explained, while the court's role is not to "flyspeck" the agency's environmental analysis, "at the same time, we are responsible for holding agencies to the standard the statute establishes." *Sierra Club v. FERC*, 867 F.3d at 1368. An agency's analysis is deficient if it does not contain "sufficient discussion of the relevant issues and opposing viewpoints," and does not demonstrate "reasoned decisionmaking." *Id.* (citing *Nevada v. Dep't of Energy*, 457 F.3d 78, 93 (D.C. Cir. 2006) and *Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014)).

NEPA analysis serves two purposes: "First, "[i]t ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts. Second, it guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Dep't of Transp. v. Public Citizen*, 541 U.S. 752, 767 (2004) (quotations omitted). Where the agency "lacks the power to act on whatever information might be contained in the [analysis]," then such detailed NEPA analysis is not required. *Id.* at 768. However where, as here, information such as the quantification of GHG emissions and analysis of resulting climate change impacts are essential to NEPA's goals of

ensuring the public "can provide input as necessary to the agency making the relevant decisions," the agency's failure to provide that information violates NEPA. *Id.*; *WildEarth Guardians v. BLM*, 870 F.3d 1222, 1235 (10th Cir. 2017).

A. BLM Failed to Provide Site-Specific Analysis of GHG Emissions and Climate Impacts.

BLM defends its failure to provide site-specific and detailed information about the GHG emissions and climate impacts of its leasing decisions with the assertion that such analysis is not required at the leasing stage but, rather, is properly deferred until subsequent drilling stage approvals. BLM Resp.18-19. BLM's own fluid minerals planning handbook belies this argument, stating: "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. As acknowledged by BLM's handbook, although NEPA review is also required before drilling commences, this is immaterial to the necessity of performing a NEPA analysis prior to issuing a lease, because leasing constitutes an irreversible and irretrievable commitment of resources.

NEPA requires analysis of site-specific development impacts prior to lease authorization, and BLM acts arbitrarily in deferring such analysis to a later stage. *See Sierra Club v. Peterson,* 717 F.2d 1409, 1415 (D.C. Cir. 1983); *accord Wyoming Outdoor Council v. U.S. Forest Serv.*, 165 F.3d 43, 49 (D.C. Cir. 1999); *Ctr. for Biological Diversity v. Dep't of Interior*, 563 F.3d 466, 480 (D.C. Cir. 2009); *New Mexico ex rel. Richardson v. BLM*, 565 F.3d 683, 718-19 (10th Cir. 2009); *Conner v. Burford,* 848 F.2d 1441, 1451 (9th Cir.1988); *see also* Pls. Br.15-16 (Dkt. 55). BLM's attempt to distinguish this line of cases is unavailing. *See* BLM Resp.19-20.[2] If this

[2] *See also* Western Energy Alliance ("WEA") Resp.19-20 (citing *Sierra Club v. Dep't of Energy*, 867 F.3d 189 (D.C. Cir. 2017) (considering the degree to which effects are reasonably foreseeable

attempt were successful, it would reverse well-established precedent across Circuits. As this Circuit explained over three decades ago: when BLM no longer retains authority to preclude *all* activities on a lease that might have unacceptable environmental consequences, then the agency must perform site-specific NEPA analysis prior to lease issuance. *Peterson*, 717 F.2d at 1415.

Although API emphatically claims that "BLM does retain such authority" to preclude subsequent development, API offers no supporting evidence or authority for this claim. Instead, API quotes language from BLM's May 2015 leasing EA merely acknowledging the necessity of additional NEPA review before drilling can commence. API Resp.27. Contrary to API's claim, 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. Neither BLM nor Intervenors point to any record evidence to demonstrate that such rights were not conferred to lessees of the subject parcels, because none exists.[3] *See New Mexico*, 565 F.3d at 718 (holding "[b]ecause 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.").

The record is unambiguous: BLM made an irreversible and irretrievable commitment of resources when it issued the Wyoming leases, and BLM failed to conduct site-specific analysis of development impacts prior to doing so. *See, e.g.,* AR03455 (acknowledging "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") (emphasis added); *see also, e.g.,* AR03385 (stating

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for an LNG pipeline and, not oil and gas leasing); *'Illio'ulaokalani Coal. v. Rumsfeld*, 464 F.3d 1083, 1096 (9th Cir. 2006) (considering the Army's transformation of combat teams, which, nevertheless, still recognizes that site-specific analysis of a project is required at the point of an irreversible and irretrievable commitment of resources)).

[3] For instance, nothing in the record establishes that BLM included no surface occupancy ("NSO") stipulations for any of the 282 parcels.

BLM eliminated an NSO stipulation from consideration because it would "unnecessarily constrain oil and gas occupancy"), 03428-29 (listing parcel stipulations). BLM's failure to provide site-specific analysis before issuing the leases is fatal. *See Wyoming Outdoor Council,* 165 F.3d at 49 (recognizing that for multiple-stage leasing programs, the point of irreversible and irretrievable commitment of resources and the concomitant obligation to fully comply with NEPA matures at the leasing stage). Deferring analysis where it can reasonably be completed is unlawful. *Kern v. BLM*, 284 F.3d 1062, 1072 (9th Cir. 2002).

BLM's and Intervenors' claims that the absence of any analysis in the Wyoming leasing decisions is cured by general qualitative discussions of climate change tiered to environmental impact statements ("EISs") for various resource management plans ("RMPs") are also unavailing. *See, e.g.,* BLM Resp.16 (acknowledging that "EISs tiered to for the first and second lease sales did not discuss GHGs and climate"); API Resp.19; WEA Resp.12; Wyo. Resp.8. While NEPA regulations permit BLM to analyze oil and gas development impacts by tiering, this is only permitted when the project being considered is part of the broader agency action addressed in the earlier NEPA document. 40 C.F.R. § 1502.20. NEPA regulations specify that an EA tiering to a broader EIS "must include a finding that the conditions and environmental effects described in the broader NEPA document are still valid or address any exceptions." 43 C.F.R. § 46.140. Moreover, a site-specific EA "can be tiered to a programmatic or other broader-scope [EIS]…for a proposed action with significant effects, whether direct, indirect, or cumulative, if…a broader [EIS] *fully analyzed those significant effects*." *Id.* § 46.140(c) (emphasis added). Neither BLM nor Intervenors identify any evidence of BLM's site-specific analysis of GHG emissions or climate impacts from Wyoming leases. Therefore, BLM cannot tier to a broader EIS to cure its deficient analyses in the Leasing EAs.

B. BLM Failed to Quantify Direct GHG Emissions.

BLM violated NEPA when it failed to analyze the direct GHG emissions and climate impacts caused by leasing 282 parcels in Wyoming. 40 C.F.R. §§ 1508.8, 1502.16(a). All of BLM's excuses for this failure lack merit. First, BLM offers a series of statements from a "typical" leasing EA to claim its discussion of direct impacts is sufficient. BLM Resp.17-18. However, these statements merely acknowledge the mechanisms of climate change—that "burning of fossil carbon sources have caused GHG concentrations to increase measurably" and that this, in turn, causes climate change. *Id.* BLM concedes that it did not do an analysis of how these mechanisms will cause climate change as a result of the leases in controversy or of how the resulting climate change will directly affect the environment. Instead, BLM asserts that it "lacks knowledge at the leasing stage" and, therefore, excuses its failure to analyze direct impacts, stating "BLM's discussion of impacts was necessarily more generic, rather than site-specific." BLM Resp.18-19; *see also* API Resp.26 (also relying on general statements); WEA Resp.21 (conceding direct emissions were not quantified). Yet this Circuit has held that failing to consider the site-specific impacts of oil and gas development at the leasing stage is arbitrary. *Peterson*, 717 F.2d at 1415.

BLM's and Intervenors' defenses are premised on the contention that the impacts of oil and gas development are not reasonably foreseeable until the drilling stage. *See* BLM Resp.23 (quoting language from August 2015 EA regarding particulate emissions to ostensibly support the argument that the amount of increased GHGs also cannot be quantified); WEA Resp.22 (quoting lease protest decision); API. Resp.29 (quoting lease protest decision). Reliance on the leasing EAs and Protest Response letters reiterating these defenses is insufficient. *See Hull v. I.R.S.*, 656 F.3d 1174, 1177-78 (10th Cir. 2011) (finding the agency's explanation "will not

suffice if the agency's claims are conclusory, merely reciting statutory standards, or if they are too vague or sweeping.").

Critically, this pretext is also contrary to what courts have found to be the reasonably foreseeable impacts of development at the leasing stage. As the Tenth Circuit explained, the environmental impacts of oil and gas development are reasonably foreseeable at the leasing stage where "[c]onsiderable exploration has already occurred" and "a natural gas supply is known to exist." *New Mexico*, 565 F.3d at 718; *cf. Park County Res. Council v. Dep't of Agriculture,* 817 F.2d 609, 623 (10th Cir. 1987) (finding leasing impacts unforeseeable in area where no exploratory drilling had previously occurred and no evidence that full field development was likely).[4] Here, and as BLM and Intervenors point out,[5] the challenged lease authorizations occur in areas where substantial oil and gas development has already occurred, and where considerable data and information already exist—including information necessary to quantify GHG emissions from development of the Wyoming leases. *See, e.g.,* AR13754 (recognizing 59,500 producing oil and gas wells in Wyoming, including 39,500 wells in the High Plains District)*; see also* Pls. Br.16-19. These impacts are reasonably foreseeable. BLM has been *unwilling* to perform the statutorily-required analysis, and its repeated excuse that it was *unable* to do so is demonstrably

[4] Wyoming asks this Court to follow *Chihuahuan Grasslands All. v. Norton*, 507 F. Supp. 2d 1216 (D.N.M. 2007), Wyo. Resp.13-15, a decision which was vacated, *Chihuahuan Grasslands All. v. Kempthorne,* 545 F.3d 884 (10th Cir. 2008), and, critically, is inconsistent with controlling law within the Tenth Circuit by which the District of New Mexico is bound. *See supra.*

[5] *See* BLM Resp.18 (identifying study of Wyoming greenhouse gas emissions by sector), 20 (noting effects from existing oil and gas development based on corresponding reasonably foreseeable development scenarios), 23 (noting 75,192 leases sold in Wyoming from 1960 through 2011); WEA Resp.3 (noting 4,920 leases producing oil and gas), 23 (identifying foreseeable emission sources), 27 (noting an average of 545 wells in HDD are drilled annually, and identifying 3,445 active wells in the WR/BBD), 29 ("Utilizing available information, BLM forecasted potential future GHG emissions for different well types in all BLM field offices"); API Resp.4 (recognizing extent of existing oil and gas leasing and development across Wyoming field offices).

false. "NEPA required an analysis of the site-specific impacts of the [subject] lease prior to its issuance, and BLM acted arbitrarily and capriciously by failing to conduct one." *New Mexico*, 565 F.3d at 718-19.

Second, BLM's and Intervenors' argument that general qualitative statements describing the mechanisms of climate change are sufficient, and that quantitative information or site-specific analysis is unnecessary, is also incorrect. BLM Resp.17-19; WEA Resp.30-33; API Resp.32. BLM must quantify foreseeable GHG emissions and climate impacts from development before BLM authorizes leases. *See Sierra Club v. FERC*, 867 F.3d at 1375. Although BLM and Intervenors claim such quantification is impossible at the leasing stage, this "impossibility" defense is contradicted by the record. BLM recognizes and relies on a per well emission factor of 0.00059 metric tons ("mt") of carbon dioxide equivalent ("CO_2e"),[6] identified in several leasing EAs as satisfying BLM's NEPA obligation to analyze GHG emissions from development. *See, e.g.,* AR13754. BLM also implies that this estimate provides a starting point for assessing GHG impacts at the leasing stage, asserting that by using this emission factor "[a]n interested citizen would be able to draw a number of useful conclusions." BLM Resp.27. However, the burden is on BLM, not the public, to provide "[a]ccurate scientific analysis." 40 C.F.R. § 1500.1(c). Arguing that there is insufficient information at the leasing stage to analyze GHG emissions, while at the same time asserting that there is enough information in the EA for the reader to assess GHG impacts, is not only contradictory, but also violates *both* of NEPA's core purposes: to "take a 'hard look' at how the choices before [the agency] affect the environment, and then to place [the agency's] data and conclusions before the public." *Or. Natural Desert Ass'n v. Bureau of Land Mgmt.* ("*ONDA*"), 625 F.3d 1092, 1099-1100 (9th Cir. 2008).

[6] *See* BLM Resp.25; API Resp.31; WEA Resp.29 (stating per well emissions of 0.00059 *million* $MtCO_2e$).

Third, BLM's per-well emission factor of 0.00059 $MtCO_2e$ underrepresents the magnitude of GHGs from lease development by a factor of *one million*, and misleads the public. *See also* Amicus 4-7. BLM's emission factor is derived from what BLM claims are the total GHGs from all Federal oil and gas wells in Wyoming (listed as 19.6 mt), proportional to the 66 percent of wells in the High Plains District (listed as 12.94 mt). *See, e.g.,* AR13754. Although BLM does not identify the source of this data, elsewhere BLM identifies the Wyoming Greenhouse Gas Inventory ("Inventory"), AR83657, as the origin of its emission information.[7] *See, e.g.,* AR11959, 28219, 55015. Notably, the Inventory quantifies the portion of Wyoming oil and gas emissions occurring from fugitive sources as *12.1 million metric tons* ("$MMTCO_2e$") in 2010. AR83671. When contrasted with the impossibly low total of 19.6 *metric tons* across all 59,500 producing Federal wells in Wyoming, AR13754, the agency's consequent per-well emission factor of 0.00059 $MTCO_2e$ is manifestly incorrect.

By comparison, record evidence shows annual emissions from a *single* well ranging from 791 to 3,682 $MTCO_2e$, AR27677; correlating to emissions of between 47 and 219 $MMTCO_2e$ from all Federal wells in Wyoming. Even assuming only one well per parcel for the 282 leases, the resulting emissions range between 223,062 and 1,038,324 $MTCO_2e$. Moreover, even if BLM's calculation is the result of an unintentional error, BLM nevertheless relied on its erroneous per-well emission factor to support its assumptions about the significance of leasing emissions, while also misleading the public by a factor of one million. *See* 40 C.F.R. §§ 1502.24 (requiring agencies to insure professional and scientific integrity of discussions and analysis), 1500.1(b) (requiring that agencies insure the public receives "high quality" information and "[a]ccurate scientific analysis"). BLM cannot satisfy its hard look and informational obligations when the

[7] WEA states that BLM's per well emission factor was based on the Inventory. WEA Resp.29. *See also, e.g.,* AR13753-54 (detailing the Wyoming GHG inventory methodology and sources).

bases of its assumptions are premised on such a fundamental error. *ONDA*, 625 F.3d at 1099-1100.

Fourth, even if BLM's per-well GHG emission estimates were accurate, the agency still arbitrarily refused to take the essential next step and calculate the GHG emissions from lease development. "[A]n agency should not attempt to travel the easy path and hastily label the impact of the action as too speculative and not worthy of agency review. This is because NEPA requires agencies to evaluate 'any adverse environmental effects which cannot be avoided should the proposal be implemented.'" *Montana Envtl. Info. Ctr. v. U.S. Office of Surface Mining* ("*MEIC*"), No. 9:15-cv-0106-DWM, 2017 WL 3480262, at *11 (D. Mont. Aug. 14, 2017) (quoting 42 U.S.C. § 4332(C)(ii)). "Reasonable forecasting and speculation is…implicit in NEPA, and [courts] must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as 'crystal ball inquiry.'" *Scientists' Inst. for Pub. Info. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973).

Finally, BLM's failure to analyze GHG emissions and climate impacts from lease development cannot be excused through unfounded claims that the Court should defer to the agency. BLM Resp.20; WEA Resp.10; API Resp.24-25; Wyo. Resp.10. First, "NEPA compliance is not within the special province of administrative agencies" and, thus, "deference to agency expertise is inapplicable in the NEPA context." *Park County*, 817 F.2d at 620. Second, the Supreme Court has explained that courts are most deferential to agency decisions not on "simple findings of fact," but in the agency's "special expertise, at the frontiers of science." *Baltimore Gas*, 462 U.S. 102-104 (considering the Nuclear Regulatory Commission's decisions on nuclear waste storage). As the Tenth Circuit recently explained:

> We do not owe the BLM any greater deference on the question at issue here because it does not involve "the frontiers of science." The BLM acknowledged that climate change is a scientifically verified reality. Climate science may be better in 2017 than in 2010…but it is not a scientific frontier as defined by the Supreme Court in *Baltimore Gas*, i.e., as barely emergent knowledge and technology.

WildEarth Guardians, 870 F.3d at 1236–37. There, as here, "there is nothing for the court to defer to here. BLM did not provide any reasoning or analysis for its conclusion… BLM's reliance on expertise deference doctrine is therefore unhelpful." *Id.* at 1238; *Barnes v. Dep't of Transp.*, 655 F.3d 1124, 1131 (9th Cir. 2011) (acknowledging that while "the agencies would like this court to take their word for it and not question their conclusory assertions…their word, however, is not entitled to…significant deference"). The court cannot "defer to a void." *ONDA*, 625 F.3d at 1121.

C. BLM Failed to Analyze Foreseeable Indirect Emissions.

BLM altogether ignored the climate impacts from lease development's foreseeable downstream emissions, in violation of NEPA. 40 C.F.R. §§ 1502.16(b), 1508.8(b); *see also Sierra Club v. FERC*, 867 F.3d at 1371 (stating "[a]n agency conducting a NEPA review must consider not only the direct effects, but also the *indirect* environmental effects, for the project under consideration.") (emphasis original). Indirect effects are "reasonably foreseeable if they are 'sufficiently likely to occur that a person of ordinary prudence would take [them] into account in reaching a decision.'" *Id.* (citing *EarthReports v. FERC*, 828 F.3d 949, 955 (D.C. Cir. 2016)). In *Sierra Club v. FERC*, this Circuit found that the downstream combustion of gas transported via a pipeline was "not just 'reasonably foreseeable,' it is the [pipeline] project's entire purpose." *Id.* at 1372. Therefore, the agency "must either quantify and consider the project's downstream carbon emissions or explain in more detail why it cannot do so." *Id.* at 1375. There, as here,

BLM's failure to either quantify emissions from oil and gas combustion or explain its reasons for not doing so, violated NEPA.[8]

BLM attempts to distinguish *Sierra Club v. FERC*, not by claiming it lacked legal authority to prevent emissions, but, again, by alleging that it lacked necessary data and that "the number of wells to be drilled remains uncertain." BLM Resp.25.[9] *Sierra Club v. FERC* rejected similar claims of uncertainty, recognizing that "some educated assumptions are inevitable in the NEPA process" and that "we have previously held that NEPA analysis necessarily involves some 'reasonable forecasting.'" 867 F.3d at 1374 (citing *Scientists' Inst.*, 481 F.2d at 1092; *Del. Riverkeeper*, 753 F.3d at 1310). The court further explained "the effects of assumptions on estimates can be checked by disclosing those assumptions so that readers can take the resulting estimates with the appropriate amount of salt." *Id.* The direct and indirect effects of lease development are reasonably foreseeable where, as here, leases are authorized in an area of existing oil and gas development. *New Mexico*, 565 F.3d at 718; *see also MEIC*, 2017 WL 3480262 at *12 (finding agency's failure to analyze indirect and cumulative combustion emissions arbitrary where emissions are "not so 'highly speculative' that *any* analysis" is impractical). Moreover, BLM cannot simply assert that analysis would be speculative; NEPA requires that agencies support claims of unforeseeability with detail about missing information,

[8] Here, as in *Sierra Club v. FERC*, BLM has the sole legal and statutory responsibility to make a determination on whether the subject parcels were sold and, if so, under what conditions. 30 U.S.C. §§ 187, 226(a); 43 C.F.R. § 3101.1-2. Correspondingly, BLM has the legal authority to refuse to sell those parcels if it determined the environmental consequences were too great. 43 U.S.C. § 1732.

[9] *See also* API Resp.35 (citing BLM's response to comments regarding various end uses of oil and gas, AR34597, and alleging this provided a reasoned explanation why BLM did not analyze indirect effects). This type of conclusory statement that the indirect and cumulative effects will be minimal or that such effects are inevitable are insufficient under NEPA. *See Ctr. for Biological Diversity v. Dep't of Interior*, 623 F.3d 633, 642-43 (9th Cir. 2010); *Davis v. Mineta*, 302 F.3d 1104, 1122-23 (10th Cir. 2002).

and why the agency could not obtain it. 40 C.F.R. § 1502.22(b)(1); *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1246 n.9 (9th Cir. 1984).

With respect to downstream GHG emissions, this Circuit further explained:

> Quantification would permit the agency to compare the emissions from this project to emissions from other projects, to total emissions from the state or the region, or to regional or national emissions-control goals. Without such comparisons, it is difficult to see how [the agency] could engage in 'informed decision making' with respect to the greenhouse-gas effects of this project, or how 'informed public comment' could be possible."

Sierra Club v. FERC, 867 F.3d at 1374; *see also WildEarth Guardians*, 738 F.3d at 309 (accepting an agency's contention that the "estimated level of [greenhouse-gas] emissions can serve as a reasonable proxy for assessing potential climate change impacts, and provide decision makers and the public with useful information for a reasoned choice among alternatives"). Any potential difficulty with modeling the consequent climate impacts from downstream GHG emissions does not excuse BLM from calculating those emissions as an indirect effect of lease development.

D. BLM Failed to Analyze Cumulative GHG Emissions.

BLM similarly failed to analyze the cumulative, incremental contribution of GHGs from development of the Wyoming leases, added to other past, present, and reasonably foreseeable BLM-managed emissions. 40 C.F.R. § 1508.7. BLM acknowledges the scope of cumulative analysis for climate change is different from other resources, and that "GHG emissions and their effect on climate, however, are necessarily cumulative, and necessarily global in nature." BLM Resp.28.[10] Yet, despite having broadly defined its analysis area for cumulative climate impacts, BLM alleges that analyzing "foreseeable GHG-emitting projects *worldwide*" would be

[10] *See also* API Rep.36 (arguing that cumulative analysis is confined by geographic area, but ignoring that BLM itself defined the cumulative analysis area for GHG emissions as global in nature); Pls. Br.22-23.

impossible, *id*. (emphasis original); which both misunderstands Guardians' claim and the agency's NEPA obligations. "[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." *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.,* 538 F.3d 1172, 1217 (9th Cir. 2008) (emphasis in original). More broadly, BLM's contention that "traditional" cumulative effect principles are inapplicable to climate analysis has been squarely rejected by the Ninth Circuit, which identified "[t]he impact of [GHG] emissions on climate change [a]s precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct." *Id.* Claiming that such analysis is "impossible," without any additional explanation as to why it would be "impractical" to estimate and discuss cumulative emissions from BLM's *own* activity, including the agency's role in the management of 700 million acres of federal mineral estate, is insufficient to comply with NEPA. BLM Resp.28; *cf. Kleppe v. Sierra Club*, 427 U.S. 390, 414 (1976) (recognizing that showing of infeasibility may warrant narrowing cumulative effects analysis). Indeed, as discussed above and in Guardians' brief, BLM has at its disposal all the data and information necessary to provide this level of cumulative analysis, yet simply refused to do so. Pls. Br.16-19.

BLM must analyze the cumulative impacts of its actions to inform the agency's determination as to "whether, or how, to alter" the plan "to lessen cumulative impacts." *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 810 (9th Cir. 1999). BLM's discussion of cumulative impacts must be structured so as to be "useful" to agency decisionmaking. *Id.* at 811; *accord NRDC v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988). BLM attempts to dismiss this failure by claiming that its "choice of methodology" is "entitled to

deference," but the agency fails to identify what that methodology is, or provide any record citation to such an analysis. BLM Resp.28. BLM's failure to provide "quantified or detailed information" on cumulative impacts violates NEPA. *Neighbors of Cuddy Mountain v. U.S. Forest Serv.,* 137 F.3d 1372, 1379 (9th Cir. 1998). "It 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). Here, BLM violated NEPA by "impermissibly subject[ing] the decisionmaking process…to the tyranny of small decisions." *Kern,* 284 F.3d at 1078; *see also Grand Canyon Trust v. F.A.A.*, 290 F.3d 339, 342 (D.C. Cir. 2002) (holding when evaluating the environmental consequences of a proposed action, the agency "must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum.").

E. BLM Failed to Reveal the Magnitude and Severity of GHG Emissions.

In addition to BLM's refusal to quantify the foreseeable direct, indirect, and cumulative GHG emissions from development of the Wyoming leases, BLM also failed to examine the "ecological[,]… economic, [and] social" impacts of those emissions, including an assessment of their "significance." 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b). In determining whether an action will significantly affect the environment, agencies must consider both the context in which the action will take place and the intensity of its impact." *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1274 (10th Cir. 2004); 40 C.F.R. § 1508.27. BLM is required to include all "information relevant to reasonably foreseeable significant adverse impacts [that] is essential to a reasoned choice among alternatives." *Id.* § 1502.22(a).

BLM claims that its failure to assess the severity and significance of emissions "reflects a mere disagreement with BLM's reasoned approach to assessing GHG emissions," BLM Resp.29;

but the agency fails to explain what that approach is or where its analysis can be found.[11] NEPA requires more: BLM must use generally accepted methods to evaluate the impacts that would result from lease development's contribution to climate change. 40 C.F.R. § 1502.22(b)(4). Quoting conclusory statements from leasing EAs, BLM and Intervenors claim such analysis is not possible because there is a lack of scientific tools to predict climate change and measure its effects. API Resp.27; BLM Resp.29; WEA Resp.42. This is incorrect and contradicted by the record. Pls. Br.25-33. "Carbon Budgets" and the "Social Cost of Carbon" are two such measures that would have allowed the decisionmaker and public to understand the magnitude and severity of emissions, both of which BLM arbitrarily ignored. *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989).

1. BLM arbitrarily ignored carbon budgets.

NEPA does not permit BLM to wholly ignore oil and gas development's impacts on GHG emissions and climate. *See Native Village*, 740 F.3d at 504. This cumulative perspective is essential to informed decisionmaking, including the importance of BLM's emissions and potential reductions, which can be given context by comparison with estimates of the remaining global "carbon budget." *See* Pls. Br.26-30. Regardless of the methodology BLM chose to use, it could not ignore the cumulative GHG impacts of *its* actions entirely.

BLM and Intervenors argue that measuring BLM-managed emissions against the remaining carbon budget is "mere disagreement with BLM's reasoned approach" or a policy judgment not within the agency's purview. *See* BLM Resp.29; API Resp.37 n.10; *see also* Wyo. Resp.21-22 (misunderstanding what a carbon budget is); *cf.* 40 C.F.R. § 1500.2 (requiring

[11] Earlier BLM claims it "addressed these contentions in the foregoing argument," BLM Resp.27-28, where, as explained above, BLM argued that emissions were too speculative and analysis was deferred until the drilling stage.

administration of NEPA in a manner consistent with policy objectives). Rather, carbon budgeting is a meaningful measure that allows BLM to satisfy an otherwise unmet NEPA requirement, providing context for the significance and severity of BLM-managed GHG emissions. 40 C.F.R.§ 1508.27(a). As detailed by the Intergovernmental Panel on Climate Change ("IPCC"),[12] carbon budgeting is essential to understanding and accounting for the severity and significance of GHG emissions, and for developing a pathway toward climate stabilization. AR81492; *see also* AR81449-55 (detailing mitigation pathways to limit warming below 2°C threshold), 81473 (detailing anthropogenic GHGs as the driver of climate change), 81493-503 (detailing climate impacts). Consideration of GHG emission impacts is consistent with the agency's mandate under NEPA that cannot simply be ignored. *See Robertson,* 490 U.S. at 349 (holding that relevant information must be made available to the public).

2. BLM arbitrarily ignored the social cost of carbon.

The social cost of carbon protocol is another measure available to BLM for evaluating the costs that lease development will have on society, as well as a proxy to determine the relative impacts of GHG emissions from lease development. *See* Pls. Br.30-33; AR56352 (Interagency Working Group on the Social Cost of Carbon Technical Support Document). Furthermore, where BLM includes economic analysis quantifying the *benefits* of the proposed action, it is arbitrary and capricious to not consider the economic *costs* of the action. *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1182 (D. Colo. 2014).

Here, BLM monetized the benefits of lease development without similarly addressing the social costs. For example, BLM's leasing EAs monetized expected rental revenues, the value of

[12] Elsewhere, BLM relies on IPCC expertise and determinations in the leasing EAs when describing the anthropogenic drivers of climate change and resulting climate change impacts. *See, e.g.,* AR03411, 19504, 35323, 28458. But BLM arbitrarily ignores IPCC carbon budgets providing context for GHG emissions.

royalties, taxes and employment opportunities, and tiered to several Wyoming RMPs for additional socioeconomic analysis that touted the benefits of oil and gas development. *See, e.g.,* AR03426, 18651, 28459. This is indistinguishable from *High Country*, where the agency provided "detailed projections of [the plan's] upside" without providing any countervailing estimate—monetary or otherwise—of the importance of climate impacts. *High Country,* 52 F. Supp. 3d at 1195; *see also MEIC,* 2017 WL 3480262 at *15 (expanding upon *High Country* and similarly holding agency decision arbitrary for "failure to consider the cost of [GHGs]"). And, as in *High Country,* there is no indication here that "projection of the project's costs" using the social cost of carbon would be "[in]feasible." *High Country,* 52 F. Supp. 3d at 1195.

BLM's and Intervenors' attempts to distinguish *High Country*, and their corresponding attacks on the social cost of carbon methodology, are equally unavailing. The Institute for Policy Integrity Amicus at 7-21 provides detailed information on the application of the social cost of carbon in NEPA review; judicial precedent pertaining to the social cost of carbon; the scientific and economic underpinnings of the Technical Support Document; and responses to BLM's and Intervenors' attacks on the methodology. Guardians adopt and incorporate by reference these arguments here.

III. BLM FAILED TO PREPARE AN ENVIRONMENTAL IMPACT STATEMENT

BLM's decision to forgo an EIS for its Wyoming lease authorizations rests on the same unsupported excuse that GHG emissions cannot be predicted until the agency knows the number of wells that will be drilled on a lease and the type of drilling technology employed. BLM Resp.22-23, 31. As detailed above, BLM's argument fails. Two points bear emphasis.

First, BLM's assertion that NEPA's "controversy" requirement was not satisfied because Guardians' concerns do not relate to "the nature of the effects" is simply wrong. BLM Resp.32.

The controversy here relates to the magnitude of GHG emissions and the environmental impacts of these emissions; impacts that BLM chose not to analyze. Pls. Br.37. BLM's findings of no significant impact ("FONSIs") for the Wyoming leases all represent that GHG emissions from lease development are insignificant. AR03473, 11974, 12419, 18699, 28235, 28509, 34719, 55029, 55273. However, as discussed above, BLM's per-well emission estimates are off by a factor of one million, resulting in a gross underrepresentation of both the "size" and "effect" of GHG emissions, while BLM altogether ignored indirect and cumulative emissions. These failures satisfy the "controversy" requirement. *See Town of Cave Creek v. F.A.A.*, 325 F.3d 320, 331 (D.C. Cir. 2003).

Second, BLM does not dispute that the effects of its decisions with respect to GHG emissions are highly uncertain. In fact, the leasing EAs and BLM's response are "replete with references to the uncertainty inherent in" BLM's lease authorizations. *Humane Society. v. Dep't of Comm.*, 432 F. Supp. 2d 4, 20 (D.D.C. 2006); AR03432, 11926, 12412, 18684, 28459, 34682. Such references confirm that it was arbitrary for BLM to conclude in the FONSIs that the environmental impacts of lease development would be insignificant. An EIS is thus required.[13]

IV. PLAINTIFFS ARE ENTITLED TO THE RELIEF REQUESTED

The Administrative Procedure Act ("APA"), which provides the cause of action for NEPA claims, states that courts "shall…hold unlawful and set aside agency action, findings, and conclusions found to be…arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." 5 U.S.C. § 706(2)(A). When a plaintiff prevails on a claim brought under the APA, "it is entitled to relief under that statute, which normally will be a vacatur of the

[13] Wyoming relies on *Park County* to support its argument that an EIS is not required at the leasing stage. Wyo. Resp.24. However, as discussed in Section II.B above, *Park County* is readily distinguishable and contrary to the subsequent decision in *New Mexico*.

agency's order." *Am. Bioscience v. Thompson*, 269 F.3d 1077, 1084 (D.C. Cir. 2001). "Pursuant to the case law in this circuit, vacating a rule or action promulgated in violation of NEPA is the standard remedy." *Humane Society v. Johanns*, 520 F. Supp. 2d 8, 37 (D.D.C. 2007). Here, vacatur is the only remedy that serves NEPA's fundamental purpose of requiring agencies to look *before* they leap, rather than discovering impacts "after resources have been committed or the die otherwise cast." *Robertson*, 490 U.S. at 349.

Wyoming argues that even if the Court finds that BLM violated federal law, it should not vacate BLM's lease authorizations, and instead limit its remedy to remanding the lease authorizations to the agency. Wyo. Resp.26. This would not provide adequate relief. NEPA regulations instruct that the NEPA process must "not be used to rationalize or justify decisions already made." 40 C.F.R. § 1502.5. While courts retain equitable discretion to depart from vacatur to craft an alternate remedy for NEPA violations, they do so only in unusual and limited circumstances. *See Sierra Club v. U.S. Dep't of Agriculture*, 841 F. Supp. 2d 349, 362 (D.D.C. 2012). Here, based on the egregiousness of BLM's NEPA failures, remand with vacatur is appropriate.

API argues that Guardians are not entitled to equitable relief enjoining the lease authorizations—even if the Court finds that BLM violated federal law—because Guardians have not demonstrated that they meet the necessary elements for injunctive relief. API Resp.42-44. Should Guardians prevail on the merits, they respectfully ask the Court to bifurcate the remedy phase and allow for additional briefing, at which point they will satisfy the required elements for an injunction, as articulated in *Monsanto v. Geertson Seed Farms*, 561 U.S. 139, 156-57 (2010).

CONCLUSION

For the foregoing reasons, Guardians respectfully request the Court to declare BLM's Wyoming leasing decisions and associated EAs/FONSIs arbitrary and in violation of NEPA and it implementing regulations; void the issued leases; and suspend and enjoin BLM from approving any drilling permits or otherwise authorizing activities on the voided leases pending BLM's full compliance with NEPA.

Respectfully submitted on the 13th day of November 2017,

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

I hereby certify that on November 13, 2017, I electronically filed the foregoing 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