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Protest Filed by USPS, Overnight Delivery

November 1, 2018

Samantha Iron Shirt
Bureau of Land Management
Montana/Dakotas State Office
Attn: Branch of Fluid Minerals
5001 Southgate Drive
Billings, MT 59101

Re: Protest of the Montana BLM's December 11, 2018 Competitive Oil and Gas Lease Sale

To Whom It May Concern:

The Western Environmental Law Center, along with WildEarth Guardians, Sierra Club, Center for Biological Diversity, Montana Environmental Information Center, Western Watersheds Project, and Waterkeeper Alliance (together "Conservation Groups") submit the following protest of the Sale Notice, Environmental Assessment, Finding of No Significant Impact, and recommended stipulations for the 23 parcels that are part of BLM's December 11, 2018 competitive oil and gas lease sale. These parcels are located in the Havre, Butte, and Miles City Field Offices.

The names, mailing addresses, and telephone numbers for each organization filing this protest are listed below:

Western Environmental Law Center
120 Shelton McMurphey Blvd., Ste. 340
Eugene, Oregon 97401
(541) 485-2471

Sierra Club
2101 Webster St. Suite 1300
Oakland, CA 94612
(415) 977-5500

Montana Environmental Information Center
P.O. Box 1184
Helena, MT 59624
(406) 443-2520

WildEarth Guardians
2590 Walnut St.
Denver, CO 80205
(406) 698-1489

Western Watersheds Project
P.O. Box 779
Depoe Bay, OR 97341
(208) 788-2290

Center for Biological Diversity
1536 Wynkoop Street Suite #421
Denver, CO 80202
(520) 623-5252

Waterkeeper Alliance, Inc.
180 Maiden Lane, Suite 603
New York, NY 10038
(212) 747-0622

I, Laura King, have been authorized to file this protest on behalf of the above groups.

I. INTERESTS AND PARTICIPATION OF PROTESTING PARTIES

Western Environmental Law Center ("WELC") uses the power of the law to defend and protect the American West's treasured landscapes, iconic wildlife and rural communities. WELC combines legal skills with sound conservation biology and environmental science to address major environmental issues in the West in the most strategic and effective manner. WELC works at the national, regional, state, and local levels; and in all three branches of government. WELC integrates national policies and regional perspective with the local knowledge of our 100+ partner groups to implement smart and appropriate place-based actions.

Montana Environmental Information Center ("MEIC") is a non-profit environmental advocacy group that protects clean water and a healthy environment for all Montanans. MEIC was founded in 1973 by Montanans concerned about protecting and restoring Montana's natural environment.

WildEarth Guardians is a Santa Fe, New Mexico-based nonprofit organization with offices throughout the western U.S., including in Montana. WildEarth Guardians is dedicated to protecting and restoring wild places, wildlife, wild rivers, and the health of the American West and has over 220,000 members and supporters. As part of its Climate and Energy Program, Guardians works to combat climate change by advancing clean energy and aiding a transition away from fossil fuels, the key source of the greenhouse gases fueling global warming, particularly on our public lands. In doing so, Guardians defends the public interest by safeguarding clean air, pure water, vibrant wildlife populations, and protected open spaces.

Sierra Club is America's largest grassroots environmental organization, with approximately 795,000 members nationwide. In addition to creating opportunities for people of all ages, levels and locations to have meaningful outdoor experiences, the Sierra Club works to safeguard the health of our communities, protect wildlife, and preserve our remaining wild places through grassroots activism, public education, lobbying, and litigation. Sierra Club is dedicated to exploring, enjoying, and protecting

the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives.

The **Center for Biological Diversity** ("the Center") is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center also works to reduce greenhouse gas emissions to protect biological diversity, our environment, and public health. The Center has over one million members and activists, including those living in Montana who have visited these public lands for recreational, scientific, educational, and other pursuits and intend to continue to do so in the future, and are particularly interested in protecting the many native, imperiled, and sensitive species and their habitats that may be affected by the proposed oil and gas leasing.

Western Watersheds Project is a non-profit organization with more than 5,000 members and supporters. Our mission is to protect and restore western watersheds and wildlife through education, public policy initiatives and legal advocacy. Western Watersheds Project and its staff and members use and enjoy America's public lands and their wildlife, cultural and natural resources for health, recreational, scientific, spiritual, educational, aesthetic, and other purposes. Western Watersheds Project also has a direct interest in mineral development that occurs in areas with sensitive wildlife populations and important wildlife habitat.

Waterkeeper Alliance is a not-for-profit, member supported, international environmental organization based in New York City. Waterkeeper Alliance unites more than 300 Waterkeeper Organizations and Affiliates that are on the frontlines of the global water crisis, patrolling and protecting more than 2.5 million square miles of rivers, lakes, and coastal waterways on 6 continents. Waterkeeper Organizations and Affiliates defend our fundamental human right to drinkable, fishable and swimmable waters, and combine firsthand knowledge of their waterways with an unwavering commitment to the rights of their communities. Through its Clean and Safe Energy campaign, Waterkeeper Alliance has increasingly engaged in public advocacy, administrative proceedings and litigation aimed at reducing the water quality and climate change impacts of fossil fuel extraction, transport and combustion, including from BLM-controlled lands, throughout the United States. Waterkeeper Alliance and its member Waterkeeper Organizations and Affiliates have members, supporters and staff who have visited public lands in Montana, including lands and waters that would be affected by actions under the lease sale, for recreational, scientific, educational, and other pursuits and intend to continue to do so, and are particularly interested in protecting them from water-intensive energy development.

The Conservation Groups have consistently participated in BLM decisionmaking for prior oil and gas leasing in Montana and within the areas proposed for lease in December. Therefore, we incorporate by reference our prior comments, protests, and exhibits, including: the EA comments and protest for the December 12, 2017 lease sale (submitted Aug. 10, 2017 and Oct. 16, 2017 respectively); the EA comments and protest

for the March 13, 2018 lease sale (submitted Oct. 30, 2017 and Jan. 11, 2018 respectively); the scoping and DNA comments for the June 12, 2018 lease sale (submitted Nov. 28, 2017 and Feb. 6, 2018 respectively); the scoping comments and EA comments for the Dec. 11, 2018 lease sale (submitted July 20, 2018, August 23, 2018, and August 24, 2018); and the scoping comments for the March 2019 lease sale (submitted October 22, 2018).

II. STATEMENT OF REASONS IN SUPPORT OF CONSERVATION GROUPS' PROTEST OF THE MONTANA DECEMBER 2018 LEASE SALE

The National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq*., and its implementing regulations, promulgated by the Council on Environmental Quality ("CEQ"), 40 C.F.R. §§ 1500.1 *et seq*., is our "basic national charter for the protection of the environment." 40 R. § 1500.1. Recognizing that "each person should enjoy a healthful environment," NEPA ensures 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. 43 U.S.C. § 4331(b).

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

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

Thus, while "NEPA itself does not mandate particular results, but simply prescribes the necessary process," *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989), agency adherence to NEPA's action-forcing statutory and regulatory mandates helps federal agencies ensure that they are adhering to NEPA's noble purpose and policies. *See* 42 U.S.C. §§ 4321, 4331.

Below, Conservation Groups detail major flaws under NEPA that remain in the Environmental Assessment and Finding of No Significant Impact for the Montana December 2018 Lease sale:

- The BLM must defer all parcels in the December 2018 Lease Sale because the lease sale has been conducted under the unlawful requirements of IM 2018-034.
- The BLM cannot lease any parcels within the Miles City Field Office until the BLM fully complies with the decision in *Western Organization of Resource Councils v. U.S. Bureau of Land Management*, CV 16-21-GF-BMM, 2018 WL 1475470, (D. Mont. Mar. 26, 2018).

- BLM failed to fully analyze GHG emissions, including cumulative emissions and "lifecycle" emissions, and fails to analyze the social costs of these reasonably foreseeable emissions.
- BLM failed to take into account rapidly shrinking global carbon budgets.
- BLM failed to fully assess the impacts from hydraulic fracturing and horizontal drilling.
- BLM failed to prepare an EIS.

A. The BLM Must Defer All Parcels in the December 2018 Lease Sale Because the Lease Sale Has Been Conducted Under the Unlawful Requirements of IM 2018-034.

Conservation Groups raise concerns regarding the validity of the upcoming lease sale in light of a recent U.S. District Court for the District of Idaho decision concerning BLM Instruction Memorandum 2018-034 ("IM 2018-034"), which the Montana BLM utilized and continues to rely upon for the December 2018 oil and gas lease sale.

On September 21, 2018, the Chief U.S. Magistrate Judge Bush of the District of Idaho issued a Memorandum Decision and Preliminary Injunction in *Western Watersheds Project v. Zinke*, 2018 WL 4550396, Case No. 1:18-cv-00187-REB (Doc. 74), (D. Idaho Sept. 21, 2018), attached as Exhibit 1. That decision enjoins and restrains the BLM from implementing certain specified provisions of IM 2018-034 for fourth quarter/December 2018 and future oil and gas lease sales "contained in whole or in part within the Sage-Grouse Plan Amendments' recognized 'Planning Area Boundaries,'" Exhibit 1 at 50.

Although one parcel in the Butte Field Office included in the Montana December 2018 lease sale may fall outside of the 2015 Sage-Grouse Approved Resource Plan Amendment planning boundaries—and therefore is not directly controlled by the court's preliminary injunction decision—the court's reasoning clearly applies with equal force to all oil and lease sales conducted under the unlawful requirements of IM 2018-034. For the reasons set forth below, the Conservation Groups hereby request that the BLM postpone and defer all parcels included in the December 2018 competitive oil and gas lease sale, and any other future lease sales, unless and until the agency fully complies with the Preliminary Injunction and addresses the legal deficiencies identified therein.

In his Memorandum Decision and Order, Judge Bush ruled that plaintiffs are likely to succeed on the merits of both their substantive and procedural challenges to IM 2018-034 under the Federal Land Policy and Management Act ("FLPMA), 43 U.S.C. §§ 1712(a) & (h), 1739(e), the National Environmental Policy Act ("NEPA") 43 U.S.C. § 4332(C), 40 C.F.R. § 1506.6, and the Administrative Procedure Act ("APA"), 5 U.S.C. § 706(2). The court reviewed BLM's IM 2018-034 and concluded that it constitutes final agency action with respect to several critical elements of the BLM's oil and gas leasing process, including: (a) BLM decisions whether or not to permit public involvement, (b) length of public review and comment, and (c) length of public protests of oil and gas lease sales. Exhibit 1 at 23-34. As the court noted, "the burden of such constraints upon public participation and compressed protest periods falls most heavily upon members of

the public, as those who have nominated potential lease parcels and BLM have had far more time to evaluate and consider the details of such parcels." Exhibit 1 at 25.

In reviewing the plaintiffs' claims, and BLM's defenses, under the standards applicable to review of motions for preliminary relief, the court determined that the plaintiffs are likely to succeed on the merits of the claim that IM 2018-034's constraints on public participation are: (1) procedurally invalid because BLM imposed binding requirements for oil and gas leasing on BLM-administered lands and minerals without required public notice and comment, Exhibit 1 at 33-34, and (2) that IM 2018-034 "improperly constrains public participation in BLM oil and gas leasing decisions." Exhibit 1 at 36. Notably, BLM procedures for the pending December 2018 oil and gas lease sale have been consistent with provisions of IM 2018-034 that the court deemed unlawful, as detailed below.

The court concluded plaintiffs are likely to succeed on the fundamental question of whether BLM's statutory obligations require a minimum level of public involvement in leasing decisions with irrevocable, long-lasting consequences for the lands and minerals BLM manages on behalf of the public, and that the IM 2018-034 procedures fall short of those obligations. The court found:

> It is well-settled that public involvement in oil and gas leasing is required under FLPMA and NEPA. . . . On a very fundamental level, it strains common sense to see how these requirements are fulfilled when just comparing IM 2018-034 to IM 2010-117. That is, how can it be said that IM 2018-034 provides the required public participation 'to the fullest extent possible' and 'to the extent practicable,' when it is dramatically more restrictive (at least on the issue of public participation) than the previously-established IM (IM 2010-117) it only recently replaced?

Exhibit 1 at 36-37. The court went on to state:

> IM 2018-034 jettisoned prior processes, practices, and norms in favor of changes that emphasized economic maximization to the detriment if not outright exclusion of pre-decisional opportunities for the public to contribute to the decisionmaking process affecting the management of public lands. That choice was problematic when considering the Congressional directives for public involvement contained in FLPMA and NEPA and the apparent shortcomings of IM 2018-034 in allowing for public participation in BLM oil and gas leasing decisions.

Exhibit 1 at 40-41. Reviewing the record, the court further concluded that:

> [i]n this case, the record contains significant evidence indicating that BLM made an intentional decision to limit the opportunity for (and even in some circumstances to preclude entirely) any contemporaneous public involvement in decisions concerning whether to grant oil and gas leases on

> federal lands. . . . The evidence illustrates that the intended result of the at-issue decisions was to dramatically reduce and even eliminate public participation in the future decision-making process. Doing so certainly serves to meet the stated "purpose" of IM 2018-034 – that is, reducing or precluding public participation will "streamline the leasing process to alleviate unnecessary impediments and burdens, to expedite the offering of lands for lease . . . ." Yet, the route chosen by BLM to reach that destination is problematic because the public involvement requirements of FLPMA and NEPA cannot be set aside in the name of expediting oil and gas lease sales. The benefits of public involvement and the mechanism by which public involvement is obtained are not 'unnecessary impediments and burdens."

Id. at 41 (emphasis added). Because of the court's clear legal conclusion that BLM, through IM 2018-034's new procedures, unlawfully eliminated required minimum levels of public involvement in mineral leasing decisions, any subsequent leasing decisions carried out under the procedures of IM 2018-034—even if outside of Sage-Grouse habitat—will not only be clouded by the court's decision, but potentially subject to vacatur. As the court noted: "In not being allowed to participate at the leasing decision stage, or in having to hurriedly clamber to do so because of IM 2018-034's changes because of the limited time frame and other constraints upon public participation, oil and gas leases have been (and will be) issued without the full benefit of public input." Exhibit 1 at 42-43 (emphasis added). BLM is now fully on notice of the serious legal deficiencies inherent in the restricted public involvement procedures of IM 2018-034.

In BLM's haste to implement "energy dominance" policies and to curtail or eliminate public involvement in lease sale decisions, the BLM and Department of Interior ran afoul of NEPA, FLPMA, and the APA in both its promulgation of IM 2018-034, and in subsequent lease sales employing its procedures. Past participation in landscape-scale planning decisions, or the possibility of subsequent participation in permitting decisions once irrevocable commitments of development rights have already been conveyed, are no substitute for the legally-required duty on BLM to provide meaningful public participation in leasing decisions.

Because the entire process of identifying, reviewing, and offering oil and gas lease sales for the BLM's December 2018 and subsequent mineral leasing processes is fundamentally compromised by the unlawful provisions of IM 2018-034, Conservation Groups request that BLM defer all parcels in the December 2018 lease sale.

B. The BLM Cannot Lease Parcels in the Miles City Field Office Until the BLM Supplements the Miles City RMP/EIS.

The BLM cannot lease parcels within the Miles City Field Office until the BLM complies with the decision in *Western Organization of Resource Councils v. U.S. Bureau of Land Management*, CV 16-21-GF-BMM, 2018 WL 1475470, (D. Mont. Mar. 26,

2018) (hereinafter "*WORC*") (previously attached to the Conservation Groups' July 20, 2018 Scoping Comments as Exhibit 1).

On March 26, 2018, Judge Brian Morris of U.S. District Court in Montana issued an "Opinion and Order" in a case challenging the validity of the Miles City and Buffalo RMPs and EISs. In the decision, the court ruled for plaintiff environmental groups on three out of the six claims under NEPA. In particular, the court held that: 1) "NEPA requires the BLM to conduct new coal screening and consider climate change impacts to make a reasoned decisions on the amount of recoverable coal made available in the RMPs"; 2) "BLM must supplement the Miles City FEIS and Buffalo FEIS with an analysis of the environmental consequences of downstream combustion of coal, oil, and gas open to development under each RMP"; and 3) "BLM violated NEPA where it failed to justify its use of GWPs [global warming potentials] based on a 100-year time horizon rather than the 20-year time horizon of the RMPs." *WORC*, 2018 WL 1475470, at *17–18.

As a result of these flaws, the court indicated that the BLM must "conduct a new coal screening to consider climate change impacts," and "must supplement the Miles City FEIS . . . with an analysis of the environmental consequences of downstream combustion of coal, oil, and gas open to development under each RMP." *Id.* at *17–18. Put simply, "the deficiencies identified in the . . . Miles City RMP must be remedied through the preparation of a supplemental EIS[.]" *Id.* at *18. The court also held that the BLM must comply with its findings "at the lease-level and permit-level for any pending or future coal, oil, or gas developments in the . . . Miles City RMP until BLM produces [] supplemental environmental analyses . . . that comply with NEPA and the APA." *Id.* at *19. In an order responding to remedy briefing, the court recently reaffirmed that its decision "applies when issuing any new or pending lease of coal, oil, or gas resources in the Buffalo or Miles City planning areas until Federal Defendants produce remedial analyses that comply with its obligations under NEPA." Exhibit 1.1, Order, *WORC*, CV 16-21-GF-BMM (D. Mont. July 31, 2018).

For the December 2018 lease sale the BLM is planning to lease approximately 10 parcels within the Miles Field Office. *See* EA, App'x A, Parcel List, Miles City FO. Although the Conservation Groups appreciate the fact that the BLM deferred parcels "due to ongoing litigation" and has included additional information regarding the global warming potential for GHGs and lease-specific calculations for downstream greenhouse gas emissions, EA at 26 and 33 respectively, the BLM still fails to fully comply with Judge Morris' order.

On the former issue, the BLM still fails to explain why the 100-year time horizon for GWP is appropriate on a scientific basis. *See* EA at 26. Instead, in the EA the BLM reiterates that it based its 100-year factor on an EPA report— the same report which Judge Morris found to based "on a political agreement between nations rather than on science." *WORC* at *15. Additionally, although BLM states that it includes the 20-year time horizon for "illustrative purposes," it does not seem as if the BLM included this in Table 5 (direct emissions) or Table 6 (downstream emissions). Furthermore, BLM fails to

explain why it is relying on a 20-year time horizon or otherwise point to any scientific basis for its decision.

For the latter issue, the BLM does not calculate total downstream GHG emissions for the lease sale for the life of the parcels. Thus, it is hard for the reader to assess the full impacts of the proposed action. Second, the BLM belittles the significance of the downstream GHG analysis by stating that "this estimated quantity represents approximately 0.0004% of total U.S. GHG emissions[.]" EA at 31. The CEQ has recommended against issuing statements such as these. *See* CEQ, *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews* at 14 (2016)[1] (hereinafter CEQ Guidance) (previously attached to the Conservation Groups' July 20, 2018 Scoping Comments as Exhibit 6).[2] Instead, federal agencies are advised to "use appropriate tools and methodologies for quantifying emissions and *comparing GHG quantities across alternative scenarios*." Exhibit 6 at 11. This latter provision is particularly important here where the BLM only considers two alternatives, no leasing or full leasing. As Judge Morris' order states, "NEPA requires BLM to "foster *informed* decision making." *WORC* at *13. Simply providing the calculations here with little context for comparison fails to meet this mandate.

BLM must also consider whether to close areas in the planning areas for the purpose of reducing climate impacts, as required by the *WORC* decision in the context of coal leasing. *WORC* at *23 (requiring consideration of a reasonable range of alternatives for coal leasing in light of climate impacts). The principle applies equally to oil and gas leasing.

Finally, NEPA regulations established by the CEQ specifically prohibit an agency from taking any action that could undermine its decisionmaking process while work on an EIS "is in progress and the action is not covered by an existing program statement." *See* 40 C.F.R. § 1506.1(c). Indeed, the intent of NEPA is to study the impact of an action on the environment *before* the action is taken. *See Conner v. Burford*, 848 F.2d 1441, 1452 (9th Cir. 1988) (explaining that NEPA requires that agencies prepare an EIS before there is "any irreversible and irretrievable commitment of resources"). "The purpose of an EIS is to apprise decisionmakers of the disruptive environmental effects that may flow from their decisions at a time when they 'retain[] a maximum range of options.'" *Id.* at 1446. Foreclosing these options by leasing 48 parcels before the SEIS is complete undermines the purpose and effectiveness of the NEPA process.

Furthermore, where an "[i]nterim action prejudices the ultimate decision on the program," NEPA forbids the action. 40 C.F.R. §§ 1506.1(c)(1)-(3). An action prejudices

[1] Available online at: https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_guidance.pdf.

[2] Although the Trump Administration has since revoked the CEQ's August 2016 Climate Guidance, the BLM is still bound by the CEQ's NEPA regulations and existing case law applying the Guidance. *See, e.g., San Juan Citizens All. v. U.S. Bureau of Land Mgmt.*, No. 16-CV-376-MCA-JHR, 2018 WL 2994406, at *11, n.5 (D.N.M. June 14, 2018).

the outcome "when it tends to determine subsequent development or limit alternatives." *Id.* Again, proceeding to lease 10 parcels within the Miles City Field Office—or any other major Federal action impacting resources in the planning area—is impermissible due to the inherent prejudice that this action will cause to the pending SEIS. As the BLM knows, once a parcel is leased, "the lessee has the right to use as much of the leased land as necessary to explore (or drill) for, extract, remove, and dispose of oil and gas deposits located under the leased lands with exceptions for restrictions that may be imposed consistent with the standard lease terms and stipulations and notices attached to the lease." 43 C.F.R. 3101.1-2. Put simply, when the oil and gas lease rights are conveyed following the sale, lessees have a right to drill, and the impact on the environment from the exercise of those rights cannot be undone. This is exactly the situation NEPA seeks to protect against—allowing new activity that determines development in the future. Indeed, once this lease sale is held, the BLM cannot stop subsequent development should the agency find out through its supplemental environmental analysis that it needs to eliminate or mitigate impacts. Thus, we request that the BLM postpone leasing the Miles City Field Office parcels in the December lease sale, unless and until the SEIS required by the *WORC* decision is complete.

C. BLM Must Fully Analyze GHG Emissions, Including Cumulative Emissions and "Lifecycle" Emissions, and Must Analyze the Social Costs of These Reasonably Foreseeable Emissions.

NEPA requires "reasonable forecasting," which includes the consideration of "reasonably foreseeable future actions . . . even if they are not specific proposals" *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1079 (9th Cir. 2011) (citation omitted). That BLM cannot "accurately" calculate the total emissions expected from full development is not a rational basis for cutting off its analysis. "Because speculation is . . . implicit in NEPA," agencies may not "shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as crystal ball inquiry." *Id*.

For the December 2018 lease sale, BLM must calculate the amount of greenhouse gas emissions that will result on an annual basis from (1) each of the fossil fuels that can be developed within the planning area; (2) each of the well stimulation or other extraction methods that can be used, including, but not limited to, fracking, acidization, acid fracking, and gravel packing; and (3) cumulative greenhouse gas emissions expected over the long-term (expressed in global warming potential of each greenhouse pollutant as well as CO2 equivalent), including emissions throughout the entire fossil fuel lifecycle discussed below. In its cumulative emissions analysis, the BLM must analyze greenhouse gas emissions from similar, collectively significant oil and gas lease sales within Montana, as well as throughout the Rocky Mountain West and on BLM-managed leases nationwide.

BLM's environmental review must include not only emissions from drilling operations, but the full "lifecycle" emissions from the transportation, refining, processing, leakage, and combustion of the oil and gas produced. It is reasonably foreseeable that this

lease sale will induce oil and natural gas production, transmission and ultimate end-user climate change impacts. The effects of this induced production must be fully analyzed. *See, e.g.*, *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1081-82 (9th Cir. 2011) (finding that NEPA review must consider induced coal production at mines, which was a reasonably foreseeable effect of a project to expand a railway line that would carry coal, especially where company proposing the railway line anticipated induced coal production in justifying its proposal); *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549-50 (8th Cir. 2003) (environmental effects of increased coal consumption due to construction of a new rail line to reach coal mines was reasonably foreseeable and required evaluation under NEPA).

While we commend BLM's attempt at quantifying potential downstream GHG emissions based on a Reasonably Foreseeable Development Scenario for this lease sale, the assumptions, calculations and methodology of this analysis leave much to be desired. EA at 31 (Table 6), 33 (Table 7). BLM can and should have calculated potential lifecycle greenhouse gas emissions using a tool such as the lifecycle greenhouse gas emissions model developed by EcoShift consulting.[3] Courts have upheld the viability and usefulness of lifecycle analyses, and adoption of this trend is clearly reflected in the CEQ Guidance on Climate Change . 81 Fed. Reg. 51, 866 at 11 (Aug. 5, 2016) ("This guidance recommends that agencies quantify a proposed agency action's projected direct and indirect GHG emissions. Agencies should be guided by the principle that the extent of the analysis should be commensurate with the quantity of projected GHG emissions and take into account available data and GHG quantification tools that are suitable for and commensurate with the proposed agency action").

Additionally, the BLM must ensure that it includes a discussion on the social cost of carbon protocol, a valid, well-accepted, credible, and interagency-endorsed method of calculating the costs of greenhouse gas emissions and understanding the potential significance of such emissions. Not only does BLM's failure to use this best available science violate NEPA's hard look mandate, but because the agency includes an extensive analysis of the economic benefits from leasing, see EA at 43-45, the BLM's analysis is also misleading and in violation of the decision in *High Country Conservation Advocates v. U.S. Forest Service*. 52 F.Supp. 3d 1174, 1193 (D. Colo. 2014).

D. BLM Must Consider Rapidly Shrinking Global Carbon Budgets When Authorizing Additional Fossil Fuel Development on Public Lands.

The United States has committed to the climate change target of holding the long-term global average temperature "to well below 2°C above pre-industrial levels and to

[3] *See* Ecoshift Consulting, The potential Greenhouse Gas Emissions of U.S. Federal Fossil Fuels, Center for Biological Diversity and Friends of the Earth (2015), *available at:* http://www.ecoshiftconsulting.com/wpcontent/uploads/Potential-Greenhouse-Gas-Emissions-U-S-Federal-Fossil-Fuels.pdf.

pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels"[4] under the Paris Agreement.[5] The Agreement recognized the 1.5°C climate target because 2°C of warming is no longer considered a safe guardrail for avoiding catastrophic climate impacts and runaway climate change.[6]

Research that models emissions pathways for meeting 1.5° or 2°C targets shows that a rapid end to all fossil fuel extraction in the United States is critical. Specifically, research indicates that g*lobal* fossil fuel CO2 emissions must *end entirely* by mid-century and likely as early as 2045 for a reasonable likelihood of limiting warming to 1.5° or 2°C.[7] The United States must end fossil fuel CO2 emissions even earlier: between 2025 and 2030 on average for a reasonable chance of staying below 1.5°C, and between 2040 and 2045 on average for a reasonable chance of staying below 2°C.[8] Ending U.S. fossil fuel CO2 emissions between 2025 and 2030, consistent with the Paris climate targets, would require an immediate halt to new production and closing most existing oil and gas fields and coal mines before their reserves are fully extracted.

If new leasing ceases and existing non-producing leases are not renewed, 12% of oil production could be avoided in 2025 and 65% could be avoided by 2040 while 6% of natural gas production could be avoided in 2025 and 59% could be avoided by 2040.[9] A comparison with other measures shows that "no leasing" could be a very significant part of U.S. efforts to address climate change. The 100 Mt CO_2 emissions savings that could result from no leasing in 2030 compares favorably with EPA standards for light- and medium-vehicles that are expected to yield 200 Mt in CO2 savings in 2030, and with standards for heavy-duty vehicles that are expected to yield 70 Mt in CO2 savings in the same year.

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[4] United Nations Framework Convention on Climate Change, Conference of the Parties, Nov. 30-Dec. 11, 2015, Adoption of the Paris Agreement Art. 2, U.N. Doc. FCCC/CP/2015/L.9 (December 12, 2015), http://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf ("Paris Agreement").

[5] On December 12, 2015, 197 nation-state and supra-national organization parties meeting in Paris at the 2015 United Nations Framework Convention on Climate Change Conference of the Parties consented to the Paris Agreement committing its parties to take action so as to avoid dangerous climate change.

[6] Although President Trump announced on June 1, 2017 that the U.S. would withdraw from the Paris Agreement, the earliest possible effective withdrawal date is November 4, 2020, in accordance with Article 28 of the Agreement.

[7] Rogelj, Joeri et al., Energy system transformations for limiting end-of-century warming to below 1.5°C, 5 Nature Climate Change 519 (2015).

[8] *See* Climate Action Tracker, USA (last updated 6 November 2017), http://climateactiontracker.org/countries/usa at Rating figure showing U.S. emissions versus year (last visited Nov. 13, 2017).

[9] Peter Erickson and Michael Lazarus, *How Would Phasing Out U.S. Federal Leases for Fossil Fuel Extraction Affect CO2 Emissions and 2°C Goals?*, Stockholm Environmental Institute (2016) at 16.

Also, importantly, avoided production through no new leasing and non-renewal of existing non-producing leases could help avoid further carbon lock-in in terms of investment in both fossil fuel-producing and fossil fuel-using infrastructure.[10]

Simply put, the timeframe to avoid catastrophic climate change is short, and the management of our federal minerals must fall into step with this reality.

As described in Conservation Groups' prior comments, the BLM has broad discretion – and often the responsibility, though too often ignored – not to lease public lands for minerals development to safeguard other multiple use, environmental, and human health resources and values. *See, e.g.*, *Udall v. Tallman*, 380 U.S. 1 (1965); *Rocky Mountain Oil & Gas Ass'n v. U.S. Forest Serv.* 157 F.Supp.2d 1142 (D. Mont. 2000).

E. BLM Must Take a Hard Look at Site-Specific Impacts.

BLM must complete a NEPA analysis for all site-specific impacts before it proceeds with the proposed lease sale. Yet, in a number of places throughout the EA, the BLM defers a full analysis to the APD stage. *See, e.g.*, EA at 62 ("The use of any specific water source on a federally administered well requires review and analysis of the proposal through the NEPA process, which will be completed at the APD stage.").

NEPA requires that agencies prepare an EIS before there is "any irreversible and irretrievable commitment of resources." *Conner v. Burford*, 848 F.2d 1441, 1452 (9th Cir. 1988). The Ninth Circuit has held that issuing leases *without* a no surface occupancy ("NSO'") stipulation conveys a right to develop and is thus considered an irretrievable commitment of resources. *Id.* ("[U]nless surface-disturbing activities may be absolutely precluded, the government must complete an EIS before it makes an irretrievable commitment of resources by selling non-NSO leases."). None of the parcels at issue have a NSO stipulation for the entire parcel. This means that the leases are irretrievable commitments of resources, and once BLM reaches the APD stage, the agency cannot include additional lease stipulations to stop drilling and other cumulative impacts. Thus, further analysis at the APD stage would be in many cases, too little, too late. The agency must complete a full NEPA analysis now.

F. The BLM Fails to Fully Assess the Impacts from Hydraulic Fracturing and Horizontal Drilling.

Although the Conservation Groups appreciate that the BLM includes information in the EA about some of the impacts from fracking, the BLM fails to fully analyze all the impacts from fracking.[11]

[10] *Id.* at 30.

[11] Hydraulic fracturing, or fracking, as used here, refers to a combination of horizontal drilling and multi-stage hydraulic fracturing.

NEPA imposes "action forcing procedures … requir[ing] that agencies take a hard look at environmental consequences." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citations omitted). "Taking a hard look includes considering all foreseeable direct and indirect impacts . . . [and] involve a discussion of adverse impacts that does not improperly minimize negative side effects." *League of Wilderness Defs.-Blue Mountains Biodiversity Project v. U.S. Forest Serv.*, 689 F.3d 1060, 1075 (9th Cir. 2012) (citing *N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006)) (internal quotations omitted).

Multiple courts have held that if the BLM plans to allow a new oil and gas extraction technique, the agency must analyze the impacts of this technique in either a programmatic or project-specific NEPA document. *See Pennaco Energy, Inc. v. U.S. Dep't of the Interior*, 377 F.3d 1147, 1151, 1153 (10th Cir. 2004) (holding that when a new fossil fuel extraction technology becomes commercially viable, and creates "changed circumstances" such that production of energy with the new technology is "significantly different" than production using previously considered technology, an agency permitting activities utilizing the new technology must take new environmental impacts into account as part of the NEPA process); *see also Ctr. for Biological Diversity v. Bureau of Land Mgmt.*, 937 F. Supp. 2d 1140, 1157 (N.D. Cal. 2013) (invalidating a BLM lease sale because "the scale of fracking in shale-area drilling today involves risks and concerns that were not addressed by the PRMP/FEIS' general analysis of oil and drilling development in the area"); *see also ForestWatch v. U.S. Bureau of Land Mgmt.*, 2016 WL 5172009, Case No. CV-15-4378-MWF (JEMx) (C.D. Cal. Sept. 6, 2016) (holding that the BLM "acted unreasonably in failing to discuss, let alone take a 'hard look' at, the environmental impact of fracking in the FEIS").

With the use of fracking comes a myriad of potentially significant environmental impacts. Fracking has not only opened up vast areas of minerals that were previously uneconomical to extract—thereby expanding the total land area impacted by development—the process of fracking also causes more intense impacts to our public health, air, water, land, and wildlife. *See* Concerned Health Prof'ls of NY & Physicians for Soc. Responsibility, *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction)* (5th ed. 2018) ("As fracking operations in the United States have increased in frequency, size, and intensity, and as the transport of extracted materials has expanded, a significant body of evidence has emerged to demonstrate that these activities are dangerous to people and their communities in ways that are difficult—and may prove impossible—to mitigate. Risks include adverse impacts on water, air, agriculture, public health and safety, property values, climate stability, and economic vitality, as well as earthquakes.") (previously attached to the Conservation Groups' July 20, 2018 Scoping Comments as Exhibit 2); Env't America, *Fracking by the Numbers: Key Impacts of Dirty Drilling at the State and National Level* 13 (2013) (estimating that wastewater from fracking in Montana in 2012 amounted to 360 million gallons) (previously attached to the Conservation Groups' July 20, 2018 Scoping Comments as Exhibit 3); *see also* BLM Oil and Gas; *Hydraulic Fracturing on Federal and Indian Lands*, 80 Fed. Reg. 161,128 (Mar. 26, 2015), https://www.gpo.gov/fdsys/pkg/FR-2015-03-26/pdf/2015-06658.pdf

(noting that a final rule regulating fracking on federal lands will "provide significant benefits to all Americans by avoiding potential damages to water quality, the environment, and public health").

Here, the EA includes some information on the impacts from fracking on water quality and quantity. But, the BLM does not include quantitative information about the amount of water that will be used to develop the specific lease parcels,[12] the amount of wastewater generated by fracking, the acreage of land that will be disturbed for wastewater and drilling mud impoundments, the increase in truck traffic associated with fracking, the impacts on roads, the socioeconomic impacts on small towns from the influx of oil and gas workers, the air pollutants released from deeper wells, the increase in greenhouse gas emissions such as methane, the impacts to human health, or the impacts to wildlife to name a few.

The need to include a full analysis at the lease sale stage is underscored by the fact that the BLM frequently fails to fully analyze the impacts of fracking at the APD stage. For example the BLM recently approved five Application Permits to Drill ("APDs") in Big Horn County, all of which have used or will use hydraulic fracturing and horizontal drilling to reach a shale formation at 8,000+ feet. *See* WildEarth Guardians, *Request for State Director Review, Alta Vista Oil Corporation Doc Holiday2-H and Bullock 1-H Application Permit to Drill, DOI-BLM-MT-C020-2018-0010-DNA* at 4 (Feb. 28, 2018) (previously attached to the Conservation Groups' scoping comments as Exhibit 4). The underlying EA for the first well completely failed to analyze the impacts of fracking and all of the subsequent APDs relied upon this initial EA. *Id.* Thus, unless BLM analyzes these impacts at the lease sale stage, such analysis is unlikely to occur.

Finally, the underlying RMPs-EIS frequently also fail to fully address this issue. For example, similar to the EA, the Miles City RMP/FEIS's analysis of the impacts from fracking and horizontal drilling focuses almost entirely on the impacts to water quality and quantity. *See, e.g.*, Miles City RMP/FEIS at 4-49, available at: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=79235. As a result, the BLM cannot rely on the analyses in the underlying RMPs-EISs to meet its obligations under NEPA to take a "hard look" at the impacts of fracking. *See Pennaco Energy, Inc.*, 377 F.3d at 1151, 1153; *Ctr. for Biological Diversity*, 937 F. Supp. 2d at 1157.

G. The BLM Must Prepare an EIS.

Because the proposed lease sale poses significant impacts, the BLM must prepare an EIS for the lease sale.

[12] The quantification of water used for fracking was specifically required by the court in *San Juan Citizens Alliance v. U.S. Bureau of Land Management.* No. 16-CV-376-MCA-JHR, 2018 WL 2994406, at *19 (D.N.M. June 14, 2018).

A federal agency must prepare an EIS when a major federal action "significantly affects the quality of the human environment." 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 All. v. U.S.*, 90 F.3d 426, 429 (10th Cir. 1996). The significance of a proposed action is gauged based on both context and intensity. 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." *Id.* § 1508.27(a). Intensity "refers to the severity of impact," and is determined by weighing ten factors, including "[1] [t]he degree to which the proposed action affects public health or safety," "[2] [u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas," "[3] [t]he degree to which the effects on the quality of the human environment are likely to be highly controversial," "[4] [t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks[,]" and "[5] [w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts." *Id.* § 1508.27(b)(2)–(5), (7). For this latter factor, "[s]ignificance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts." *Id.*

The first intensity factor under NEPA is "the degree to which the proposed action affects public health and safety." *Id.* § 1508.27(b)(2). There is no doubt the proposed action, which would allow for the use of fracking, impacts public health and safety. As discussed above, the use fracking presents risks to human health and water due to air pollution and risks of contamination. Thus, the BLM must fully analyze and disclose the impacts of fracking in a future EIS.

A similar argument applies to the second and third intensity factors, which require, respectively, a look at the degree to which impacts are highly controversial and the degree to which impacts are highly uncertain or involve unique and unknown risks. Indeed, the situation here is directly similar to the situation in *Center for Biological Diversity v. U.S. Bureau of Land Management*, where the court held that the BLM's "unreasonable lack of consideration of how fracking could impact development of the disputed parcels . . . unreasonably distort[ed] BLM's assessment of at least three of the 'intensity' factors in its FONSI," including the aforementioned factors. 937 F. Supp. 2d at 1157. Specifically, the court reasoned that fracking was highly controversial based on the possibility of significant environmental degradation, public outcry, and potential threats to health and safety. *Id.* at 1157–58. There is no doubt that similar reasoning applies here. Fracking presents a significant risk of contamination. For example, the Pavillion well contamination occurred within a related geological formation connected to the formation which stretches into Carbon County, Montana. *Compare*, EPA Draft Report, *Investigation of Ground Water Contamination Near Pavillion, Wyoming* 1 (Dec. 2011), https://www.epa.gov/sites/production/files/documents/EPA_ReportOnPavillion_Dec-8-2011.pdf, *with* USGS, *Subsurface Stratigraphic Cross Sections Showing Correlation of Cretaceous and Lower Tertiary Rocks in the Bighorn Basin, Wyoming and Montana* 2, 3

(2010), https://pubs.usgs.gov/dds/dds-069/dds-069-v/REPORTS/69_V_CH_6.pdf (both previously attached to Conservation Groups' July 20, 2018 Scoping Comments as Exhibits 5.1 and 5.2).

Additionally, based on the proximity of the December 2018 lease sale parcels to the Blackfeet Indian Reservation, Glacier National Park, the Northern Cheyenne Indian Reservation, the Crow Indian Reservation, Rosebud Battlefield State Park, and the Tongue River Reservoir, there is no doubt that the fourth intensity factor—the unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas—is also implicated.

Finally, because the December 2018 lease parcels are directly adjacent to both the December 2017 and June 2018 lease parcels, the fifth intensity factor, cumulative impacts, is also implicated by the lease sale, further underscoring the need for an EIS. According to NEPA regulations, "[s]ignificance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts." 40 C.F.R. § 1508.27(b)(7). This latter sentence is particularly important here. The December lease sale is not occurring in a vacuum. There is clearly significant interest in the area that is continuing with the December 2018 parcels. Thus, the BLM must study the cumulative impacts of these similar actions occurring within the same area.

III. CONCLUSION

The Conservation Groups appreciate your consideration of the information and concerns addressed herein. Should you have any questions or wish to discuss our concerns in greater detail, please do not hesitate to contact us.

Sincerely,

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