

**THE WILDERNESS SOCIETY
COALITION TO PROTECT AMERICA'S NATIONAL PARKS * FRIENDS OF THE
EARTH US * NATIONAL PARKS CONSERVATION ASSOCIATION * ROCKY
MOUNTAIN WILD * POWDER RIVER BASIN RESOURCE COUNCIL * WYOMING
OUTDOOR COUNCIL**

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SUBMITTED VIA E-PLANNING

Andrew Archuleta
State Director
Wyoming Bureau of Land Management
5353 Yellowstone Road
Cheyenne, WY 82009

Project Contacts:

Erik Norelius
enoreliu@blm.gov
(307) 775-6284

Allen Stegeman
astegeman@blm.gov
(307) 775-6259

Katrina Gray
klgray@blm.gov
(307) 684-1067

**Re: Comments on the Wyoming Bureau of Land Management 2024 Second Quarter
Competitive Oil & Gas Lease Sale Draft Environmental Assessment and Draft Finding
of No Significant Impact (DOI-BLM-WY-0000-2024-0001-EA).**

Dear State Director Archuleta:

On behalf of our organizations, members, and supporters, we thank you for accepting and fully considering these comments on the Draft Environmental Assessment (Draft EA) and Draft Finding of No Significant Impact (Draft FONSI) for the Bureau of Land Management Wyoming 2024 Second Quarter Oil and Gas Lease Sale. Our organizations and members are deeply invested in sound stewardship of public lands and committed to ensuring that public land management prioritizes the health and resilience of ecosystems, equitably benefits the public, addresses environmental justice, protects biodiversity, and mitigates the impacts of climate change.

We are grateful for both the proposed Fluid Mineral Leases and Leasing Process Rule (Leasing Rule) and the earlier release of several Instruction Memoranda (IMs) beginning to implement program reforms and provisions in the Inflation Reduction Act (IRA).¹ The IRA addressed only some of the needed reforms. The Leasing Rule would codify the IRA’s reforms, address other needed reforms, and update severely outdated bonding requirements.

We urge the BLM to finalize the Leasing Rule expeditiously to ensure deficiencies in the oil and gas leasing program are addressed. Because important measures such as adequately updated bonding requirements are not yet in place, we encourage the agency to consider not proceeding with additional leasing before finalizing the Leasing Rule.

I. The BLM should consistently track EOIs and acreage pursuant to IM 2023-006.

IM 2023-006, released on November 21, 2022, explains that the BLM “will create and periodically update a report to track the acreage of submitted EOIs” Further, the IM requires the BLM to “place the [EOI acreage] report on the NFLSS Dashboard from the National-Apps Reporting System.” *Id.* Therefore, the BLM should consistently track EOIs and acreage pursuant to IM 2023-006 and make that information available to the public.

However, while DOI has stated that it is proceeding with new lease sales “to comply with congressional direction on oil and gas leasing through the [IRA],” it has not established how the proposed oil and gas lease sales align with plans to issue rights-of-way (ROWs) for wind and solar development. IM 2023-006 details how the BLM will determine the acreage it must offer for oil and gas leasing in order to issue wind or solar ROWs pursuant to the IRA and defines the period for calculating the acreage requirement as the “year before the wind or solar energy right-of-way is issued.” However, if DOI is going to conduct lease sales to comply with the IRA’s tethering provisions, it should do so as part of a clearly articulated and concerted national strategy rather than holding lease sales piecemeal, state office by state office. Any leases offered as part of this lease sale or related lease sales in the one-year period should indeed be part of a plan to issue wind or solar permits. We urge the BLM to offer for lease the minimum amount of acreage necessary under the IRA to enable it to issue renewables ROWs.

The BLM has significant discretion to determine which EOIs have been properly submitted and, ultimately, to determine whether and how much acreage to lease at all. The agency should offer no more acreage than necessary to comply with the IRA’s requirements for allowing issuance of rights-of-way for responsible and appropriately sited wind and solar development on public lands following these oil and gas lease sales.

II. BLM should exercise its authority to defer additional parcels in this lease sale that do not comport with the guidance provided in IM 2023-007 and IM 2023-008.

We appreciate the BLM screening the parcels in the Draft EA’s Table 2-3 in accordance with IM 2023-007’s preference criteria and likely deferring two parcels, one of which the BLM recommends for deferral because it received a low-preference designation based on the criteria.

¹ See Inflation Reduction Act of 2022, H.R. 5376, 117th Cong. §§ 50262–50263 (2022).

However, the BLM should also have designated as low preference for leasing based on the habitat criteria—and should defer—all the proposed parcels that overlap with crucial wildlife habitat.

a. BLM Should Continue to Defer Parcels in Crucial Wildlife Habitats.

The BLM should not hold this lease sale until it has fully addressed whether the proposed parcels overlap with crucial wildlife habitat. The Draft EA contends that none of the offered parcels overlap with big game crucial winter range.² This runs counter to the two parcels the Draft EA acknowledges are overlapping within the Sublette mule deer herd unit.³ The contention is also at odds with the five parcels that are shown in the Draft EA’s Attachment 7.1 Parcel Specific Map (Wildlife) to overlap with ungulate crucial winter ranges (WY-2024-06-1828, WY-2024-06-1833, WY-2024-06-1834, WY-2024-06-1840, WY-2024-06-1841). It is concerning that the BLM contends none of the parcels overlap with big game crucial winter ranges, even though the documents provided show that many of the parcels do. This inconsistency in BLM’s documents must be resolved in the final documents.

Further, we contend that BLM should defer all five parcels that contain mule deer and pronghorn crucial winter range from this sale. The BLM is required to manage public lands “in a manner that will provide food and habitat” for all wildlife. 43 U.S.C. § 1701(a)(8). Further, in 2018, the Secretary of the Interior signed Secretarial Order 3362, which directs the Department of the Interior to work with western states, including Wyoming, to enhance and improve big game winter range and migration corridors.⁴ This policy directive was further reinforced by the May 2021, *Conserving and Restoring America the Beautiful Report*, where the Biden-Harris administration committed to “Expand Collaborative Conservation of Fish and Wildlife Habitats and Corridors,” and continue with the implementation of SO 3362. SO 3362 includes requirements that BLM “. . . [m]inimize development that would fragment winter range. . . [and] [l]imit disturbances on winter range[s].” *Id.*

Big game crucial winter ranges are essential habitats for ungulates at a time of year when these animals are often at their most nutritionally stressed and disturbances on winter range can have a negative impact on herd health and population numbers.⁵ For instance, mule deer populations studied on the Pinedale Anticline natural gas field declined by 36% in response to direct habitat loss of winter range from well pads and roads covering only 3.5% of the study area.⁶ The impacts of development on winter range are not just from human activity itself but the loss of habitat and the long-term avoidance of infrastructure and have been reported for pronghorn,⁷ and

² Draft EA at 79, 81.

³ Draft EA at 80.

⁴ DOI Secretary Order 3362: Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors. Available at <https://www.doi.gov/pressreleases/secretary-haaland-announces-progress-toward-conservation-and-restoration-wildlife>

⁵ Mautz, W. W. (1978). Sledding on a bushy hillside: The fat cycle in deer. *Wildlife Society Bulletin*, 6(2), 88–90. <https://www.jstor.org/stable/3781295>.

⁶ Sawyer, H., Korfanta, N. M., Nielson, R. M., Monteith, K. L., & Strickland, D. (2017). Mule deer and energy development—Long-term trends of habituation and abundance. *Global Change Biology*, 23, 4521-4529. <https://onlinelibrary.wiley.com/doi/pdfdirect/10.1111/gcb.13711>.

⁷ Reinking, A. K., Smith, K. T., Mong, T. W., Read, M. J., & Beck, J. L. (2019). Across scales, pronghorn select sagebrush, avoid fences, and show negative responses to anthropogenic features in winter. *Ecosphere*, 10(5),

mule deer,⁸ in the region. Compounding the well-documented disturbances caused by oil and gas development to ungulate winter range was an especially challenging winter of 2022-23 in western Wyoming, which led to extensive losses in pronghorn and mule deer populations.

Of noted concern is parcel WY-2024-06-1833, which appears to include both pronghorn and mule deer crucial winter range habitat. The regional pronghorn population in the Upper Green was especially hit hard last winter. Following a *Mycoplasma bovis* outbreak, concern for the Sublette Antelope herd is heightened. In 2022, the population of this herd that summers in and around Grand Teton consisted of about 708 animals according to the Nation Park Service, Wyoming Game and Fish Department, and the National Elk Refuge combined ground count. In the summer of 2023, only 79 pronghorn were counted in the Jackson Hole and Gros Ventre drainage area.⁹ Given the recent loss of over 90% of the Grand Teton area pronghorn and over 50% of the Sublette Pronghorn herd, it is more imperative than ever to conserve the species migration pathways and sensitive habitat and defer parcels that overlap with crucial pronghorn winter range.¹⁰

Population abundance for mule deer and pronghorn is directly tied to intact migratory habitats. Last winter's extreme rate of mortality for the herds in the Upper Green, from a disease outbreak (for pronghorn), extreme snowpack conditions, was only accentuated by historical and ongoing leasing and development in and adjacent to these documented migration corridors, stopovers, bottlenecks, and summer and winter ranges. Disturbance from energy development causes not only direct habitat loss but has a multiplicative effect through avoidance behavior resulting in indirect habitat loss 4.6 times greater than direct habitat loss from roads, well pads, and other infrastructure.¹¹ These recent facts and findings make leasing for oil and gas within pronghorn and mule deer winter range in the Upper Green wholly inappropriate. Parcel –1833 must be deferred.

The analysis in the respective RMPs for all five parcels listed above do not account for the wealth of significant new science, much of it specifically regarding the impacts of energy development on ungulate populations. Before moving forward with leasing, the agency must acknowledge and assess the increased risk to the herds that these studies document.

Therefore, the BLM should not be leasing in crucial big game habitats. We urge the BLM to

e02722. <https://www.uwyo.edu/esm/faculty-and-staff/faculty/beck/files/docs/publications/reinking-etall-2019-ecosphere.pdf>.

⁸ Sawyer et al., *supra* note 6.

⁹ Billy Arnold, *Jackson Hole Pronghorn counts Nosedive*, Jackson Hole News & Guide (Aug. 30, 2023), https://www.jhnewsandguide.com/news/environmental/jackson-hole-pronghorn-counts-nosedive/article_e29792ba-468e-11ee-948e-83eeebef88.html#:~:text=the%20migratory%20ungulates,-.During%20Wyoming%20Game%20and%20Fish's%20annual%20survey%2C%20only%2079%20pronghorns.to%20early%20708%20last%20year.&text=Buy%20Now-.A%20lone%20pronghorn%20buck%20emerges%20over%20a%20hillside%20in%20the.22.

¹⁰ See Kylie Mohr, *The Unprecedented Decline of a Wyoming Pronghorn Herd*, Mountain Journal (Dec. 15, 2023), <https://mountainjournal.org/the-unprecedented-deline-of-wyoming-pronghorn-herd>; See also Caitlin Tan, *Nearly 50% of two Historic Wildlife Herds Could Succumb to This Winter: Wyomingites are Frustrated*, Wyoming Public Radio (Apr. 14, 2023), <https://www.wyomingpublicmedia.org/open-spaces/2023-04-14/nearly-50-of-two-historic-wildlife-herds-could-succumb-to-this-winter-wyomingites-are-frustrated>.

¹¹ Samantha Dwinnell et al., *Where to forage when afraid: Does perceived risk impair use of the foodscape?*, *Ecological Applications* 29(7) (June 2019).

defer all or parts of the five parcels that overlap with big game crucial winter ranges (WY-2024-06-1828, WY-2024-06-1833, WY-2024-06-1834, WY-2024-06-1840, WY-2024-06-1841). Extensive leasing in habitats would have significant adverse impacts on Wyoming's pronghorn, and mule deer herds. By avoiding leasing in crucial winter ranges, BLM can uphold its duty to provide food and habitat for these critically important big game species.

b. The BLM Should Defer All Parcels in Priority and General Habitat Management Areas for Greater Sage-Grouse.

We commend the BLM for considering whether parcels are in PHMA and GHMA, and for likely deferring one parcel. However, as noted above, the BLM has not done so for the remaining parcels in this lease sale in PHMA or GHMA. Even though the BLM acknowledges that the remaining parcels are in or overlap with PHMAs and GHMAs, this sale still includes eighteen parcels that overlap with PHMAs and GHMAs for the greater sage-grouse (WY-2024-06-1770, WY-2024-06-1771, WY-2024-06-1823, WY-2024-06-1825, WY-2024-06-1828, WY-2024-06-1829, WY-2024-06-1832, WY-2024-06-1833, WY-2024-06-1834, WY-2024-06-1835, WY-2024-06-1836, WY-2024-06-1837, WY-2024-06-1838, WY-2024-06-1840, WY-2024-06-1841, WY-2024-06-7294, WY-2024-06-7295, WY-2024-06-7296). The BLM should prioritize deferring all parcels or those portions of parcels that contain acreage designated as PHMA and GHMA under the 2015 Greater Sage-Grouse Resource Management Plan Amendments (the 2015 Plans). Deferral is required for at least two reasons.

First, a key component of the 2015 Plans requires BLM to prioritize new oil and gas leasing outside of PHMA and GHMA to protect that habitat from future disturbance. In May 2020, the BLM's national policy addressing prioritization, Instruction Memorandum 2018-026, was struck down by a court. *Montana Wildlife Federation v. Bernhardt*, No. 18-cv-69-GF-BMM, 2020 WL 2615631 (D. Mont. May 22, 2020). BLM has not adopted new national guidance on the prioritization requirement and has represented to the Montana court that the agency's previous prioritization guidance (adopted in 2016) also is not in effect. As a result, there is currently no national guidance providing direction on how prioritization is to be applied. Complying with the prioritization requirement of the 2015 Plans must be a central consideration for any lease parcels in PHMA or GHMA. The BLM should defer all parcels containing PHMA or GHMA at least until new national guidance is issued. The *Montana Wildlife Federation* ruling demonstrates the need for a well-reasoned national directive that fully complies with the purpose and language of the 2015 Plans' prioritization objective. A state-by-state approach to prioritization will inevitably fall short of what the 2015 Plans require.

Second, the BLM is in the process of reviewing and amending the 2015 Plans to address changed conditions and new information since 2015, as well as the impacts of climate change on the sage-grouse.¹² In light of this review, all parcels in sage-grouse habitat should be deferred while the BLM considers revisions to the 2015 Plans. Maintaining and increasing sage-grouse populations will require amending the 2015 Plans to add new terms and conditions, such as potentially closing PHMA and/or GHMA to new leasing. In the meantime, leasing in PHMA and GHMA must be deferred to avoid committing additional habitat to mineral development under

¹² See Notice of Intent to Amend Land Use Plans Regarding Greater Sage-Grouse Conservation and Prepare Associated Environmental Impact Statements, 86 Fed. Reg. 66,331 (Nov. 22, 2021).

terms that are inadequate to protect the sage-grouse.

Ensuring healthy sage-grouse populations across their range will require amending the 2015 Plans to address the variety of threats faced by this species and include considering how best to manage the various habitat designations, which we are encouraged to see the BLM has begun. In the meantime, leasing in GHMA must be deferred to ensure future conservation opportunities, especially given the breadth of undeveloped leased lands in WY.

The above recommendations, urging extreme care in development in sage-grouse habitat, become extremely important given recent scientific findings. In March 2021, U.S. Geological Survey researchers released a report that provides one of the most comprehensive population trend modeling efforts ever undertaken for sage-grouse.¹³ The report describes an overall decline in the number of sage-grouse across the majority of their range, which previous studies have shown as well. Since 1965, sage-grouse populations have declined 80% range-wide, including in areas where the decline has not been as severe. Since 2002, range-wide populations have declined 37%. Further, 78% of leks have a greater than 50% probability of extirpation in the next 56 years. In September 2022, the U.S. Geological Survey and other federal agencies released the that found that 1.3 million acres of habitat are transitioning each year from largely intact sagebrush sites to less functioning sagebrush habitat.¹⁴

Further, the Draft EA fails to comply with the 2015 Plans because it does not prioritize leasing outside GHMA. Under FLPMA, the BLM must manage public lands “in accordance with the [applicable] land use plans” 43 U.S.C. § 1732(a); *see also* 43 C.F.R. § 1610.5-3(a) (“All future resource management authorizations and actions . . . shall conform to the approved plan.”).

The Supreme Court has explained that the statutory directive that BLM manage “in accordance with” land use plans, and the regulatory requirement that authorizations and actions “conform to” those plans, prevent BLM from taking actions inconsistent with the provisions of a land use plan. *Norton v. Southern Utah Wilderness Alliance*, 542 U.S. 55, 68 (2004).

Here, the Draft EA’s proposed action is not consistent with the 2015 Plan requirement to prioritize leasing outside of GHMAs. BLM must:

prioritize oil and gas leasing and development outside of identified PHMAs **and GHMAs** . . . to further limit future surface disturbance and to encourage new development in areas that would not conflict with GRSG. This objective is intended to guide development to lower conflict areas and, as such, protect important habitat and reduce the time and cost associated with oil and gas leasing development. It would do this by avoiding sensitive areas, reducing the

¹³ Peter S. Coates et al., Range-wide Greater Sage-Grouse Hierarchical Monitoring Framework: Implications for Defining Population Boundaries, Trend Estimation, and a Targeted Annual Warning System (March 2021), <https://doi.org/10.3133/ofr20201154>.

¹⁴ Doherty, K., Theobald, D.M., Bradford, J.B., Wiechman, L.A., Bedrosian, G., Boyd, C.S., Cahill, M., Coates, P.S., Creutzburg, M.K., Crist, M.R., Finn, S.P., Kumar, A.V., Littlefield, C.E., Maestas, J.D., Prentice, K.L., Prochazka, B.G., Remington, T.E., Sparklin, W.D., Tull, J.C., Wurtzebach, Z., and Zeller, K.A., 2022, A sagebrush conservation design to proactively restore America’s sagebrush biome: U.S. Geological Survey Open-File Report 2022–1081, 38 p.

complexity of environmental review and analysis of potential impacts on sensitive species, and decreasing the need for compensatory mitigation.¹⁵

The Draft EA, however, offers no explanation of how the proposed action alternative prioritizes leasing outside PHMA or GHMA. To the contrary, the BLM proposes to lease eighteen parcels that overlap with PHMAs and GHMAs. Without applying prioritization to PHMAs and GHMAs, the proposed lease sale would violate FLPMA.

BLM must thoroughly analyze leasing in both PHMA and GHMA in its prioritization process, and the BLM must direct new leasing away from GHMAs as well as PHMAs. For the reasons stated, we encourage BLM to defer all parcels that overlap with PHMAs and GHMAs.

Furthermore, pursuant to IM 2023-008, we strongly urge BLM to defer the three lease parcels in Wyoming that were nominated anonymously (WY-2024-06-1770, WY-2024-06-1771, and WY-2024-06-1837).

III. The BLM should provide robust public participation and Tribal consultation as part of the lease sale process.

Public participation and Tribal consultation are critical to an informed NEPA process. DOI has rightfully committed to providing robust and “enhance[d] opportunities for Tribal and environmental justice community engagement in the NEPA and decision-making process.” Secretarial Order 3399, at *3 (Apr. 16, 2021). To honor its commitment to enhanced public participation and Tribal consultation, BLM should consider providing, in addition to this scoping comment period, one or more listening sessions before issuing any draft NEPA document. Then, BLM should give the public at least 60 days to review and comment on any draft NEPA document. Doing so would help ensure that the public has an adequate “opportunity to comment upon . . . and participate in, the preparation and execution of” this lease sale, as required by FLPMA and NEPA. 43 U.S.C. § 1738(e); 42 U.S.C. § 4332(C).

The Department must also fully consult and engage Tribal nations, both those recognized by the United States as sovereign nations as well as those not recognized. The United States must recognize the right of Indigenous Peoples to give or withhold “free, prior and informed consent” to projects and policies affecting their lands and people, as stated in the United Nations Declaration on the Rights of Indigenous Peoples, which the United States has supported for more than a decade. The incorporation of these bottom-up principles in this federal process is an important and needed step as we address the history of public lands in the United States.

IV. The BLM must properly analyze and address the reasonably foreseeable greenhouse gas emissions and related climate impacts stemming from this lease sale.

The Draft EA’s discussion of greenhouse gas (GHG) emissions and climate impacts resulting from this lease sale requires additional analysis to take the proper “hard look at environmental consequences” that NEPA demands. *Robertson v. Methow Valley Citizens*

¹⁵ Rocky Mountain Region ROD at 1-25 (emphasis added).

Council, 490 U.S. 332, 350 (1989). On January 9, 2023, the Council on Environmental Quality (CEQ) released updated guidance on how agencies should consider and analyze GHG emissions and climate change in NEPA reviews.¹⁶ The CEQ climate guidance is effective immediately and directs agencies to “use this guidance to inform the NEPA review for all new proposed actions.”¹⁷ The guidance reiterates the BLM’s obligation under NEPA to properly consider GHG emissions and climate change. Application of this climate guidance to this lease sale will inform the BLM’s analysis of the impacts related to climate disruption and consideration of alternatives.

Please see the Appendix submitted with this comment letter for a discussion of our recommendations regarding GHG emissions and climate analysis.

V. The BLM must take a hard look at impacts to groundwater from well construction practices and hydraulic fracturing.

The Draft EA violates NEPA because it contains a limited analysis of the reasonably foreseeable impacts to groundwater from drilling on these particular lease sale parcels. The Draft EA contains generic boilerplate about potential water impacts from oil and gas development.¹⁸ These statements could be made about any oil and gas lease anywhere in North Dakota or nearby states – they tell the agency and the public nothing at all about how the development of these leases will impact the region.

NEPA requires BLM to assess all the potential environmental impacts from oil and gas leases *before* it offers those leases to operators. That responsibility includes taking a “hard look” at how ensuing development could impact groundwater. *WildEarth Guardians v. U.S. Bureau of Land Mgmt.*, 457 F. Supp. 3d 880, 886–89 (D. Mont. May 1, 2020).

Groundwater is a critical resource that supplies many communities, particularly rural ones, with drinking water. Protecting these resources is imperative to protect human health and the environment, especially because groundwater will become more important as increased aridity and higher temperatures alter water use. The U.S. Environmental Protection Agency (EPA) has noted that existing drinking water resources “may not be sufficient in some locations to meet future demand” and that future sources of fresh drinking “will likely be affected by changes in climate and water use.”¹⁹ As a result, BLM must protect both aquifers currently used for drinking water, and deeper and higher-salinity aquifers that may be needed in coming decades.

Oil and gas drilling involves boring wells to depths thousands of feet below the surface, often through or just above groundwater aquifers. Without proper well construction and vertical separation between aquifers and fractured formations, oil and gas development can contaminate

¹⁶ *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*, 88 Fed. Reg. 1196 (Jan. 9, 2023).

¹⁷ *Id.* at 1212.

¹⁸ Draft EA at 50, 68–71.

¹⁹ U.S. Environmental Protection Agency, *Hydraulic Fracturing for Oil and Gas: Impacts from the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States*, EPA/600/R-16/236F, at 2–18 (Dec. 2016) (EPA 2016 Report), www.epa.gov/hfstudy.

underground sources of water.²⁰ However, federal rules and regulations do not provide specific direction for BLM and operators to protect all usable water. Even rules that purport to do so, like Onshore Order No. 2's requirement to "protect and/or isolate all usable water zones," are inconsistently applied and often disregarded in practice.²¹

Moreover, industry has admitted that it often does not protect usable water in practice. Western Energy Alliance and the Independent Petroleum Association of America have told BLM that the "existing practice for locating and protecting usable water" does not measure the numerical quality of water underlying drilling locations, and therefore does not consider whether potentially usable water would be protected during drilling.²² For example, a report studying a sample of existing oil and gas well records in Montana confirms industry admissions that well casing and cementing practices do not always protect underground sources of drinking water.²³ Similarly, a study of hydraulic fracturing in Pavillion, Wyoming, confirmed that oil and gas drilling had contaminated underground sources of drinking water in that area due to lack of vertical separation between the aquifer and target formation.²⁴

In light of these risks to a critical resource, BLM must evaluate potential groundwater impairment. As a threshold matter, BLM must provide a detailed account of all regional groundwater resources that could be impacted, including usable aquifers that may not currently be used as a drinking water supply. The accounting must include, at minimum, all aquifers with up to 10,000 parts per million total dissolved solids, and it cannot substitute existing drinking water wells or any other incomplete proxy for a full description of all usable or potentially usable groundwater in the region. Second, BLM must use that accounting to assess how new oil and gas wells might impact these resources. That evaluation must assess the sufficiency of protective measures that will be employed, including wellbore casing and cementing and vertical separation between aquifers and the oil and gas formations likely to be hydraulically fractured. In assessing these protections, BLM cannot presume that state and federal regulations will protect groundwater, because of the shortcomings and industry noncompliance described above. BLM may not defer this analysis of groundwater impacts to the APD stage. *WildEarth Guardians*, 457 F. Supp. 3d at 888. Failure to conduct this analysis would violate NEPA. *Id.*

²⁰ See, e.g., Gayathri Vaidyanathan, *Fracking Can Contaminate Drinking Water*, at 8, *Sci. Am.* (Apr. 4, 2016); Dominic C. DiGiulio & Robert A. Jackson, *Impact to Underground Sources of Drinking Water and Domestic Wells from Production Well Stimulation and Completion Practices in the Pavillion, Wyoming Field*, 50 *Am. Chem. Society, Envtl. Sci. & Tech.* 4524, 4532 (Mar. 29, 2016); EPA 2016 Report.

²¹ See BLM, *Regulatory Impact Analysis for the Final Rule to Rescind the 2015 Hydraulic Fracturing Rule*, at 44–45 (Dec. 2017), <https://beta.regulations.gov/document/BLM-2017-0001-0464>.

²² Western Energy Alliance and the Independent Petroleum Association of America, Sept. 25, 2017 comments Re: RIN 1004-AE52, Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands; Rescission of a 2015 Rule (82 Fed. Reg. 34,464) (2017 WEA comments), at 59, <https://www.regulations.gov/document?D=BLM-2017-0001-0412>.

²³ Dominic Digiulio, [Examination of Selected Production Files in Southcentral Montana to Support Assessment of the March 2018 BLM Lease Sale](https://eplanning.blm.gov/public_projects/nepa/87551/136880/167234/Earthjustice_Protest_1-12-2018.pdf) (December 22, 2017), https://eplanning.blm.gov/public_projects/nepa/87551/136880/167234/Earthjustice_Protest_1-12-2018.pdf. (Exhibit D to David Katz and Jack and Bonnie Martinell's protest of the March 13, 2018 BLM Montana-Dakotas oil and gas lease sales).

²⁴ Dominic C. DiGiulio & Robert A. Jackson, [Impact to Underground Sources of Drinking Water and Domestic Wells from Production Well Stimulation and Completion Practices in the Pavillion, Wyoming Field](https://pubs.acs.org/doi/10.1021/acs.est.5b04970), 50 *Am. Chem. Society, Envtl. Sci. & Tech.* 4524, 4532 (Mar. 29, 2016), <https://pubs.acs.org/doi/10.1021/acs.est.5b04970>.

VI. We recommend that the BLM conduct additional analysis of the impacts of this lease sale on public health and environmental justice.

We appreciate that the BLM has incorporated some of our provided resources to acknowledge a few of the adverse impacts to public health. However, we urge the agency to address and analyze even more thoroughly the impacts of this lease sale on public health based on our recommendations detailed in our scoping comments.²⁵

VII. The Draft EA does not properly analyze methane emissions that would result from this lease sale.

Methane is a potent climate pollutant that has contributed about half a degree Celsius to observed global warming.²⁶ There is now more methane in the atmosphere than at any time in the last 800,000 years, with concentrations increasing at an alarming rate since 2007, largely because of fossil fuel production.²⁷ Recent findings have amplified the urgent need to curtail oil and gas emissions, demonstrating that methane release from such development has been dramatically underestimated.²⁸ Analysis of pre-industrial ice cores “indicate that anthropogenic fossil [methane] emissions are underestimated by about 38 to 58 teragrams CH₄ per year, or about 25 to 40 percent of recent estimates.”²⁹ This “highlights the human impact on the atmosphere and climate, [and] provides a firm target for inventories of the global [methane] budget.”³⁰ The BLM must, in its baseline, properly account for current methane levels and the related climate and resource impacts associated with this and the related lease sales.

The Draft EA fails to take the requisite hard look at the impacts of methane emissions that will result from development of and production on these leases, including the economic, public health, and public welfare impacts of venting and flaring.³¹ Venting and flaring of gas account for tremendous economic waste and adverse health impacts. In 2019 alone, venting or flaring accounted for roughly 150 billion cubic feet of methane, resulting in the loss of over \$50 million in federal royalty revenue – enough to meet the needs of over two million households, nearly as many households as the states of New Mexico, North Dakota, Utah, and Wyoming combined. This waste also means lost royalty revenues for taxpayers and Tribes. A recent analysis conducted by Synapse Energy Economics determined the value of lost gas in the form of: lost royalties; (2) lost state revenue from taxes; and (3) lost revenue from wasted natural gas

²⁵ See generally Montana-Dakotas First Quarter 2024 Scoping Letter from TWS et al., to Sonya Germann, State Director, Montana Bureau of Land Management State Office (Sep. 20, 2023) (on file with the Bureau of Land Management Montana State Office)

²⁶ Intergovernmental Panel on Climate Change (IPCC), Climate Change 2021: The physical Science Basis, Contribution of Working Group I to the Sixth Assessment Report of the IPCC, Summary for Policymakers SPM-7 (V. Masson-Delmotte et al. eds, 2021) [hereinafter IPCC AR6 WGI], https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.

²⁷ IPCC, SIXTH ASSESSMENT REPORT, CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS, TECHNICAL SUMMARY TS-67.

²⁸ B. Hmiel et al., Preindustrial CH₄ indicates greater anthropogenic fossil CH₄ emissions, 578 NATURE 409, 409–12 (Feb. 19, 2020); S. Pandey et al., Satellite observations reveal extreme methane leakage from a natural gas well blowout, 116 PNAS 52 (2019).

²⁹ *Id.* at 409.

³⁰ *Id.*

³¹ See, e.g., EDF, Flaring Aerial Survey Results (2021), <https://www.permianmap.org/flaring-emissions/>.

that could be used for other purposes. The study found that \$63.3 million in royalties, \$18.8 million in state revenue from taxes (from the top six states), and \$509 million in gas value was lost due to venting, flaring, and leaks on federal and Tribal lands.³² The report found that, in 2019, leaks accounted for 46% and flaring for 54% of lost gas.³³

Venting and flaring on Tribal and federal public lands has significant health impacts on frontline and fence line communities.³⁴ Proximity to oil and gas infrastructure creates disproportionate adverse health risks and impacts on Indigenous communities in particular.³⁵ According to an Environmental Defense Fund (EDF) analysis, roughly 1,100 adults with asthma, 800 adults with chronic obstructive pulmonary disease, 700 adults with coronary heart disease, and 400 adults who have experienced a stroke live within a half mile of a flaring well.³⁶ Another study links flaring to shorter gestation and reduced fetal growth.³⁷ Reducing waste from flaring on federal and Tribal lands would lessen these harms and would be consistent with the Administration's environmental justice commitments. Therefore, the BLM should not issue additional oil and gas leases until the agency addresses waste on Tribal and federal public lands.

Conclusion

Thank you for the opportunity to provide these comments on the Draft EA and Draft FONSI. We look forward to continuing to engage in this decision-making process.

Respectfully,



James Mowdy on behalf of the undersigned parties
Associate Attorney
The Wilderness Society
503 West Mendenhall St.
Bozeman, MT 59715
James_mowdy@twso.org

Phil Francis
Chair
Coalition to Protect America's National Parks

³² Olivia Griot et al., Onshore Natural Gas Operations on Federal and Tribal Lands in the United States: Analysis of Emissions and Lost Revenue, Synapse Energy Economics Inc., 3 (Jan. 20, 2023), https://blogs.edf.org/energyexchange/files/2023/01/EMBARGOED_EDF-TCS_Public_Lands_Analysis.pdf.

³³ *Id.* at 23.

³⁴ *E.g.*, Jeremy Proville et al., *The demographic characteristics of populations living near oil and gas wells in the USA*, 44 *Population and Environment* 1 (2022), <https://doi.org/10.1007/s11111-022-00403-2>.

³⁵ *See, e.g., id.* at 2–5.

³⁶ Olivia Griot et al., *supra* note 32.

³⁷ Lara J. Cushing et al., *Flaring from Unconventional Oil and Gas Development and Birth Outcomes in the Eagle Ford Shale in South Texas*, 128 *ENVIRONMENTAL HEALTH PERSPECTIVES*, 077003 (2020).

Nicole Ghio
Senior Fossil Fuels Program Manager
Friends of the Earth US

Beau Kiklis
Senior Program Manager: Energy & Landscape
National Parks Conservation Association

Alison Gallensky
Conservation Geographer: Leadership Team
Rocky Mountain Wild

Katherine Stahl
Community Organizer
Powder River Basin Resource Council

Meghan Riley
Wildlife Program Manager
Wyoming Outdoor Council