May 26, 2020

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Via: Email[1] at blm_nv_eoi_nominations@blm.gov

Protest of the June 2020 Oil and Gas Lease Sale Environmental Assessment
(DOI-BLM-NV-B000-2020-0007-EA)

Dear Ms. Anderson,

Please accept this timely protest of the above Oil and Gas Lease Sale in the Battle Mountain District.[2] The protesting parties are The Wilderness Society, and the Toiyabe Chapter of the Sierra Club. In this lease sale, BLM is proposing to lease 7 parcels that would cover approximately 10,459.14 acres of public lands.

I. Lease Parcels Protested

We protest the sale of all seven parcels that are being offered in the Battle Mountain District. This protest is filed under the provisions at 43 C.F.R. § 3120.1-3. The parcel numbers and serial numbers that are protested are also shown in the Appendix to this protest. Notably, the parcels at issue are in areas that are still in disputed ownership with the Western Shoshone Nation.[3] Accordingly, they are not appropriate for lease sale.

II. Interests of the Protesting Parties

The Wilderness Society ("TWS") has a long-standing interest in the management of BLM lands

[1] BLM states in their Lease Sale Notice that protests will be accepted by electronic mail. *See* June 9, 2020 Bureau of Land Management Notice of Competitive Oil and Gas Internet Lease Sale (April 24, 2020), *available at* https://www.blm.gov/sites/blm.gov/files/NV_OG_20200424_Sale_Notice_Signed.pdf

[2] BLM issued an Errata to the Lease Sale Notice correcting the protest due date to May 24, 2020. BLM states that if the office is not open to the public on the due date, that a protest received on the next day the office is open to the public will be considered timely filed. As May 24, 2020 was a weekend and May 25, 2020 was a holiday, the public office was closed. The next day that the office is open to the public is May 26, 2020. *See* Errata #1 (April 28, 2020), *available at* https://www.blm.gov/sites/blm.gov/files/NV_OG_20200609_MD_Sale_Errata_1_0.pdf

[3] *See* Steven Newcomb, *Convoluted U.S. 'Logic' About the Western Shoshone Nation and its Territory*, Indian Country Today (Apr. 23, 2014), *available at* https://indiancountrytoday.com/archive/convoluted-u-s-logic-about-the-western-shoshone-nation-and-its-territory-rZl0p7cBXU2V5ipprxhE9w ("The Western Shoshone Nation has never ceded or relinquished its territory by a ratified treaty with the United States as required by the organic act establishing the Territory of Nevada. The Treaty of Ruby Valley was not a treaty of cession or relinquishment. And, according to the act that established the territory of Nevada, no Indian land shall become part or any state or territory until such time as the Indians enter into a treaty with the United States by which they transfer their lands to the United States.")

in Nevada and engages frequently in the decision-making processes for land use planning, project proposals and oil and gas leasing that could potentially affect wilderness-quality lands and other important natural resources on our public lands and mineral estate. TWS represents more than one million members and supporters nationwide, including members and supporters in Nevada, all of whom have a great interest in the protection and enhancement of the natural values and recreational opportunities provided by our public lands, including lands that are included in or may be affected by Nevada June 2020 lease sale.

The ***Sierra Club*** is a national nonprofit organization of approximately 784,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; 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 Toiyabe Chapter of the Sierra Club has approximately 6,600 members in Nevada and the Eastern Sierra, including members who live and recreate in the Battle Mountain District. Sierra Club members use the public lands in the Battle Mountain District, including lands and waters that would be affected by actions under the lease sale, for quiet recreation, aesthetic pursuits, and spiritual renewal. These areas would be threatened by increased oil and gas development that could result from the proposed lease sale.

III. Authorization to File this Protest

As an attorney for The Wilderness Society, Bruce Pendery is authorized to file this protest on behalf of The Wilderness Society and its members and supporters. He has been given like authority to file this protest on behalf of the Sierra Club.

IV. Statement of Reasons

The protesting parties filed detailed comments on March 25, 2020, on the proposed lease parcels, as described in the Environmental Assessment (EA) prepared by Battle Mountain District on February 24, 2020. The majority of our comments were inadequately addressed or were not address at all. Therefore, many elements of this protest remain unchanged from the issues we raised in the March comments, and we ask the BLM to consider those concerns at this time. For that reason, our previous comments are incorporated into this protest by this reference, and we ask that they be fully considered as part of it. We have significant concerns with the proposed lease sale, including potential impacts to wilderness-quality lands, the leasing of Federal lands unlikely to produce oil or gas, climate impacts, and the disputed ownership with the Western Shoshone. Our comments detail these concerns below.

A. Public Participation

We appreciate BLM's decision to link this lease sale's ePlanning site to the agency's official webpage for oil and gas lease sales in Nevada, per our March 25th comments.

On April 16, 2020, TWS along with several other organizations sent a letter to BLM Nevada State Office Director Jon Raby, requesting a formal pause on new and ongoing BLM public participation processes. The unprecedented national health crisis is making it exceptionally difficult for people

to participate in public comment and protest processes, and many are unable to participate at all. BLM's public rooms are closed (making it difficult to conduct research or deliver lease sale protests), and state and local orders are encouraging people to stay at home and limiting travel. The guidelines issued by the Center of Disease Control in response to the COVID-19 pandemic have greatly disrupted the working and living conditions across the country, impairing the ability of the general public, issue experts and others to conduct their daily routine, regular business, and/or weigh in on Federal government actions that affect them. Moving forward with comment periods and decisions that will grant leases for at least ten years when the public is unable to properly participate violates the requirements of NEPA and FLPMA.

Members of Congress, attorneys general, and state and local governments have submitted requests that the federal government pause or extend public comment periods for rulemaking efforts and other processes during the novel COVID-19 pandemic.[4] Administrative actions and public comment periods for other federal agency actions are being suspended or extended for "to be determined" amounts of time due to the national emergency.[5] . Furthermore, in an April 3rd letter to the Department of Interior (DOI), Nevada Senators Catherine Cortez Masto and Jacky Rosen wrote "Public comment periods are an incredibly important tool for ensuring that the public has a role in making federal decisions with significant environmental, economic, and cultural impacts" and requested that DOI indefinitely extending open comment periods and suspending new comment periods due to the national emergency. BLM should heed these many indications that it is not responsible to move forward with lease sales.

In addition, the Mineral Leasing Act (MLA) requires BLM to give notice of proposed leasing and that "[s]uch notice shall be posted in the appropriate local office of the leasing and land management agencies." 30 U.S.C. § 226(f). Clearly, BLM cannot comply with this requirement right now.

Proceeding with lease sales would violate the public participation requirements of the Federal Land Policy and Management Act (FLPMA) and National Environmental Policy Act (NEPA). As BLM has recently been reminded, "[p]ublic involvement in oil and gas leasing is required under FLPMA and NEPA" and "the public involvement requirements of FLPMA and NEPA cannot be set aside in the name of expediting oil and gas lease sales." *Western Watersheds Project v. Zinke*, Memorandum Decision and Order, Case 1:18-cv-00187-REB (D. Idaho February 27, 2020), pp.

[4] *See, e.g.,* letter from fourteen House of Representatives Committee Chairs to Office of Management and Budget , Acting Director Russell Vought, submitted April 1, 2020: https://www.eenews.net/assets/2020/04/02/document_gw_08.pdf; letter from Senators Wyden, Merkley, and Udall to Secretary Bernhardt requesting a pause on comment periods, submitted April 3, 2020: https://www.wyden.senate.gov/imo/media/doc/040320%20Letter%20on%20DOI%20comment%20periods.pdf; letter from state attorney generals to Office of Management and Budget, Acting Director Russell Vought, submitted March 31, 2020: https://portal.ct.gov/-/media/AG/Press_Releases/2019/COVID-19-Rule-Delay-Letter---Final.pdf?la=en; Letter from various state and local government organizations requesting a pause on all public comment and rulemaking processes, submitted March 20, 2020: https://www.nga.org/letters-nga/state-and-local-government-organizations-seek-pause-on-public-comments-on-rulemaking-processes/

[5] For example, DOI's Interior Board of Land Appeals extended all filing deadlines by 60 days in response to COVID-19; the Daniel Boone National Forest Supervisor suspended the public objection period for its planning effort in light of COVID-19; and the U.S. Forest Service extended a public comment period for the Nantahala and Pisgah forest plan revision with the length of time to be determined (available at: https://www.fs.usda.gov/detail/nfsnc/home/?cid=stelprdb5397660).

32, 40. In particular, FLPMA requires that BLM give "the public adequate notice and an opportunity to comment upon the formulation of standards and criteria for, and to participate in, the preparation and execution of plans and programs for, and the management of, the public lands." 43 U.S.C. § 1739(e). NEPA requires that "environmental information is available to public officials and citizens before decisions are made and before actions are taken" and reiterates that "public scrutiny is essential to implementing NEPA." 40 C.F.R. § 1500.1(b). NEPA obligates the BLM to "[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures." 40 C.F.R. § 1506.6(a).

Furthermore, the adequate enforcement of environmental laws is not possible during COVID-19. Not only are there significantly higher numbers of people working from home or who have been laid off, limiting the ability of governments to respond to emergencies on the ground, but state and federal governments have actively suspended many routine inspections and enforcement. BLM and the Environmental Protection Agency, as well as Colorado agencies, all have different responsibilities when it comes to responding to spills, water contamination, air quality issues, etc. Several of these agencies have made public declarations that they will not be conducting normal inspections and enforcement during the pandemic[6], and we do not see how BLM can be keeping up with normal practices. This makes planning for increased oil and gas operations through additional lease sales especially inappropriate and dangerous.

B. BLM does not adequately consider or provide for the protection of Lands with Wilderness Characteristics

1. BLM should defer parcels that overlap with inventoried lands with wilderness characteristics until management decisions are made for those lands in order to comply with the National Environmental Policy Act and Federal Land Policy and Management Act.

Lands with wilderness characteristics (LWC) are one of the resources of the public lands that must be inventoried and considered under the Federal Land Policy and Management Act (FLPMA). 43 U.S.C. § 1711(a); *see also Ore. Natural Desert Ass'n v. BLM.*, 625 F.3d 1092, 1122 (9th Cir. 2008). Of the seven lease parcels proposed for the June 2020 lease sale in the Battle Mountain District, all seven parcels overlap with three BLM-recognized LWC units covering 9,739 acres. EASI at Table 4 (presenting the LWC unique identifier numbers and the lease parcels overlapping them and the acreage of overlap). The underlying Shoshone-Eureka Resource Management Plan (RMP) does not address LWC. BLM states that LWC will be addressed in future RMP amendments. See EA at 43. BLM has not yet made decisions in its land use plans for how these areas will be managed relative to their wilderness characteristics.

These leases are being offered under the provisions of the outdated Shoshone-Eureka RMP (1986 and amended in 2006). BLM is developing a new draft RMP for the Battle Mountain District, including alternatives that may place new restrictions on oil and gas leases. Leasing within this area during a land-use plan revision unnecessarily shrinks the BLM's decision space to use an

[6] See EPA Suspends Enforcement of Environmental Laws Amid Coronavirus, March 26, 2020, available at https://thehill.com/policy/energy-environment/489753-epa-suspends-enforcement-of-environmental-laws-amid-coronavirus

updated analysis and determine where or how leasing is now appropriate. More importantly, because the public has not been able to weigh in on where or how to offer oil and gas leases in this region for several decades, leasing now severely limits public engagement in the draft plan. This action erodes public trust. Mineral rights bestowed by selling leases now will restrict future management actions. We greatly appreciate that BLM has completed an inventory of LWC in the Battle Mountain District consistent with and agency policy. EA at 43. However, BLM must preserve its ability to decide whether and how to protectively manage those newly inventoried wilderness resources in a public planning process. Such decisions could be foreclosed by leasing those lands to the oil and gas industry at this time. Unfortunately, the BLM states in the EA that the Shoshone-Eureka RMP does not address LWC and will be addressed in future RMP amendments, and therefore "[i]n the interim the District will manage lands with wilderness characteristics for multiple use." EA at 44. That is, despite having completed an inventory finding these lands do have wilderness characteristics, the BLM has no current plans to recognize wilderness values and will manage the lands under a general multiple use mandate that may not adequately recognize the wilderness values of these lands. In fact, BLM has stated that while LWC is present, it will not be affected. EA at 16. Yet later in the EA, BLM contradictorily states that:

> "Development and production could produce effects similar to those of exploration drilling but that would be more long-term and could potentially cause an inventory unit to no longer be considered to have wilderness characteristics under criteria (2) and (3) in a subsequent inventory, depending on such factors as the number and placement of wells and long-term facilities in relation to the unit's size, configuration, and topographic and vegetative screening; and the success of measures taken to minimize effects."

EA at 44.

Therefore, BLM should defer all parcels that overlap with inventoried LWC units until the agency has the opportunity to make management decisions for those areas through a public planning process. It is well within BLM's authority to defer nominated parcels from lease sales. Even if lands at issue here are open for leasing under the governing RMP, it would be entirely reasonable and consistent with BLM's obligations under FLPMA and the National Environmental Policy Act (NEPA) for BLM to consider deferring parcels that have important wilderness resources and/or other resources. Neither the Mineral Leasing Act (MLA), FLPMA, nor any other statutory mandate requires that BLM must offer public lands and minerals for oil and gas leasing solely because they are nominated for such use, even if those lands are allocated as available to leasing in the governing land use plan. The Tenth Circuit Court of Appeals confirmed this discretion in *New Mexico ex rel. Richardson v. BLM*, when it stated, "[i]f the agency wishes to allow oil and gas leasing in the plan area it must undertake additional analysis…but it retains the option of ceasing such proceedings entirely" 565 F.3d 683, 698 (10th Cir. 2009).

BLM regularly exercises this discretion to defer parcels in inventoried LWC for which the agency has not yet made management decisions. For example, the Grand Junction Field Office deferred lease parcels from its December 2017 lease sale in areas that BLM recently inventoried and found to have wilderness characteristics. BLM stated: "Portions of the following parcels were deferred due to having lands with wilderness characteristics that require further evaluation." DOI-BLM-CO-N050-2017-0051-DNA, p. 1. The Grand Junction Field Office completed its RMP revision in

2015, but still determined that it is inappropriate to lease areas that have been inventoried and found to possess wilderness characteristics since the RMP was completed to allow the agency to consider management options for those wilderness resources. In another example, the Bighorn Basin District Office in Wyoming deferred several parcels from Wyoming BLM's August 2013 lease sale because they overlapped with "Lands with Wilderness Characteristics inventory area" while BLM completed the RMP revision. DOI-BLM-WY-R010-2013-0014- EA at 4-37.

BLM must defer leasing in inventoried LWC for which management decisions have not been made. This approach is consistent with agency policy and authority and is critical to preserving BLM's ability to make management decisions for those wilderness resources through a public planning process.

C. BLM has failed to consider a reasonable range of alternatives.

Under NEPA, the BLM must consider a reasonable range of alternatives for this lease sale, including alternatives that would decrease the greenhouse gas (GHG) emissions resulting from its actions and alternatives that would mitigate remaining climate change impacts. 40 C.F.R. § 1502.14(a); *see also Theodore Roosevelt Conservation P'ship v. Salazar*, 661 F.3d 66, 72-73 (D.C. Cir. 2011) (requiring BLM to consider a reasonable range of alternatives for oil and gas activity). Yet, BLM often only considers two alternatives in its leasing analyses: leasing no parcels (the no action alternative) or leasing all (or nearly all) parcels that have been nominated. [This "all or nothing approach" violates NEPA, which requires Federal agencies to "study, develop, and describe appropriate alternatives to recommend courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. 4332(2)(E); *see also* 40 C.F.R. § 1508.9(b) (an EA must include a discussion "of alternatives as required by section 102(2)(E)"). Although "an agency's obligation to consider alternatives under an EA is a lesser one than under an EIS," NEPA "requires that alternatives be given full and meaningful consideration" in both instances. *Native Ecosystems Council v. U.S. Forest Service*, 428 F.3d 1233, 1245–46 (9th Cir. 2005). "The existence of a viable but unexamined alternative renders an EA inadequate." *Western Watersheds Project v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013) (quotations and citations omitted). When determining whether an agency has considered an appropriate range of alternatives, courts look to the substance of the alternatives. *Native Ecosystems Council*, 428 F.3d at 1246. In particular, the agency must consider reasonable alternatives that facilitate informed decision-making and a "hard and careful look at [] impacts." *Western Watersheds Project*, 719 F.3d at 1051.

Here, BLM evaluates only two options: the proposed action (leasing all of the nominated parcels) and a no action alternative. An EA offering a choice between leasing every proposed parcel, and leasing nothing at all, does not present a reasonable range of alternatives. *See TWS v. Wisely*, 524 F. Supp. 2d 1285, 1312 (D. Colo. 2007) (BLM violated NEPA by failing to consider "middle ground compromise between the absolutism of the outright leasing and no action alternatives"). The court held that BLM should have considered a "potentially appealing middle-ground compromise between the absolutism of the outright leasing and no action alternatives," which would have reduced environmental impacts. *Id. See also Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 813 (9th Cir. 1999) (NEPA analysis failed to consider a reasonable range of alternatives where it "considered only a no action alternative along with two virtually identical

alternatives"). [7]

This obligation applies to oil and gas planning and leasing decisions. As the Tenth Circuit has held, "[w]ithout substantive, comparative environmental impact information regarding other possible courses of action, the ability of [a NEPA analysis] to inform agency deliberation and facilitate public involvement would be greatly degraded." *New Mexico ex rel. Richardson v. BLM*, 565 F.3d 683, 708 (10th Cir. 2009).

A "rule of reason" is used to determine if a reasonable range of alternatives have been considered; this rule is governed by two guideposts: (1) the agency's statutory mandates; and (2) the objectives for the project. *New Mexico ex rel. Richardson*, 565 F.3d at 709. Here, there is no doubt that BLM's legal mandates under FLPMA and NEPA require it to fully consider the protection of wilderness values. Additionally, under IM 2010-117, which was largely reinstated by the decision in *Western Watersheds Project v. Zinke*, 336 F. Supp. 3d 1204, 1212 (D. Idaho 2018) the agency must treat the protection of other important resources and values as an equally important objective to leasing. *See also Western Watersheds Project v. Zinke,* Case No. 1:18-cv-00187-REB at 3-4 (D. Idaho, Feb. 27, 2020) (granting motion for summary judgement and finding IM 2018-034 provisions would be set aside and replaced by those in IM 2010-117). Although this case was decided within the context of the greater sage grouse habitat management areas, its reasoning applies to all oil and gas lease sales authorized under FLPMA and NEPA and completed under IM 2018-034.

In this lease sale, the BLM is proposing to sell seven parcels that overlap with three LWC inventory units that cover 9,739 acres. The BLM should consider not leasing or at least deferring leasing in these areas, or at a minimum, leasing the parcels with an NSO stipulation. Moreover, to the extent certain parcels have only low potential for development, the alternative of deferring them appears even more reasonable. These options have never been analyzed. Federal courts have held that site-specific analysis is required prior to issuing oil and gas leases where there is surface that is not protected by NSO stipulations and where there is reasonable foreseeability of environmental impacts. *See, e.g., New Mexico ex rel. BLM*, 565F.3d at 718.

Here, BLM has failed to evaluate a reasonable range of alternatives that would protect the wilderness characteristics of parcels in the Battle Mountain District from the impacts of the lease sale. Because the BLM has not considered any meaningful alternatives, such as include offering the parcels with NSO stipulations, they must defer the parcels from the lease sale.

D. Prioritizing oil and gas leasing is inconsistent with FLPMA's multiple use mandate.

Prioritizing oil and gas leasing over all other resources and values violates FLPMA's multiple use mandate, and prioritizing leasing of lands with low potential for oil and gas development exacerbates this violation. Leasing in low potential areas gives preference to oil and gas development at the expense of other uses because the presence of leases can limit BLM's ability to manage for other resources, in violation of FLPMA's multiple use mandate. Under FLPMA,

[7] *See also Colo. Envtl. Coal. v. Salazar,* 875 F. Supp. 2d 1233, 1248–50 (D.Colo. 2012) (holding that BLM unlawfully failed to consider an oil and gas leasing alternative that required minimal surface disturbance relative to the proposed action); *W. Org. of Res. Councils v. BLM,* CV 16-21-GF-BMM, 2018 WL 1475470, at *9 (D. Mont. Mar. 26, 2018) (similar); *Wilderness Workshop*, 342 F. Supp. 3d at 1166–67. (similar).

BLM is subject to a multiple use and sustained yield mandate, which prohibits the DOI from managing public lands primarily for energy development or in a manner that unduly or unnecessarily degrades other uses. *See* 43 U.S.C. § 1732(a) and (b). Instead, the multiple use mandate directs DOI to achieve "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations." 43 U.S.C. § 1702(c). Further, as co-equal, principal uses of public lands, outdoor recreation, fish and wildlife, grazing, and rights-of-way must receive the same consideration as energy development. 43 U.S.C. § 1702(l).

DOI appears to be pursuing an approach to oil and gas management that prioritizes this use above others in violation of the multiple use mandate established in FLPMA. For example, a March 28, 2017, Executive Order and ensuing March 29, 2017, Interior Secretarial Order #3349 seek to eliminate regulations and policies that ensure energy development is balanced with other multiple uses. None of the overarching legal mandates under which BLM operates – be it multiple use or non-impairment – authorizes DOI to establish energy development as the dominant use of public lands. On our public lands, energy development is an allowable use that must be carefully balanced with other uses. Thus, any action that attempts to enshrine energy development as the dominant use of public lands is invalid on its face and inconsistent with the foundational statutes that govern the management of public lands.

The mere fact an RMP makes lands *available* for leasing does not mean that actually leasing the lands meets BLM's multiple use obligations. Given BLM's acknowledged discretion to engage in leasing, or not to lease, under the MLA, it is clear the leasing stage, as much as the planning stage, is when multiple use decisions should be made. Since land use plan decisions only set a basic framework for land management, and do not make project-specific decisions, it is clear the leasing stage is when decisions should be made about whether issuing a lease parcel would meet BLM's multiple use responsibilities, and this must be reflected in the NEPA analysis at the leasing stage, which has not occurred here.

Federal courts have consistently rejected efforts to affirmatively elevate energy development over other uses of public lands. In *New Mexico ex rel. Richardson*, the Tenth Circuit put to rest the notion that BLM can manage chiefly for energy development, declaring that "[i]t is past doubt that the principle of multiple use does not require BLM to prioritize development over other uses." 565 F.3d at 710; *see also S. Utah Wilderness Alliance v. Norton*, 542 U.S. 52, 58 (2004) (defining "multiple use management" as "striking a balance among the many competing uses to which land can be put"). Other Federal courts have agreed. *See, e.g., Colo. Envtl. Coalition v. Salazar*, 875 F. Supp. 2d 1233, 1249 (D. Colo. 2012) (rejecting oil and gas leasing plan that failed to adequately consider other uses of public lands). Thus, any action by BLM that seeks to prioritize oil and gas leasing and development as the dominant use of public lands, as this proposed sale of seven parcels appears to do, would violate FLPMA. BLM must consider a reasonable range of alternatives for this lease sale that considers and balances the multiple uses of our public lands, consistent with NEPA and FLPMA. BLM can – and should – consider an alternative eliminating oil and gas leasing in areas determined to have only moderate or low potential for oil and gas development. *See Wilderness Workshop,* 342 F. Supp. 3d at 1167 ("the principle of multiple use does not require BLM to prioritize development over other uses . . . [and therefore] it seems a reasonable alternative would be to consider what else may be done with the low and medium potential lands if they are not held open for leasing.") (internal citation and quotation omitted). An alternative eliminating

oil and gas leasing in areas determined to have no or low potential for oil and gas development would be "'significantly distinguishable' because it would allow BLM to consider other uses for that land." *Id*. at 1167 (citing *New Mexico ex rel Richardson*, 565 F.3d at 708–09).

E. Climate change impacts must be properly analyzed and considered

1. BLM's response to our previously submitted climate change comments are inadequate and in violation of NEPA

In the comments we submitted on the Nevada June 2020 oil and gas lease sale EA on March 25, 202,0 we provided the BLM with detailed comments on climate change issues that needed to be considered and means to reduce climate change impacts that BLM should adopt. The BLM has responded to those comments in the Summary of Comments and Responses section of the Lease Sale EA Supplemental Information, rejecting all our concerns. EASI at 48.

We would like to ask the BLM to reconsider the climate change issues we raised in our March EA comments as part of this protest. Therefore, we reincorporate those comments, including the Exhibits we provided, by this reference in their entirety into this protest. And we again ask the BLM to reconsider them.

In addition, there are two issues relative to climate change we raise as part of this protest. The first is a rebuttal to the responses to our climate change comments in the Summary of Comments and Responses section of the EA, which is provided in the following table. Second is the need to comply with the recent decision in *WildEarth Guardians v. U.S. Bureau of Land Mgmt.,* 2020 U.S. Dist. LEXIS 77409 (D. Mont., May 1, 2020) where the court vacated two lease sales in Montana partly due to an insufficient analysis of the cumulative impacts of climate change.

Comment	**BLM Response**	**Protest Rebuttal**
BLM must consider the risks and costs of climate change and should do an option value analysis to avoid irreparable damage	The proposed lease conforms with the purpose and need stated in the EA and complies with the MLA and applicable RMP.	The BLM must consider all relevant issues in the EA. An agency must "consider every significant aspect of the environmental impact of a proposed action." Baltimore Gas & Electric Co. v. Natural Resources Defense Council, 462 U.S. 87, 107 (1983) (quotations and citation omitted).
BLM must consider unquantified effects including the worldwide and long-range character of climate change.	This is outside the scope of the EA.	Considering climate change environmental impacts, including its worldwide effects and long-range character, is not outside of the scope of an EA. An EA must provide enough evidence to determine whether an EIS is needed and it must aid an agency's compliance with NEPA in any event. 40 C.F.R. §1508.9. NEPA requires consideration of all relevant environmental issues. 40 C.F.R. § 1500.2; 42 U.S.C. §§ 4331(b)(1)-(6), 4332(2)(A), (B), (C)(i)-(v), (F), and (H). An agency must "consider every significant aspect of the environmental impact of a proposed action."

		Baltimore Gas & Electric Co. v. Natural Resources Defense Council, 462 U.S. 87, 107 (1983) (quotations and citation omitted).
Methane emissions must be considered and the Social Cost of Carbon and Social Cost of Methane, and carbon sequestration issues.	Table 6 in the EA presents GHG emission estimates including for methane.	This does not address the concerns raised in our EA comments. Not only the amount of methane emissions needs to be considered; the climate change environmental impacts of those emissions must be considered, which is not the case. And the EA does not even consider SCC and SCM, or carbon sequestration.
GHG emissions must be quantified including downstream emissions and their direct, indirect, and cumulative climate impacts.	BLM presents GHG emissions levels in the EA and additional NEPA will be done at the project approval stage.	The BLM is not required to wait until the APD stage to do environmental analysis when such is possible before that time. See, e.g., New Mexico ex rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683, 707-708 (10th Cir. 2009) ("All environmental analyses required by NEPA must be conducted at the "earliest possible time."") (citations and quotations omitted). See also id. at 716 (assessment of an environmental impact must occur as soon as the impact is "reasonably foreseeable" and before any "irretrievable commitment of resources.").
A reasonable range of alternatives must be developed that considers GHG emissions.	Considering the two alternatives evaluated in the EA—no action and the proposed lease sale—met the requirements of NEPA. Statewide and national emissions levels are considered.	BLM's full consideration of only two alternatives in the EA does not meet NEPA requirements; BLM can at least reduce local GHG emissions and climate change impacts and this needs to be considered in the EA.
Mitigation of GHG emissions must be fully considered and option value must be considered.	This can only be done through RMP amendment or revision.	Considering issues like modifying the underlying RMPs is part of the reason for doing an EA and BLM should recognize and consider this. The BLM must ensure it fully complies with the court decisions in WildEarth Guardians, Wilderness Workshop, Diné Care, and San Juan Citizens Alliance, which are cited in the climate change comments on the EA that we submitted in March. It also must comply with the May 1, 2020 decision from Montana in WildEarth Guardians cited above and discussed in the next section below.
BLM cannot delay the climate change analysis to the APD stage.	The EA considers climate change to the extent possible.	Again, the BLM is not required to wait until the APD stage to do environmental analysis when such is possible before that time. See, e.g., New Mexico ex rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683, 707-708 (10th Cir. 2009) ("All environmental analyses required by NEPA must be conducted at the "earliest possible time."") (citations and quotations

		omitted). See also id. at 716 (assessment of an environmental impact must occur as soon as the impact is "reasonably foreseeable" and before any "irretrievable commitment of resources.").
BLM must consider the ecological, economic, and social impacts of GHG emissions.	The RFD scenario analysis meets this need.	The EA does not present the widespread direct, indirect, and cumulative environmental impacts of oil and gas leasing on climate change as required by the NEPA regulations. 40 C.F.R. § 1508.8(b)
Mitigation measures are needed to reduce these impacts.	Mitigation measures that "could be required" are described in the EA.	There is a need for mandatory mitigation measures to deal with climate change impacts.
The values of BLM lands for carbon sequestration need to be considered.	GHG emissions, and impacts, in Nevada are very low.	This does not answer the question. BLM could provide for ways to maximize carbon sequestration even if emissions are low, such as through careful management of any oil and gas development, with concomitant mandatory mitigation measures.
Methane waste must be minimized and waste minimization stipulations should be adopted in the lease sale.	BLM manages venting and flaring under the regulations at 43 C.F.R. Subpart 3179 and mitigation measures are described in the EA.	As discussed in our EA comments, BLM's current waste regulations do not meet the requirements in the MLA to "use all reasonable precautions" to prevent waste at the oil and gas leasing stage. See 30 U.S.C. §§ 187 and 225.
The Social Cost of Methane (SCM) protocol must be employed.	BLM does not know the impacts that might occur at the leasing stage and it can only provide stipulations.	The SCM protocol is a valuable tool that can help the BLM fully understand climate change impacts, and it should therefore be used.
The BLM must use an appropriate timeframe for estimating the global warming potential (GWP) of methane.	The BLM has considered 100-year and 20-year GWP for methane.	We appreciate that BLM has considered both timeframes.

2. BLM must comply with the decision in *WildEarth Guardians v. U.S. Bureau of Land Management.*

As we mentioned, BLM must ensure that it complies with the recent decision in *WildEarth Guardians v. U.S. Bureau of Land Mgmt.,* 2020 U.S. Dist. LEXIS 77409 (D. Mont., May 1, 2020). In that case the court vacated two lease sales (encompassing 287 leases covering 145,063 acres) and the FONSIs supporting the underlying EAs because the BLM failed to consider four issues (impacts to groundwater, consideration of alternatives to protect groundwater, climate change impacts, and issuing the FONSIs in an arbitrary and capricious manner). The Order from that case is included herewith as Exhibit 1.

Relative to climate change the court found the EAs did not support the lease sales because BLM failed to do the needed analysis of cumulative impacts. *WildEarth Guardians* at *24 to *34. BLM relied on its quantification of GHG emissions to support its claims it met the cumulative impact

analysis requirements, but while "[t]his information was thorough and necessary for BLM to comply with NEPA, [ ] none of it speaks to whether BLM considered *cumulative* climate impacts." *Id.* at *27 to *28 (emphasis in original). Moreover, BLM claimed that it met NEPA's cumulative impacts requirement by tiering the EAs to the relevant RMPs. *Id.* at It at * 28. But the BLM failed to consider lease sales outside of Montana in Wyoming, and this argument also failed because "the RMPs predate the lease sales by more than two years" and did not account for actions outside the planning area for the specific RMP. *Id.* *28 and *29. Moreover, "BLM cannot, as it claims, satisfy NEPA's cumulative impacts analysis simply because it put the emissions from a single lease sale into context with state and national greenhouse-gas emissions." *Id.* at *29. BLM contended that "the global nature of climate change prevents it from assessing "the specific effects of GHG emissions from any particular lease sale either on any particular region or on the planet as whole"" but this argument was rejected for three reasons, including that

- Even if BLM could not ascertain exactly how the projects contribute to climate change impacts in the project area "it knows that less greenhouse-gas emissions equals less climate change," and
- "The cumulative impacts analysis was designed precisely to determine whether "a small amount here, a small amount there, and still more at another point could add up to something with a much greater impact"" and "[t]hus, if BLM ever hopes to determine the true impacts of its projects on climate change, it can do so only by looking at projects in combination with each other, not simply in the context of state and nation-wide emissions."

Id. at * 30 to *31 (administrative record and case citations omitted).

Based on the decision in *WildEarth Guardians*, it is clear that BLM's climate change cumulative impacts analysis cannot be based on just a quantification of GHG emissions, cannot tier to RMPs that are more than two years old, the BLM must consider projects outside the planning area, the agency cannot contextualize GHG emissions from this lease sale with state and national GHG emissions, and even if climate change analysis is difficult, BLM must recognize that fewer GHG emissions will mean less climate change and it must consider projects in combination with each other, "not simply in the context of state and nation-wide emissions."

The cumulative impacts analysis in the EA for this lease sale fails in these regards. Among other things, the Shoshone Eureka RMP (Mt. Lewis Field Office) was approved in 1986, much more than two years ago, so it cannot be tiered to, especially relative to RFD projections. EA at 4. The EA's claim that leasing has no impacts on air quality and that any effects will not occur until the APD stage of development is unfounded. *Id.* at 22, 23, and 51. The cumulative impacts analysis cannot be postponed to the APD stage. GHG emissions estimates for the leases cannot form the basis for a cumulative impacts analysis; emissions from projects outside the planning area must be considered, which has not been done. *Id.* at 25, 26, 51, and 52. The claims of uncertainty about future climate change impacts does not meet the need to recognize that fewer GHG emissions will mean less climate change and potential projects must be considered in combination with each other. *Id.* at 26.

The significance of these concerns was made evident in BLM's denial of our protest of the March 24, 2020 lease sale in the Battle Mountain District. In that protest denial BLM based its claim that

the cumulative impacts analysis was sufficient on an assertion that the EA "compared the GHG emissions (MMT/yr CO2e) from the Proposed Action to total estimated all sectors GHG emissions in Nevada and the U.S. . . . ." March 2020 protest denial at 6. BLM claimed that since GHG emissions in Nevada are low, "based on the low amount of current production and projected production based on the Reasonably Foreseeable Development scenario, as compared to state, national, and worldwide consumption" BLM's analysis was adequate. *Id.* But as noted, "if BLM ever hopes to determine the true impacts of its projects on climate change, it can do so only by looking at projects in combination with each other, not simply in the context of state and nation-wide emissions." *WildEarth Guardians* at * 31.

3. Climate change poses an existential threat to our planet and humanity, with public lands playing a key role.

i. There is scientific consensus regarding the trajectory of human-caused climate change.

A large and growing body of scientific research demonstrates, with ever increasing confidence, that climate change is occurring and is caused by GHG emissions from human activities, primarily the use of fossil fuels. The Intergovernmental Panel on Climate Change (IPCC), has affirmed that:

> Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen. . . Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems.[8]

In 2009, the Environmental Protection Agency (EPA) issued a finding that the changes in our climate caused by elevated concentrations of GHG in the atmosphere are reasonably anticipated to endanger the public health and welfare of current and future generations. *See* Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009). The D.C. Circuit Court of Appeals upheld this decision as supported by the vast body of scientific evidence on the subject. *See Coal. for Responsible Regulation, Inc. v. EPA.*, 684 F.3d 102, 120–22 (D.C. Cir. 2012).

Most climatologists agree that, while the warming to date is already causing environmental problems, another 0.4 degree Fahrenheit rise in temperature, representing a global average atmospheric concentration of carbon dioxide (CO2) of 450 parts per million (ppm), could set in motion unprecedented changes in global climate and a significant increase in the severity of natural disasters—and could represent the point of no return. [9]

[8] *See* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014 SYNTHESIS REPORT SUMMARY FOR POLICYMAKERS 2, (2014), https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf.
[9] *See* Doug Moss & Roddy Scheer, *Have We Passed the Point of No Return on Climate Change?*, SCIENTIFIC AMERICAN, (April 13, 2015), http://www.scientificamerican.com/article/have-we-passed-the-point-of-no-return-on-climate-change/.

The 2018 IPCC Special Report on Global Warming of 1.5°C found that human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, and that warming is likely to reach 1.5°C between 2030 and 2052 at the current rate.[10] This landmark report warns that the 2°C maximum temperature threshold is no longer accurate, and that warming of 1.5°C beyond pre-industrial levels will cause grave social and economic damage. Additionally in 2018, the U.S. Global Change Research Program published the Fourth National Climate Assessment (NCA4), finding "that the evidence of human-caused climate change is overwhelming and continues to strengthen, that the impacts of climate change are intensifying across the country, and that climate-related threats to Americans' physical, social, and economic well-being are rising."[11]

The National Oceanic and Atmospheric Administration (NOAA) released the 2018 National Climate Report, a major scientific report by 13 Federal agencies saying that climate change could shrink the US economy by 10 percent if significant steps are not taken to address emissions.[12] The assessment predicts devastating impacts on the economy, public health, and the environment including, falling agricultural yields, longer fire seasons, disrupted export and supply chains, threats to water supplies, flooding, and outbreaks of disease, among other adverse impacts.

These reports emphasize the need to take immediate action to mitigate climate change impacts. Despite new data from the most reliable scientific sources, the Trump Administration's energy dominance policy continues to prioritize fossil fuel production and expand drilling on Federal lands. BLM must consider these reports in a climate change analysis and make decisions relative to potential land use allocations and oil and gas leasing and development in the Mount Lewis Field Office accordingly.

The Environmental Assessment (EA) for the BLM Nevada June 2020 lease sale largely does not consider these important studies.

ii. The impacts of climate change are already being felt and will intensify in the future.

According to the Cumulative BLM New Mexico Greenhouse Gas Emissions 2019 white paper, average temperatures in southern Colorado and New Mexico rose "just under 0.7 degrees Fahrenheit per decade between 1971 and 2001, which is approximately double the global rate of temperature increase." *See* BLM 2019 p. 7, citing Rahmstorf, S.G. (2012). Comparing Climate Projections to Observations up to 2011. *Environmental Research Letters,* 7:004035. Climate modeling estimates that temperatures in this region "may rise by 4-6 degrees Fahrenheit by the end of the 21st century, with warming increasing from south to north." *Id.*

As highlighted above, there is an abundance of scientific research describing how climate change

[10] *See* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, GLOBAL WARMING OF 1.5°C SUMMARY FOR POLICYMAKERS 6 (2018), https://www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15_SPM_version_stand_alone_LR.pdf.

[11] U.S. GLOBAL CHANGE RESEARCH PROGRAM, FOURTH NATIONAL CLIMATE ASSESSMENT: VOLUME II IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES 36 (2018), https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf [hereinafter NCA4].

[12] *See* NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION, STATE OF THE CLIMATE: GLOBAL CLIMATE REPORT FOR ANNUAL 2018 (2019), https://www.ncdc.noaa.gov/sotc/global/201813.

impacts will intensify in the future. The NCA4 found:

- The unprecedented droughts in the Colorado River Basin and California showed increased temperatures from climate change intensified the severity of the drought. Models project more drought under climate change, snowpack and streamflow decline in parts of the Southwest, and decreasing surface water supply reliability for cities, agriculture, and ecosystems. Declining streamflow to Lake Mead threatens lands in rural Nevada.
- The Southwest produces more than half of the nation's high-value specialty crops, which are irrigation-dependent and particularly vulnerable to extremes of moisture, cold, and heat. Reduced yields from increasing temperatures and increasing competition for scarce water supplies will displace jobs in some rural communities.
- Tree death across the western United States doubled from 1955 to 2007, likely due to increased heat, wildfire, and bark beetle infestations, all of which are mainly attributable to climate change.
- Increased warming, drought, and insect outbreaks, all caused by or linked to climate change, have increased wildfires and impacts to people and ecosystems. Fire frequency could increase by 25%, and the frequency of very large fires (greater than 5,000 hectares) could triple.
- Reductions in runoff would increase the salinity of Pyramid Lake in Nevada, reducing fish biodiversity and affecting the cui-ui fish, which is Federally endangered, and the primary cultural resource of the Pyramid Lake Paiute Tribe.
- Impacts specific to Indigenous peoples include declining vegetation, higher temperatures, diminished snow, and soil desiccation have caused dust storms and more mobile dunes on some Navajo and Hopi lands, resulting in damaged infrastructure and grazing lands and loss of valued native plant habitat. There is evidence that shows climate-related environmental changes on culturally important foods, practices, and mental and spiritual health.[13]

Marginalized communities and indigenous people often feel the impacts of climate change disproportionately. For instance, indigenous peoples tend to live in more natural environments and have a symbiotic relationship with nature. "This gives them an extraordinarily intimate knowledge of local weather and plant and animal life. Traditional wisdom on matters such as when to plant crops or where to hunt for food has been accumulated over many generations, but now that the climate is shifting, some of those understandings are proving to be no longer valid."[14] Climate change not only threatens their livelihood, but their culture, their language, and their way of life. Marginalized communities tend to live in places most vulnerable to the impacts of climate change. According to John Magrath, Programme Researcher at Oxfam:

> Minorities tend to live in the more marginal areas, exposed areas, that seem to be seeing more climate changes and are more susceptible to climate impacts because they have got less, and get less, from governments . . . . It is a characteristic of all the studies that I have seen, that the ethnic communities are the people who suffer most from climate impacts and

[13] NCA4 at 1107-1109.

[14] Rachel Baird, *The Impact of Climate Change on Minorities and Indigenous Peoples*, MINORITY RIGHTS GROUP INTERNATIONAL 4 (2018), https://minorityrights.org/wp-content/uploads/old-site-downloads/download-524-The-Impact-of-Climate-Change-on-Minorities-and-Indigenous-Peoples.pdf.

are the most vulnerable.[15]

Marginalized communities are more likely to live in neighborhoods with less tree cover to help reduce heat and more concrete to trap it. They also have less access to air conditioning. A 2013 study found that African Americans in Los Angeles have a heatwave mortality rate that is two times high than the city average.[16] A recent study found that formerly redlined neighborhoods are on average 5°F hotter than non-redlined neighborhoods.[17] Climate change will make extreme weather events like heatwaves, more frequent and more severe, disproportionately affecting minorities and indigenous peoples. Climate change is also acutely impacting Federal public lands and resources.

iii. Climate change is caused primarily by GHG emissions from fossil fuel use, with public lands playing a key role.

The contribution of Federal lands mineral production to the climate change problem is significant. The U.S. Federal Government is one of the largest energy asset managers in the world – responsible for over 2.4 billion acres of subsurface mineral rights, including resources like coal, crude oil, and natural gas. The Federal government does not regularly track climate emissions associated with fossil energy development on public lands, nor has it ever set reduction goals for these emissions. 2018 and 2020 reports by The Wilderness Society (attached as Exhibits 2 & 3) provide an in-depth look at the significant lifecycle emissions resulting from the development of fossil fuels on U.S. public lands. These reports found that in 2017, Federal lands supplied 42% of all coal, 24% of all crude oil, and 13% of all-natural gas produced in the United States. Over the last decade, the lifecycle emissions associated with these publicly owned fossil fuel resources amounted to approximately 20% of all U.S. GHG emissions.

To put this in perspective, if Federal public lands were a country, they would be the fifth-largest emitter of GHGs in the world. The Wilderness Society researchers found that development of oil and gas leases sold at auction between January 2017 and January 2020 could result in lifecycle emissions between 1 billion and 5.95 billion metric tons (MT) carbon dioxide-equivalent (CO_2e).[18] Of these potential emissions, onshore leasing during this period accounts for roughly 62% of total estimated emissions (3.68 billion MT CO_2e), while offshore leasing accounts for 38% (2.27 billion MT CO_2e).[19] In order to stay under the 2°C limit supported by leading scientists, emissions associated with Federal lands energy development need to be reduced from 1.52 billion tons carbon dioxide equivalent (CO_2e) per year to between 1.16 billion and 1.13 billion tons CO_2e per year by 2025 to be in-line with economy-wide reductions.[20] The analysis concludes that CO_2e emissions

[15] *Id.* at 2.
[16] Alana Hansen et al., *Vulnerability to extreme heat and climate change: is ethnicity a factor*? 6 GLOBAL HEALTH ACTION 21,364 (2013), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3728476/.
[17] Jeremy Hoffman et al., *The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas* (2020), https://www.mdpi.com/2225-1154/8/1/12/htm.
[18] THE WILDERNESS SOCIETY, THE CLIMATE REPORT 2020: GREENHOUSE GAS EMISSIONS FROM PUBLIC LANDS AT 6 (2020), https://www.wilderness.org/sites/default/files/media/file/TWS_The%20Climate%20Report%202020_Greenhouse%20Gas%20Emissions%20from%20Public%20Lands.pdf.
[19] *Id*. at 6.
[20] THE WILDERNESS SOCIETY, IN THE DARK; THE HIDDEN CLIMATE IMPACTS OF ENERGY DEVELOPMENT ON PUBLIC LANDS 3 (2018), https://www.wilderness.org/sites/default/files/media/file/In the Dark

from Federal lands is on pace to exceed these targets by roughly 300 million tons or 25%. The Federal government has failed to provide adequate policies to address emissions stemming from public lands. BLM must seriously consider how its management of energy development on our public lands is a critical component of any national emissions reduction strategy.

Government reports confirm these findings. A 2018 U.S. Geological Survey (USGS) report, *Federal Lands Greenhouse Gas Emissions and Sequestration in the United States: Estimates for 2005-14*, found that GHG emissions from Federal energy production on public lands are a significant source of total U.S. emissions.[21] Nationwide emissions from fossil fuels produced on Federal lands in 28 States and two offshore areas in 2014 were 1,279.0 million metric tons of carbon dioxide equivalent (MMT CO_2e) for carbon dioxide (CO2), 47.6 MMT CO2 Eq. for methane (CH4), and 5.5 MMT CO_2e for nitrous oxide (N2O).[22] The 2018 USGS analysis referenced above found that:

> [n]ationwide emissions from [fossil] fuels extracted from Federal lands in 2014 were 1,279.0 MMT CO_2 Eq. [million metric tons of carbon dioxide equivalent] for CO_2 [carbon dioxide], 47.6 MMT CO_2 Eq. for CH_4 [methane], and 5.5 MMT CO_2 Eq. for N_2O [nitrous oxide]. . . . On average, Federal lands fuels emissions . . . accounted for 23.7 percent of national CO_2 emissions, 7.3 percent for CH_4, and 1.5 percent for N_2O [over the ten years included in this estimate].[23]

In short, the best available scientific information demonstrates that we cannot continue to lease, develop, and burn fossil fuels at current rates and must move rapidly to a net-zero carbon budget from public lands.[24] Despite this information, the Trump Administration has offered up 24.5 million acres of publicly owned land and minerals to oil and gas companies as of March 2020. This is greater than the size of Indiana. Off our coasts, the Administration has offered 359,537,572 acres of publicly owned waters to oil and gas companies. Our last remaining wild places are under tremendous threat from pressures for oil, gas, and mineral extraction on public lands. Americans depend on these unique wild lands for their way of life. Energy companies already have more leases than they can use — of the 25.5 million acres currently under lease to oil and gas companies, nearly half are sitting idle.[25] The production horizons for already leased federal fossil fuel resources underscore how unwarranted any additional leasing is, and in turn how unreasonable new leasing is.

Comparing production horizons to dates at which carbon budgets would be exceeded if current emission levels continue demonstrates the critical need for the Federal government to immediately

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Report_FINAL_Feb_2018.pdf.

[21] *See* MATTHEW D. MERRILL, ET AL., FEDERAL LANDS GREENHOUSE EMISSIONS AND SEQUESTRATION IN THE UNITED STATES—ESTIMATES FOR 2005–14, U.S. GEOLOGICAL SURVEY SCIENTIFIC INVESTIGATIONS REPORT 1 (2018), https://doi.org/10.3133/sir20185131. [hereinafter USGS Report]

[22] *Id.* at 1.

[23] *Id.* at 6.

[24] DUSTIN MULVANEY, ET AL. OVER-LEASED: HOW PRODUCTION HORIZONS OF ALREADY LEASED FEDERAL FOSSIL FUELS OUTLAST GLOBAL CARBON BUDGETS 5 (2016), https://1bps6437gg8c169i0y1drtgz-wpengine.netdna-ssl.com/wp-content/uploads/wpallimport/files/archive/Over_Leased_Report_EcoShift.pdf. [hereinafter Over-Leased].

[25] BLM Oil and Gas Statistics webpage, Table 2 and Table 6. https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/oil-and-gas-statistics

acknowledge the climate impacts of development on public lands. For example:

- Federal crude oil already leased will continue producing for 34 years beyond the 1.5°C threshold and 19 years beyond the 2°C threshold;
- Federal natural gas already leased will continue producing 23 years beyond the 1.5°C threshold and 8 years beyond the 2°C threshold;
- Federal coal already leased will continue producing 20 years beyond the 1.5°C threshold and 5 years beyond the 2°C threshold.[26]

Choosing not to lease oil and gas parcels could be a very significant part of U.S. efforts to address climate change. 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.[27] This avoided production would significantly reduce future U.S. emissions. Cessation of new and renewed leases for federal fossil fuel extraction could reduce CO2 emissions by about 100 Mt per year by 2030.[28]

BLM could also address the anticipated GHG emissions from new leasing through mitigation to ensure net-zero carbon emissions from public lands, as discussed further below. While net-zero emissions should be achieved by 2030 to avoid the most catastrophic impacts of climate change, they absolutely must be achieved by 2050, with at least a 45% reduction in emissions by 2030. As described in the IPCC's 2018 Special Report, "Limiting warming to 1.5°C implies reaching net zero CO_2 emissions globally around 2050 and concurrent deep reductions in emissions of non-CO_2 forcers, particularly methane."[29] "In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO_2 emissions decline by about 45% from 2010 levels by 2030 (40–60% interquartile range), reaching net-zero around 2050 (2045–2055 interquartile range)."[30] Despite the crucial need to rapidly decrease and eliminate GHG emissions from public lands, the Trump Administration has worked to dismantle policies designed to reduce emissions.

Despite the crucial need to rapidly decrease and eliminate GHG emissions from public lands, the Trump Administration has worked to dismantle policies designed to reduce emissions.

[26] DUSTIN MULVANEY, ET AL. OVER-LEASED: HOW PRODUCTION HORIZONS OF ALREADY LEASED FEDERAL FOSSIL FUELS OUTLAST GLOBAL CARBON BUDGETS 5 (2016), https://1bps6437gg8c169i0y1drtgz-wpengine.netdna-ssl.com/wp-content/uploads/wpallimport/files/archive/Over_Leased_Report_EcoShift.pdf. [hereinafter Over-Leased].
[27] PETER ERICKSON & MICHAEL LAZARUS, *HOW WOULD PHASING OUT U.S. FEDERAL LEASES FOR FOSSIL FUEL EXTRACTION AFFECT CO2 EMISSIONS AND 2°C GOALS?,* STOCKHOLM ENVIRONMENTAL INSTITUTE 16 (2016), https://mediamanager.sei.org/documents/Publications/Climate/SEI-WP-2016-02-US-fossilfuel-leases.pdf.
[28] Over-Leased, *supra* note 15, at 6.
[29] Rogelj, J., D. Shindell, K. Jiang, S. Fifita, P. Forster, V. Ginzburg, C. Handa, H. Kheshgi, S. Kobayashi, E. Kriegler, L. Mundaca, R. Séférian, and M.V.Vilariño, 2018: Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press. *Executive Summary*
[30] *Id.*

Under the Obama Administration BLM adopted the 2016 Methane (or Waste) Rule that had important climate implications. *See* Waste Prevention, Production Subject to Royalties, and Resource Conservation, 81 Fed. Reg. 83,008 (Nov. 18, 2016). The Methane Rule put in place strong new regulations to reduce venting, flaring, and leaking of natural gas (methane), an extremely potent greenhouse gas. Pursuant to a March 2017 Executive Order (EO 13783) and related Interior Department Secretarial Order (SO 3349), the Trump Administration has rescinded the rule. *See* Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements, 83 Fed. Reg. 49,184 (Sept. 28, 2018). The rescission is currently being challenged in court. *State of California v Bernhardt,* Case No. 4:18 cv 05712 YGR (N.D. Calif.) (Methane Rule).

BLM's environmental analysis must also consider that undeveloped Federal lands act as a critical carbon sink. The USGS found that in 2014, Federal lands of the conterminous United States stored an estimated 83,600 MMT CO_2 Eq., in soils (63%), live vegetation (26%), and dead organic matter (10%).[31] In addition, the USGS estimated that Federal lands "sequestered an average of 195 MMT CO_2 Eq./yr between 2005 and 2014, offsetting approximately 15% of the CO_2 emissions resulting from the extraction of fossil fuels on Federal lands and their end-use combustion."[32] BLM must account for potential loss of carbon storage in its leasing decisions, including analysis of how the decisions and resulting fossil fuel development will increase negative climate impacts. The agency's analysis should include consideration of the time lag between leasing and reclamation and the significance of the loss of carbon sinks on GHG emissions and climate change during that time period.

Utah State University (USU) studied the impacts of climate change on the multiple uses that BLM is charged with managing and made recommendations for how the agency should be addressing this issue in its land management planning and other decisions. Attached as Exhibit 4. The study reviewed 225 papers published between 2009 and 2018, and found that active uses on BLM lands, such as energy development, threaten passive uses such as conservation and ecosystem services. Under FLPMA, BLM is required to manage the public lands based on the principles of multiple use and sustained yield. Yet, in reviewing 44 BLM RMPs, the study found that there was little consideration of climate change impacts to ecosystems and land uses and that adaptive responses to climate change were not considered. BLM must plan for climate change to fulfill its conservation mandate, especially the need for prioritizing different uses, but BLM's planning remains inadequate. Passive uses are under-prioritized by BLM in favor of active uses. Energy extraction contributes the most to anthropogenic climate change of all the land uses BLM manages. Consequently, the study concluded the most direct way the BLM can reduce its contribution to climate change is by reducing permits for energy extraction. The widespread lack of consideration of climate change in BLM management plans negatively impacts BLM's multiple use mandate. More thorough incorporation of science is needed for effective natural resources management in the face of a climate-change affected future. BLM should consider the USU report as it analyzes, and addresses climate impacts associated with the Nevada June 2020 lease sale.

[31] USGS Report, *supra* note 13, at 12-13.
[32] *Id.* at 1.

4. BLM must fully analyze the impacts of climate change for this lease sale under NEPA

The National Environmental Policy Act (NEPA) is our "basic national charter for the protection of the environment." 40 C.F.R. § 1500.1(a). It achieves its purpose through "action forcing" procedures. *Id.* §§ 1500.1(a), 1502.1. The courts have termed this crucial evaluation as a "hard look." *Ocean Advocates v. U.S. Army Corps of Engineers,* 402 F.3d 846, 864 (9th Cir. 2005). NEPA's fundamental purpose is to ensure "important effects will not be overlooked or underestimated." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). NEPA requires BLM to consider national policy in its decision-making process. 40 C.F.R. §§ 1500.6, 1502.16(c), 1506.2(d).[33] This includes the consideration of the best available information and data, as well as disclosure of any inconsistencies with federal policies and plans. *Id.* §§ 1502.22, 1502.24.

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." 42 U.S.C. §§ 4331(b)–(c). Agencies "to the fullest extent possible" are to achieve the policies of NEPA, which include:

- Using a systematic and interdisciplinary approach in planning and decision-making that may have an impact on man's environment;
- Considering presently unquantified environmental amenities and values in decision-making;
- Recognizing the worldwide and long-range character of environmental problems; and;
- Initiating and using ecological information in planning and the development of resource-oriented projects.

Id. §§ 4332(1)A), (B), (F), (H).

It is well established that Federal agencies must analyze climate change when conducting land use planning, including in this lease sale EA. *See, e.g.*, *Wilderness Workshop v. Bureau of Land Mgmt.,* 342 F. Supp. 3d 1145, 1156 (D. Colo. 2018) (holding BLM failed to take a hard look at the severity and impacts of GHG pollution, specifically the indirect impacts of oil and gas combustion, in an RMP revision); *W. Org. of Res. Councils v. Bureau of Land Mgmt.,* 2018 U.S. Dist. LEXIS 49635 at 53-54 (D. Mont., Mar. 26, 2018) (holding BLM needed to consider climate change impacts relative to the amount of coal available for leasing, consider the downstream combustion of coal, oil, and gas open to development, and consider a 20-year global warming potential rather than 100-year).

NEPA requires a more searching analysis than merely disclosing the amount of GHG pollution.

[33] NEPA regulations direct federal agencies to "discuss any inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned)," 40 C.F.R. § 1506.2(d), and require agencies to address "[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned." 40 C.F.R. § 1502.16(c).

BLM must 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). BLM must also consider unquantified effects, recognize the worldwide and long-range character of climate change impacts, and incorporate this analysis of ecological information into its environmental analysis. 42 U.S.C. §§ 4332(2)(B), (F), (H).

Federal courts have repeatedly rejected agency claims that analysis at the lease sale stage would be speculative. "Because speculation is implicit in NEPA, we must reject any attempt by agencies to shirk their responsibilities under NEPA labeling any and all discussion of future environmental effects as crystal ball inquiry." *Northern Plains Res. Council, Inc. v. Surface Transportation Bd.,* 668 F.3d 1067, 1078–79 (9th Cir. 2011) (quotations and alternations omitted) (rejecting agency's argument that coalbed methane drilling was "too speculative" to analyze).

The Tenth Circuit Court of Appeals recently held that the preparation of a Reasonably Foreseeable Development Scenario (RFDS) makes it reasonably foreseeable that the number of wells identified "*would be drilled*," and NEPA, therefore, requires BLM to consider impacts of those wells in its lease sale NEPA analysis. *Diné Citizens Against Ruining Our Env't v. Bernhardt*, 923 F.3d 831, 853 (10th Cir. 2019) (emphasis added). While the EA includes an RFDS, BLM fails to complete the necessary analysis under NEPA.

To comply with NEPA, BLM must at a minimum conduct NEPA analysis for this lease sale to include the following components:

- Complete an environmental assessment (EA) or environmental impact statement (EIS) to fully analyze climate change impacts and mitigation opportunities. This analysis must include, among other things, methane emissions, social cost of greenhouse gases, including carbon and methane, and loss of carbon sequestration.
- Quantify reasonably foreseeable GHG emissions – including end-use of fossil fuel extraction (downstream emissions) – and associated direct, indirect, and cumulative climate impacts associated with those emissions.
- Develop alternatives that allow the public and the decisionmaker to compare the anticipated levels of GHG emissions, including alternatives that close all lands to leasing or only make limited lands available for leasing, as well as other alternatives that ensure a net zero carbon budget.
- Analyze options to avoid, minimize, and fully mitigate GHG emissions, and energy development in the planning area (e.g., prioritize minimal development, but for where development does occur, do not open low-potential lands to leasing and assess the option value of delaying leasing.
- Establish a requirement for a lease notice to be attached to proposed leases to preserve BLM's ability to impose mitigation or offsets for climate change impacts at the application for permit to drill (APD) stage, or to delay/disapprove development.

An agency must "consider every significant aspect of the environmental impact of a proposed action." *Baltimore Gas & Electric Co. v. Natural Resources Defense Council*, 462 U.S. 87, 107 (1983) (quotations and citation omitted). This includes the disclosure of direct, indirect, and cumulative impacts of its actions, including climate change impacts and emissions. 40 C.F.R. §§

1502.16(a)–(b), 1508.25(c).

The need to evaluate such impacts is bolstered by the fact that "[t]he harms associated with climate change are serious and well recognized," and environmental changes caused by climate change "have already inflicted significant harms" to many resources around the globe. *Massachusetts v. EPA*, 549 U.S. 497, 521 (2007); *see also id.* at 525 (recognizing "the enormity of the potential consequences associated with manmade climate change"). Among other things, the agency's NEPA analysis must disclose "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity[,]" including the "[e]nergy requirements and conservation potential of various alternatives and mitigation measures." 42 U.S.C. § 4332(2)(C)(iv); 40 C.F.R. § 1502.16(e). Failing to perform such analysis undermines the agency's decision-making process and the assumptions made. Furthermore, the RFD in BLM Nevada's June 2020 lease sale is identical to the RFD and subsequent analysis on climate change impacts from the previous March 2020 lease sale, despite the lease sale being 556% larger in acreage.

i. Case law confirms BLM's obligation under NEPA to fully analyze climate impacts.

Federal courts have repeatedly confirmed that the BLM must consider climate change in its NEPA analysis of oil and gas lease sales. For instance, in *WildEarth Guardians* the court found that in issuing 282 leases in Wyoming, BLM "did not take a hard look at drilling-related and downstream GHG emissions from the leased parcels, and it failed to sufficiently compare those emissions to regional and national emissions." 368 F. Supp. 3d at 63. On that basis the court remanded the EAs and FONSIs to BLM for further analysis and enjoined BLM from issuing any APDs on the leases. *Id.* at 79–80. The court stated:

> In summary, the challenged EAs failed to take a hard look at the climate change impacts of oil and gas drilling because the EAs (1) failed to quantify and forecast drilling related GHG emissions; (2) failed to adequately consider GHG emissions from the downstream use of oil and gas produced on the leased parcels; and (3) failed to compare those GHG emissions to state, regional, and national GHG emissions forecasts, and other foreseeable regional and national BLM projects.

Id. at 76–77. "By asserting that these crucial environmental analyses are overly speculative at the leasing stage and more appropriate for later site-specific assessments, BLM risks relegating the analyses to the 'tyranny of small decisions.'" *Id.* at 77 (citation omitted).[34] These obligations hold true at the RMP stage as well. *See, e.g.*, *Wilderness Workshop v. BLM,* 342 F. Supp. 3d 1145, 1155–56 (D. Colo. 2018) (holding that BLM violated NEPA by not considering downstream indirect effects of emissions resulting from combustion of oil and gas and failed to analyze alternatives that would have made low-potential lands unavailable for leasing).

Federal courts have echoed these requirements in the coal leasing context – at both the leasing and RMP stages. *See, e.g.*, *W. Org. of Res. Councils v. BLM,* CV16-21-GF-BMM, 2018 WL 1475470,

[34] *See also, San Juan Citizens Alliance v. BLM,* 326 F. Supp. 3d 1227, 1244, 1249 (D.N.M. 2018) (invalidating lease sale where BLM failed to analyze downstream combustion and associated indirect impacts and admonishing the agency not to utilize outdated scientific tools and analyses).

at *29, 40, 53–54 (D. Mont. Mar. 26, 2018) (BLM failed to analyze downstream combustion impacts associated with lands made available for coal leasing in the RMP or to consider options that modified or foreclosed the amount of acreage available); *High Country Conservation Advocates v. U.S. Forest Service,* 52 F. Supp. 3d 1174, 1189–92, 1196–98 (D. Colo. 2014) (Forest Service failed to adequately analyze climate impacts of coal mine expansion, including subsequent combustion of the coal, or to utilize available tools such as the Social Cost of Carbon to quantify costs). The BLM must fully consider this case law as it prepares the NEPA analysis for this lease sale.

ii. BLM must fully analyze the direct, indirect, and cumulative impacts of GHG emissions.

NEPA requires full analysis of the direct, indirect, and cumulative climate impacts of reasonably foreseeable GHG emissions associated with the lease sale. 40 C.F.R. §§ 1502.16(a)-(b), 1508.25(c). In analyzing these impacts, the BLM needs to ensure it considers the full scope of development activities that are reasonably foreseeable under a BLM oil and gas lease: exploration, drilling, well completion (including hydraulic fracturing), production, gathering, boosting, processing, transportation, transmission, storage, distribution, refining, and end use.

Failure to fully analyze and disclose to the public the impacts of the leasing decision on GHG emissions and climate change violates NEPA. Lease issuance is the "point of no return" (*i.e.*, the point at which time BLM makes an irrevocable commitment of resources) for purposes of NEPA analysis. *WildEarth Guardians*, 368 F. Supp. 3d at 66. BLM itself identifies lease issuance as the point of irretrievable commitment of resources:

> The BLM has a statutory responsibility under NEPA to analyze and document the direct, indirect and cumulative impacts of past, present and reasonably foreseeable future actions resulting from Federally authorized fluid minerals activities. By law, these 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.[35]

It is at this point that BLM must analyze *all* direct, indirect, and cumulative impacts of its leasing decision. *See, e.g.*, *WildEarth Guardians*, 368 F. Supp. 3d at 65–66; *see also* 40 C.F.R. §§ 1508.7, 1508.8.

The BLM must ensure in its NEPA analysis for this lease sale that it considers the amount of GHG emissions likely to be generated as a result of well drilling on the leases that are sold, as well as the impacts of those emissions. In doing its assessment of direct, indirect, and cumulative impacts, BLM must communicate the "actual environmental effects resulting from . . . emissions" of GHGs, not just quantify them. *Ctr. for Biological Diversity v. National Highway Transportation Safety Administration.,* 538 F.3d 1172, 1216 (9th Cir 2008).[36]

[35] Bureau of Land Management., *H-1624-1 – Planning for Fluid Mineral Resources* § I.B.2, at I–2 (Feb. 20, 2018) (emphasis added), *available at* https://www.blm.gov/sites/blm.gov/files/H-1624-1%20rel%201-1791.pdf.

[36] In assessing direct, indirect, and cumulative impacts, BLM must use the best available science by analyzing the warming potential of methane emissions using both the IPCC's current upper-end 100-year global warming potential (GWP) for fossil methane of 36, and the IPCC's current upper-end 20-year GWP for fossil methane of 87. *See W. Org. of Res. Councils v. U.S. Bureau of Land Mgmt*., CV16-21-GF-BMM, 2018 WL 1475470, at *18 (D.

The indirect impacts of oil and gas leasing on GHG emissions (i.e., downstream emissions) must be considered in BLM's NEPA analysis, as repeatedly emphasized by the courts. *See San Juan Citizens Alliance*, 326 F. Supp. 3d at 1240–50 (BLM's reasoning for not analyzing indirect GHG emissions was "contrary to the reasoning in several persuasive cases that have determined that combustion emissions are an indirect effect"); *W. Org. of Res. Councils*, CV16-21-GF-BMM, 2018 WL 1475470, at *40. ("In light of the degree of foreseeability and specificity of information available to the agency while completing the EIS, NEPA requires BLM to consider in the EIS the environmental consequences of the downstream combustion of the coal, oil and gas resources potentially open to development under these RMPs."); *Wilderness Workshop*, 342 F. Supp. 3d at 1156) ("BLM acted in an arbitrary and capricious manner and violated NEPA by not taking a hard look at the indirect effects resulting from the combustion of oil and gas in the planning area under the RMP. BLM must quantify and reanalyze the indirect effects that emissions resulting from combustion of oil and gas in the plan area may have on GHG emissions."); *Sierra Club v. Fed. Energy Regulatory Comm'n*, 867 F.3d 1357, 1374 (D.C. Cir. 2017) (stating that GHG emissions from the combustion of gas "are an indirect effect of authorizing this [pipeline] project, which [the agency] could reasonably foresee"); *Mont. Envtl. Info. Ctr. v. U.S. Office of Surface Mining Reclamation and Enf't*, 274 F. Supp. 3d 1074, 1098-99 (D. Mont. 2017) (stating that indirect effects from coal trains include "the effects of the estimated 23.16 million metric tons of [GHG] emissions the Mining Plan EA concluded would result from combustion of the coal that would be extracted from the mine"); *Diné Citizens*, 82 F. Supp. 3d at 1213 ("find[ing] that the coal combustion-related impacts of [the mine's] proposed expansion are an 'indirect effect' requiring NEPA analysis").

BLM is obligated under NEPA to analyze the cumulative impacts on the climate of the past, present, and reasonably foreseeable oil and gas development in the project area. NEPA requires a detailed analysis of cumulative effects, which are "the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. §§ 1508.7, 1508.25(c). Analysis of cumulative impacts protects against "the tyranny of small decisions," *Kern v. BLM,* 284 F.3d 1062, 1078 (9th Cir. 2002), by confronting the possibility that agency action may contribute to cumulatively significant effects even where impacts appear insignificant in isolation. 40 C.F.R. §§ 1508.7. BLM must consider the reasonably foreseeable incremental and total contribution of GHG emissions from oil and gas development in the planning area when added to other relevant past, present, and reasonably foreseeable BLM-managed fossil-fuel extraction emissions as well as GHG emissions from non-federal sources.

The need to consider cumulative impacts has been confirmed by the courts. In *Ctr. for Biological Diversity*, the Ninth Circuit assessed an agency's NEPA analysis for a rule requiring automobile manufacturers to increase the fuel efficiency of their vehicles, thereby lowering average tailpipe emissions per mile driven. 538 F.3d 1172. The court stated that "[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct." *Id.* at 1217. There was a need to consider the broader range of impacts, not just the impacts of the action alone. *Id.* Likewise, in *Mid States Coalition for Progress*

Mont. Mar. 26, 2018).("BLM violated NEPA where it failed to justify its use of GWPs based on a 100-year time horizon rather than the 20-year time horizon of the RMPs. BLM also violated NEPA where it failed to acknowledge evolving science in this area . . ." that would justify a lower GWP).

v. Surface Transp. Bd., the Eighth Circuit held that NEPA requires an agency to disclose and analyze the impacts of future combustion of mined coal when deciding whether to approve a railroad line providing access to coal mining areas. 345 F.3d 520, 549–50 (8th Cir. 2003).

As stated in *WildEarth Guardians*, relating to an insufficient cumulative impacts analysis for oil and gas leasing in Wyoming:

> Without access to a data-driven comparison of GHG emissions from the leased parcels to regional and national GHG emissions, the public and agency decisionmakers had no *context* for the EAs' conclusions that GHG emissions from the leased parcels would represent only an "incremental" contribution to climate change. Likewise, they could not *conceptualize* the extent to which the lease sales would contribute to the local, regional, and global climate change discussed qualitatively in the EAs and tiered EISs.

368 F. Supp. 3d at 77. (emphasis added).

To satisfy NEPA's hard look requirement, the cumulative impacts assessment must do two things. First, BLM must catalog the past, present, and reasonably foreseeable projects in the area that might impact the environment. *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 809–10 (9th Cir. 1999). Second, BLM must analyze these impacts in light of the proposed action. *Id.* If BLM determines that certain actions are not relevant to the cumulative impacts analysis, it must "demonstrat[e] the scientific basis for this assertion." *Sierra Club v. Bosworth*, 199 F. Supp. 2d 971, 983 (N.D. Cal. 2002).

A failure to include a cumulative impact analysis of additional leasing that is already planned in the region renders a NEPA analysis insufficient. *See*, *e.g.*, *Kern*, 284 F.3d at 1078 (holding that an EA for a timber sale must analyze the reasonably foreseeable future timber sales within the area). The analysis here must include an analysis of the extent of past oil and gas leasing in the area, how this past leasing may have contributed to significant environmental impacts, and whether additional leasing may have an "additive and significant relationship to those effects." Council on Environmental Quality, Guidance on the Consideration of Past Actions in Cumulative Effects Analysis at 1 (June 24, 2005); *Lands Council v. Powell*, 395 F.3d 1019, 1028 (9th Cir. 2005).

BLM must ensure it fully considers not only the GHG emissions from wells drilled on the leases sold at this lease sale—and the climate change impacts of those GHG emissions—but also the impacts of other federal lease sales in the state, the region, and the nation, as well as impacts from GHG emissions from non-Federal sources. BLM must consider GHG emissions in the aggregate along with other foreseeable emissions. This is necessary to meet the cumulative impacts analysis requirements of NEPA.

While the EA considers the direct, indirect, and cumulative impacts of GHG emissions that could result from this lease sale in the EA, it declines to consider the climate change impacts of these emissions, claiming leasing does not cause direct or cumulative air quality impacts. EA at 23, 51. It says uncertainty prevents an estimate of climate change impacts, claiming leasing is just an administrative action with no direct impacts. *Id.* at 27. It would unlawfully defer impact analysis to the APD stage of development. *Id.* at 23. The BLM says downstream (indirect) GHG emissions

estimates can be made but climate change impacts due to those emissions cannot be. *Id.* at 26. The BLM says GHG emissions estimates can be used as a proxy from climate change impacts analysis, citing Council on Environmental Quality draft guidance. *Id.* at 52. However, this draft guidance cannot supersede what is required by statute. The BLM must fully analyze and disclose to the public of the direct, indirect, and cumulative effects of GHG emissions on climate change to comply with NEPA.

iii. BLM must consider the ecological, economic, and social impacts of GHG emissions utilizing best available science and information.

BLM's analysis must consider ecological, aesthetic, historical, cultural, economic, and social effects whether the impacts are direct, indirect, or cumulative. 40 C.F.R. § 1508.8(b). BLM's NEPA analysis must ensure the scientific integrity of the discussions and analyses, particularly on GHG emissions and climate change. *Id.* § 1502.24. To meet these requirements, there are several protocols and analyses available that should be reflected in the NEPA analysis.

a. BLM should employ the social cost of carbon and social cost of methane protocols.

The Social Cost of Carbon (SCC) is a leading tool for quantifying the climate impacts of proposed federal actions.[37] It is an estimate, in dollars, of the long-term damage caused by a one-ton increase in carbon dioxide (CO2) emissions in a given year; or viewed another way, the benefits of reducing CO2 emissions by that amount in a given year. The SCC is intended to be a comprehensive estimate of climate change damages that includes, among other costs, the changes in net agricultural productivity, risks to human health, and property damages from increased flood risks. A court has recognized its applicability to NEPA analyses. *High Country Conservation Advocates,* 52 F. Supp. 3d at 1190–93 (determining that the U.S. Forest Service's decision to not employ SCC was arbitrary and capricious and violated NEPA). By ignoring the need to accurately quantify the costs of climate change, BLM is essentially zeroing out the potential costs of development that could occur under the proposed action. Courts do not allow such an approach under NEPA. *Id.* To the extent that the BLM does not use the SCC, the agency must still find a way to calculate these costs.

Similarly, the Social Cost of Methane is another available tool that BLM could use in its NEPA analysis to analyze and disclose the significance of impacts of its decisions as required by 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b).[38] Both tools should be utilized here.

[37] Interagency Working Group on Social Cost of Carbon, *United States Government, Technical Support Document: - Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866* at 2 (Aug. 2016 revision). Although President Trump directed the Office of Information and Regulatory Affairs to withdraw this metric in Executive Order 13,783 (82 Fed. Reg. 16,093 (Mar. 28, 2017)), it remains the best available tool for complying with the legal requirement to analyze the effects of GHG emissions.

[38] Interagency Working Group on Social Cost of Greenhouse Gases (IWG), *Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide* 2-3 (2016), *available* at: https://www.epa.gov/sites/production/files/2016-12/documents/addendum_to_sc-ghg_tsd_august_2016.pdf.

b. BLM should utilize global carbon budgets.

A carbon budget sets a cap on the remaining GHG that can be emitted while keeping global average temperature rise below scientifically researched warming thresholds (2°C or 1.5°C). BLM should consider a carbon budget in this EA and disclose what portion of the remaining budget the lease sale's cumulative emissions will consume. Like the social cost of GHGs, a carbon budget "disclose[s] the actual environmental effects" of the project in a way that "brings those effects to bear on [the agency's] decisions." *See Baltimore Gas & Electric Co.*, 462 U.S. 87 at 96. BLM should utilize a carbon budget so that the climate change NEPA analysis is based on the best available science, as required by the NEPA regulations. 40 C.F.R. § 1502.24.

To ensure the scientific integrity of this NEPA analysis, BLM should use available tools, such as the social cost of greenhouse gases (carbon and methane) and carbon budgeting analyses. *See* 43 C.F.R. § 1502.24 ("Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.").

BLM has failed to disclose the significance of emissions and should utilize both the social cost of GHGs and carbon budgeting to do so.

iv. Climate change impacts must be integrated into the environmental baseline and across alternatives.

Considerations of existing and reasonably foreseeable climate change impacts must be integrated into the environmental baseline and across alternatives, including the no action alternative, in order to facilitate the requisite hard look at impacts that NEPA requires. Agencies are required under NEPA to "describe the environment of the area(s) to be affected or created by the alternatives under consideration," which creates the "baseline" for the impacts analysis and comparison of alternatives. 40 C.F.R. § 1502.15. As the Ninth Circuit held, "without establishing the baseline conditions . . . there is simply no way to determine what effect the proposed [action] will have on the environment and, consequently, no way to comply with NEPA." *Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988). The court further held that "[t]he concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process." Excluding climate change effects from the environmental baseline ignores the reality that the impacts of proposed actions must be evaluated based on the already deteriorating, climate-impacted state of the resources, ecosystems, human communities, and structures that will be affected.

The underlying RMP is drastically out of date and in need of revision. This thirty-year old RMP (the 1986 Shoshone-Eureka RMP) cannot be used to inform the baseline conditions in the area. After 20 plus years it is impossible for the BLM to credibly claim that these same lands would be available for leasing under the same conditions if a new, updated RMP was developed. Until these problems are corrected in an updated environmental impact statement (EIS) and/or RMP, the current RMP cannot be used to support the June 2020 lease sale.

Similarly, it is important for BLM to consider the "context" of climate change problems. This includes "society as whole (human, national), the affected region, the affected interests, and the

locality." 40 C.F.R. § 1508.27(a). "Both short- and long-term effects are relevant." *Id.; see also* 42 U.S.C. § 4332(2)(F) (requiring agencies to "recognize the worldwide and long-range character of environmental problems"). The world as a whole must be considered in a NEPA climate change analysis. *See Montana Envtl. Info. Ctr.,* 274 F. Supp. 3d at 1101–02 (for greenhouse gases, an agency may not "limit its context analysis to the local and regional level"); *accord Barnes v. U.S. Dep't of Transp.,* 655 F.3d 1124, 1139 (9th Cir. 2011) (noting "the effect of greenhouse gases on climate is a *global* problem" (emphasis in original)). Thus, in setting the "context" for this EA analysis, BLM must consider the local environment where the lease parcels are located, as well as regional, national, and global climate impacts.

v. BLM must fully consider measures to mitigate climate impacts.

NEPA and associated CEQ regulations require BLM to analyze potential impacts and consider ways to avoid, minimize and mitigate impacts, in accordance with the mitigation hierarchy. 40 C.F.R. §§ 1508.8, 1502.14, 1502.16, 1508.20. Specifically, agencies must "include appropriate mitigation measures not already included in the proposed action or alternatives." *Id.* §§ 1502.14(f), 1502.16(h). In its environmental analysis to support this lease sale, BLM must consider "[e]nergy requirements and conservation potential of various alternatives and mitigation measures" and means to mitigate adverse environmental impacts. *Id.* §§ 1502.16(e), (h).

BLM must first seek to avoid impacts, with second priority to minimize impacts (e.g., through project modifications, permit conditions, interim and final reclamation, etc.), and, generally, only if those approaches are insufficient to fully mitigate the impacts, will BLM seek to require compensation for some or all of the remaining impacts (i.e., residual effects). Tools such as regional mitigation strategies, compensatory mitigation funds, and conservation agreements allow land managers, in partnership with developers and stakeholders, to prioritize areas for different uses based on the full range of trust resources present and determine whether avoidance, minimization, or compensation of development impacts is appropriate in specific contexts and locations. This decisional hierarchy protects the other uses of public land – including hunting, fishing, and outdoor recreation – and gives industry better information to plan their investments and a more predictable and efficient permitting process.

Simply stating that climate change is occurring and the proposed action would contribute to its effects is inadequate; BLM must utilize that analysis to evaluate and ultimately adopt decisions that lessen or eliminate those impacts, such as closing areas to leasing, not leasing in areas with low or no development potential, requiring emissions mitigation technologies for future leases, and/or requiring inclusion of lease notices and stipulations for future leases to preserve the agency's ability to address climate impacts at the time of development.

In developing mitigation measures for this lease sale, the BLM needs to fully consider the impacts from climate change that are being seen locally, on a statewide basis, a national basis, and worldwide. Locally these include things like impacts to forage that livestock graze and impacts to the habitat of wildlife species that occur on BLM lands. Increased wildfire frequency and severity is a significant issue, as are invasive species problems. Globally and nationally things like increasing sea levels need to be considered. BLM can at least put in place measures to mitigate local impacts in this EA because BLM has widespread authority over these lands.

BLM must seek to avoid impacts; then minimize impacts (e.g., through project modifications, permit conditions, interim and final reclamation, etc.). This protects the other uses of public land – including hunting, fishing, and outdoor recreation – and gives industry better information to plan their investments and a more predictable and efficient permitting process. In accordance with NEPA, FLPMA, the Administrative Procedure Act, other laws and case-law, BLM's decisions regarding mitigation must not be arbitrary or capricious.

Mitigation measures can be used to support a finding of no significant impact (FONSI). *See, e.g., Spiller v. White,* 352 F.3d 235, 239 (5th Cir. 2003) (approving the use of mitigated FONSIs). But to do this, the *efficacy* of the mitigation measures must be fully analyzed and be *enforceable*. If the BLM issues a FONSI for this lease sale, it must ensure the mitigation measures relative to climate change outlined in it will be enforced.

Mitigation of impacts to air quality due to oil and gas development is discussed in the EA. EA at 27. BLM states that best management practices (BMPs), conditions of approval (COA) and compliance with the venting and flaring provisions at 43 C.F.R. § 3179 may be employed. A few potential emissions reductions measures that might be used are listed, which we appreciate. But while we appreciate these mitigation measures, we believe the BLM should analyze them fully as opposed to merely listing them and consider expanding them. Mitigation measures that deal with the local impacts of climate change, like increased fire severity and frequency, and invasive species incursions should be more fully considered. Tools such as regional mitigation strategies, compensatory mitigation funds, and conservation agreements should be considered. And BLM must ensure that the mitigation measures are fully enforceable if used to justify the issuance of FONSI for this lease sale.

vi. BLM must analyze option value, carbon sequestration, and climate impacts on multiple uses.

In this NEPA analysis BLM can and should apply the principles of option, or informational, value, which permit the agency to look at the benefits of delaying irreversible decisions.[39] A recent New York University School of Law report examines the business schemes and practices utilized by private oil and gas companies when leasing public lands. The report, attached as Exhibit 5, found that "[w]hile private companies routinely account for option value, timing their purchasing and development decisions to be privately optimal, BLM fails to account for option value in its land use planning and lease sale processes."[40] Failing to account for the informational value of waiting puts the American people at economic and financial disadvantages. The consideration of option value before offering leases would result in more consideration of climate risks and would reduce economic costs.[41]

[39] *See* Jayni Foley Hein, *Harmonizing Preservation and Production,* INSTITUTE FOR POLICY INTEGRITY at 13 (June 2015) ("Option value derives from the ability to delay decisions until later, when more information is available... In the leasing context, the value associated with the option to delay can be large, especially when there is a high degree of uncertainty about resource price, extraction costs, and/or the social and environmental costs of drilling.") *available at* https://policyintegrity.org/files/publications/DOI_LeasingReport.pdf.
[40] New York University School of Law; Institute for Policy Integrity, *Look Before You Lease; Reducing Fossil Fuel Dominance on Public Lands by Accounting for Option Value* 4 (2020).
[41] *Id*. at 24.

The report makes recommendations for how BLM can modernize their leasing and planning processes to account for option value, and ensure the public is fairly compensated for its forgone option value. BLM can do this using existing legal authority. Recommendations include offering only high-potential lands, if any, in lease sales, increasing minimum bids, and exploring other means of accounting for environmental and social considerations (such as valuing carbon sink attributes). Option value considerations are of notable importance in the ongoing planning effort given the extreme drop in oil prices in recent months.

It is well established that issuance of an oil and gas lease is an irreversible commitment of resources. As the U.S. Court of Appeals for the D.C. Circuit held in the context of considering the informational value of delaying leasing on the Outer Continental Shelf, "[t]here is therefore a tangible present economic benefit to delaying the decision to drill for fossil fuels to preserve the opportunity to see what new technologies develop and what new information comes to light." *Ctr. for Sustainable Econ.*, 779 F.3d at 610. The NEPA analysis for leasing must evaluate the economic benefits that could arise from delaying leasing and/or exploration and development by making much of the planning area closed to oil and gas leasing. Potential economic benefits include improvements in technology, additional benefits that could come from managing these lands for other uses, including special designations, and additional information on the impacts of climate change and ways to avoid or mitigate resulting changes to the affected environment.

BLM has the ability and obligation to undertake an analysis of the benefits of delaying leasing, which can be both qualitative and quantitative, considering both economic and environmental needs. In *Wilderness Workshop*, plaintiffs proposed a land use planning alternative where low and medium potential lands would be closed for leasing. BLM declined to consider the alternative, claiming it had already considered and discarded a "no leasing" alternative. 342 F. Supp. at 1167. The court ruled against the agency and found: "[t]his alternative would be 'significantly distinguishable' because it would allow BLM to consider other uses for that land." *Id*. Considering such an alternative would permit BLM to consider the option value of delaying leasing on low potential land and better consider climate change impacts.

In this NEPA analysis BLM should consider at least one alternative where option values would be preserved, delaying or deferring leasing. The BLM should attach stipulations to the leases that permit consideration of option value when development is proposed.

The BLM should also consider the values of its lands for sequestering carbon dioxide, and thus reducing climate change impacts, in this NEPA analysis. Native grasslands, rangelands, and soils can be important means to sequester carbon, thus removing it from the atmosphere. Development of these areas would release carbon stored in biomass as well as foregoing future carbon storage opportunity. Taken together, this is just as much part of the emissions analysis as lifecycle emissions from development and use the fuels themselves. This issue, therefore, must be considered in the NEPA analysis for this lease sale. Facilitating or promoting carbon sequestration is an important alternative or mitigation measure that could be adopted for this lease sale and must be fully analyzed.

BLM must also fully analyze the impacts of climate change on other multiple uses, including ways

to mitigate those impacts. As discussed above, the USU study, discusses the impact of climate change on BLM's multiple use mission and makes recommendations for how to address this issue. BLM fails to account for climate change as needed to fulfill its conservation mandate, especially the need for prioritizing different uses. More effective incorporation of science is needed for effective natural resources management in the face of a climate-change-affected future. Passive uses are under-prioritized by BLM in favor of active uses. Energy extraction contributes the most to anthropogenic climate change of all the land uses BLM manages. BLM must use the best available information, including but not limited to the USU study, to fully analyze the impacts of past, present, and reasonably foreseeable GHG emissions and associated climate impacts on multiple uses.

Mitigation measures should be considered in the context of BLM's multiple use mission and the need to protect those resources, such as cultural sites, wildlife resources, and recreation areas. The impacts of climate change to those resources must be fully analyzed. This should be fully apparent in the alternatives considered in the EA for this lease sale, as well as the baseline (affected environment) that is considered.

BLM has not conducted an options values analysis for this lease sale, which should be corrected. It also has not considered its multiple use mandate as a relevant consideration in analyzing and disclosing climate change impacts.

vii. BLM must analyze a reasonable range of alternatives.

It is imperative that BLM consider a reasonable range of alternatives for this lease sale that includes a range of options for reducing climate change impacts and GHG emissions. These would include, for example, no leasing, requiring mandatory offsets for GHG emissions, methane controls and other leasing stipulations, protections for carbon sinks, and consideration of option value alternatives. Other mitigation measures that could be included in the alternatives have been mentioned, such as tree planting and a carbon mitigation fee.

In this lease sale the BLM is only considering the "all or nothing" approach. EA at 10-11. This does not meet BLM's obligations under NEPA and needs to be reconsidered. BLM needs to considering deferring parcels in this lease sale to deal with climate change impacts as well as the other issues discussed in these comments.

viii. The underlying Resource Management Plan must support the NEPA analysis and leasing decisions.

The underlying RMP must support this lease sale with an up-to-date and scientifically supported climate change analysis of oil and gas leasing and development, including but not limited to quantification of reasonably foreseeable GHG emissions and associated climate change impacts, as well as a cumulative impact analysis and a discussion of the significance of the emissions. It should also include an up-to-date Reasonably Foreseeable Development Scenario (RFDS) to inform an accurate analysis of climate impacts, as well as availability and other plan-level direction on oil and gas leasing and development that fully accounts for climate impacts. *See Wilderness Workshop*, 342 F. Supp. 3d at 1167 (holding that BLM RMP must include full climate analysis

and consideration of alternatives that would make low and medium potential lands unavailable for leasing).

As discussed above, the Shoshone Eureka RMP applicable to the Mount Lewis Field Office does not meet these needs. EA at 4. To rectify these deficiencies, BLM should prepare an RMP amendment and corresponding new or supplemental EIS prior to leasing. *See* 40 C.F.R. § 1502.9(c)(i)-(ii) (supplemental EIS required where substantial changes have occurred and/or significant new circumstances or information exist).

5. BLM must fully account for climate impacts under the Administrative Procedure Act

Besides complying with NEPA, BLM must ensure the climate change analysis for this lease sale complies with the Administrative Procedure Act (APA). The APA provides that agency action can be set aside when it is deemed "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

The BLM operates under many requirements that demand full consideration of climate change issues and mitigation relative to this lease sale. For instance, the BLM can require "reasonable measures" on an oil and gas lease "to minimize adverse impacts to other resource values." 43 C.F.R. § 3101.1-2. Lessees must "conduct operations in a manner that minimizes adverse impacts to land, air, and water, to cultural, biological, visual, and other resources, and to other lands uses or users." BLM Form 3100-11 (BLM's standard lease form). The BLM must "take any action necessary to prevent unnecessary or undue degradation" of the public lands. 43 U.S.C. § 1732(b). The BLM must comply with its multiple use mandate, including considering the present and future needs of the American people, providing for the long-term needs of future generations, and ensuring the "harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment" considering the relative values of the resources. *Id.* § 1702(c). Environmental protection measures are required to be incorporated in oil and gas leases by the MLA. 30 U.S.C. § 226(g).

To avoid BLM's climate change decisions relative to this lease sale being deemed arbitrary and capricious the BLM must meet the standards set by the courts. Under the APA, an action is arbitrary and capricious "if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29, 43 (1983). The APA's standard of reasoned decision-making requires agencies to consider both the advantages and disadvantages—in other words, both the costs and benefits—of their decisions. *Michigan v. EPA,* 135 S. Ct. 2699, 2707 (2015). In this lease sale the climate change analysis must demonstrate full consideration of all relevant factors in a reasoned way to avoid being deemed arbitrary and capricious.

6. BLM must fully account for, reduce, and mitigate the impacts of climate change in its leasing decisions as required by FLPMA and the MLA.

In the context of the existential crisis posed by climate change, the significant GHG emissions originating from Federal public lands, and the serious detrimental impacts of climate change on multiple uses, BLM must fully analyze and disclose for the climate impacts associated with this lease sale, reduce the impacts as much as possible, and fully mitigate any remaining impacts to ensure net zero climate emissions from public lands. BLM has ample authority to do so and indeed must do so to satisfy its statutory obligations under FLPMA and the Mineral Lease Act (MLA).

First, under FLPMA, BLM is required to manage public lands on the basis of multiple use and sustained yield. 43 U.S.C. § 1732. This in turn requires consideration of "the present and future needs of the American people," providing for "the long-term needs of future generations," and ensuring the "harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment [considering] the relative values of the resources." *Id.* § 1702(c). As the Supreme Court has explained:

> '"Multiple use management'" is a deceptively simple term that describes the enormously complicated task of striking a balance among the many competing uses to which land can be put, "including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and [uses serving] natural scenic, scientific and historical values."

Norton v. S. Utah Wilderness Alliance, 542 U.S. 55, 58 (2004) (quoting 43 U.S.C. § 1702(c)).

In recognition of the environmental components of the multiple use mandate, courts have repeatedly held that development of public lands is not required, but must instead be weighed against other possible uses, including conservation to protect environmental values. *See, e.g., New Mexico ex rel. Richardson v. BLM*, 565 F.3d at 710. ("BLM's obligation to manage for multiple use does not mean that development *must* be allowed . . . Development is a *possible* use, which BLM must weigh against other possible uses—including conservation to protect environmental values, which are best assessed through the NEPA process." (emphasis in original)); *Wilderness Workshop v. BLM*, 342 F. Supp. 3d 1145, 1166 (D. Colo. 2018) ("the principle of multiple use does not require BLM to prioritize development over other uses" (internal quotations and citations omitted)). Just as BLM can deny a project outright in order to protect the environmental uses of public lands, it can also condition a project's approval on the commitment to mitigation measures that lessen environmental impacts. *See, e.g., Pub. Lands Council v. Babbitt*, 167 F.3d 1287, 1300–01 (10th Cir. 1999) ("FLPMA unambiguously authorizes the Secretary to specify terms and conditions in livestock grazing permits in accordance with land use plans"); *Grynberg Petro*, 152 IBLA 300, 307–08 (2000) (describing how appellants challenging conditions of approval bear the burden of establishing that they are "unreasonable or not supported by the data").

The multiple use framework's provision for protecting environmental resources and emphasis of the need to balance between present and future generations are highly relevant to consideration of climate change-related impacts. Climate change will inevitably affect future generations more than present ones and threatens to deplete a variety of resources – both renewable and non-renewable.

In addition, climate change is affecting and will continue to affect every other resource value included in the multiple use framework, whether environmental, recreational, or economic in nature, due to the many changes it is causing to the ecosystems of public lands and increased threats from natural disasters. *See, e.g.*, USU Report). In this context, satisfying FLPMA's multiple use and sustained yield mandate requires BLM to fully account for the climate impacts, reduce the impacts as much as possible, and fully mitigate any remaining impacts to ensure net zero climate emissions as a condition of approval on any leasing or development decisions

Second, climate mitigation is also necessary to satisfy BLM's obligation to prevent unnecessary or undue degradation (UUD) under FLPMA. 43 U.S.C. § 1732(b) (requiring BLM "[i]n managing the public lands . . . [to] take any action necessary to prevent unnecessary or undue degradation of the lands"); *see also Rocky Mountain Oil & Gas Ass'n v. Watt*, 696 F.2d 734, 739 (10th Cir. 1982) ("[i]n general, the BLM is to prevent unnecessary or undue degradation of the public lands."). In other contexts, BLM has defined its obligation to avoid UUD as requiring mitigation for adverse impacts. *See e.g.*, 43 C.F.R. §§ 3809.5 & 3809.420(a)(4) (in hard rock mining context, UUD means conditions, activities or practices that are not "reasonably incident" to the mining operation or that fail to comply with other laws or standards of performance, which include "mitigation measures specified by BLM to protect public lands"). The IBLA and courts have likewise recognized that BLM has authority to incorporate mitigation measures into project authorizations to prevent UUD. *See, e.g.*, *Theodore Roosevelt Conservation P'ship v. Salazar*, 661 F.3d 66, 76, 78 (D.C. Cir. 2011) (citing with approval *Biodiversity Conservation Alliance*, 174 IBLA 1, 5–6 (March 3, 2008), which held that an environmental impact may rise to the level of UUD if it results in "something more than the usual effects anticipated from [] development, subject to *appropriate mitigation*" (emphasis added)); *Biodiversity Conservation Alliance v. BLM*, No. 09-CV-08-J, 2010 U.S. Dist. LEXIS 62431, at *1, *27 (D. Wyo. June 10, 2010) (infill drilling project would not result in UUD where BLM required enforceable mitigation of project impacts).

Given the catastrophic impacts of climate change on public lands, multiple uses, and future generations, avoiding UUD necessarily requires BLM to ensure net zero carbon emissions from any leasing or development decisions. Given the global nature of climate change, it is *never* necessary to have a net incremental increase in GHG emissions because any emissions can be fully mitigated and offset. In other words, a net zero carbon budget can readily be accomplished, whether that is by not leasing, delaying leasing or development to account for option value, and/or imposing mandatory measures to mitigate and offset any GHG emissions as stipulations and/or conditions of approval. As mentioned previously, while net zero emissions should be achieved by 2030 to avoid the most catastrophic impacts of climate change, they absolutely must be achieved by 2050, with at least a 45 percent reduction in emissions by 2030.

FLPMA's broad policy directives support this approach. For instance, FLPMA calls on BLM to manage public lands "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air *and atmospheric*, water resource, and archaeological values." 43 U.S.C. § 1701(a)(8) (emphasis added). It also directs BLM to receive "fair market value" for the use of public lands. *Id.* § 1701(a)(9). "Fair market value" is not defined in FLPMA, but BLM's economic valuation handbook and previous working groups convened by the Department of the Interior indicate that "economic, environmental, and social considerations [should be considered]

in determining the value of federal lands – including option value."[42] Because climate change, and thus all emissions of GHGs, create costs to be borne by society at large and by the BLM in adapting its lands to the changing climate, the "fair market value" of oil and gas extraction activities should take carbon costs into consideration and be addressed through mandatory compensatory mitigation.

Third, the MLA provides BLM with authority to require a net zero carbon budget, including through its broad discretion to determine which, and how much, public land to lease for mineral extraction. *See, e.g., W. Energy All. v. Salazar*, 709 F.3d 1040, 1044 (10th Cir. 2013); *W. Energy All. v. Jewell*, No. CV 16-0912 WJ/KBM, 2017 WL 3600741, at *3 (D.N.M. Jan. 13, 2017), rev'd sub nom. W. Energy All. v. Zinke, 877 F.3d 1157 (10th Cir. 2017). To address climate impacts, BLM may reduce the amount of land made available for leasing and/or require full mitigation of GHG emissions and associated climate impacts via lease stipulations and conditions of approval designed "to minimize adverse impacts to other resource values." *See* 30 U.S.C. § 226(g); 43 C.F.R. §§ 3101.1-2 & 3101.1–3; *see also* BLM Form 3100-11 at 3 (BLM's standard lease form requires lessees to "conduct operations in a manner that minimizes adverse impacts to land, air, and water, to cultural, biological, visual, and other resources, and to other lands uses or users"). Additionally, leasing under the MLA must generally be done in the "public interest," which necessarily requires consideration and mitigation of climate change. Indeed, BLM may, under the MLA, reject a bid for an oil and gas lease if accepting the offer is "unwise in the public interest." 30 U.S.C. § 192.

BLM has not complied with these obligations, and the lease sale cannot proceed absent full consideration and adoption of measures that would ensure net zero GHG emissions. BLM may not rely on Instruction Memorandum 2019-018 – which purports to disallow mandatory offsite compensatory mitigation – to avoid these obligations. IM 2019-018 fails to distinguish between localized impacts and the global impacts of climate change or recognize that climate impacts are unlikely to be full mitigated solely through onsite mitigation. Instead, it purports to forbid GHG offsets that would allow BLM to satisfy its obligations under FLPMA and the MLA to fully account for and mitigate climate change impacts. Reliance on the IM is arbitrary, capricious, and not in accordance with law.

7. BLM must fully consider and prevent methane waste

i. BLM failed to satisfy its obligation to prevent the waste of methane.

The release of methane from oil and gas operations due to its venting, flaring, or leaking—also referred to as waste—is a significant issue relative to climate change because methane is a far more potent GHG than carbon dioxide. Methane is at least 86 times more potent than carbon dioxide.[43] Between 2009 and 2015, 462 billion cubic feet (Bcf) of natural gas from federal leases was vented

[42] *See* New York University School of Law; Institute for Policy Integrity, *Look Before You Lease; Reducing Fossil Fuel Dominance on Public Lands by Accounting for Option Value* at 4 (2020); *citing* Jayni Foley Hein, *Federal Lands and Fossil Fuels: Maximizing Social Welfare in Federal Energy Leasing*, 42 HARV. ENVT'L L. REV. 1 at 39-40 (2018).

[43] Gayathri Vaidyanathan, *How Bad of a Greenhouse Gas is Methane?*, SCIENTIFIC AMERICAN (Dec. 22, 2015), https://www.scientificamerican.com/article/how-bad-of-a-greenhouse-gas-is-methane/.

or flared – enough to serve 6.2 million households for a year.[44] In 2008 "the economically recoverable volume represented about $23 million in lost Federal royalties and 16.5 million metric tons of carbon dioxide equivalent (CO2e) emissions."[45] The agency found that in 2013, 98 Bcf of natural gas was vented and flared from Federal and Indian leases. This volume had a sales value of $392 million and would have generated royalty revenues in excess of $49 million. Of the 98 Bcf of gas, it is estimated that 22 Bcf was vented and 76 Bcf was flared.[46]

Under the MLA the BLM is obligated to regulate waste. The MLA directs DOI to require "all reasonable precautions to prevent waste of oil or gas developed in the land," 30 U.S.C. § 225, and mandates that "[e]ach lease shall contain provisions for the prevention of undue waste." *Id.* § 187. The MLA also requires BLM to consider not just private oil and gas interests, but also the "interests of the United States" and the "public welfare" when leasing and regulating publicly owned oil and gas resources. *Id.* § 187. As described above, FLPMA's mandates to prevent unnecessary or undue degradation and to manage for multiple use and sustained yield and in a manner that protects environmental, air, and atmospheric values, likewise require BLM to regulate and limit natural gas waste and its significant contributions to climate change and associated degradation of public lands resources. 43 U.S.C. §§ 1701(a)(8), 1702(c), 1732(b).

The MLA's use of "all" to modify the term "reasonable precautions" shows that Congress intended BLM to aggressively control waste. The agency may not forego reasonable and effective measures limiting venting, flaring, and leaks for the sake of administrative convenience or to enhance the bottom lines of operators. *See Halliburton, Inc. v. Admin. Review Bd*., 771 F.3d 254, 266 (5th Cir. 2014) (ruling that statutory term "all relief necessary" authorized broad remedies against defendant because "we think Congress meant what it said. All means all" (internal quotation omitted)); *City of Oakland v. Fed. Housing Fin. Agency*, 716 F.3d 935, 940 (6th Cir. 2013) ("a straightforward reading of the statute leads to the unremarkable conclusion that when Congress said 'all taxation,' it meant all taxation" (emphasis in original)).

The obligation to "use all reasonable precautions to prevent waste" applies to lease sale decisions regardless of any national waste rules the BLM may operate under. In 2016 the BLM adopted strong new waste regulations. Waste Prevention, Production Subject to Royalties, and Resource Conservation, 81 Fed. Reg. 83,008 (Nov. 18, 2016). The rule would have reduced venting of natural gas by 35% and flaring of gas by 49% and required companies to limit the waste (leaking) of this methane due to infrastructure failures, with significant air quality and climate change benefits. The rule was projected to reduce volatile organic compound (VOC) emissions by 250,000–267,000 tons per year (tpy) and methane emissions by 175,000–180,000 tpy (using the social cost of methane, estimated to be worth $189–247 million per year). *Id.* at 83,069.

Under the direction of this administration, however, the BLM abandoned (rescinded) the 2016 rule and adopted a new much weaker regulation in 2018. Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements, 83 Fed.

[44] Waste Prevention, Production Subject to Royalties, and Resource Conservation, 81 Fed. Reg. 83,008 (Nov. 18, 2016).
[45] U.S. Bureau of Land Management, *Regulatory Impact Analysis for: Revisions to 43 CFR 3100 (Onshore Oil and Gas Leasing) and 43 CFR 3600 (Onshore Oil and Gas Operations) Additions of 43 CFR 3178 (Royalty-Free Use of Lease Production) and 43 CFR 3179 (Waste Prevention and Resource Conservation)*, at 2 (Nov. 10, 2016).
[46] *Id.* at 3.

Reg. 49,184 (Sept. 28, 2018). The new rule seeks to remove five key policies of the 2016 rule (including leak detection and repair requirements) and modify and/or replace three other significant provisions (including gas capture related to flaring requirements). The new rule would retreat to the outdated provisions in Notice to Lessees 4A (NTL-4A)[47] and would rely on inadequate state waste rule provisions which do not even exist in some cases. The 2018 rule is being challenged in court. *State of California v. Bernhardt,* Case No. 18-cv-05712-YGR (N.D. Cal.) (filed Sept. 18, 2018). Regardless of the status of these national rules, the BLM still has an obligation to "prevent" waste that could occur as a result of this lease sale. This includes substantive waste prevention requirements, as well as a thorough NEPA analysis of methane (waste), climate change impacts, and consideration of mitigation measures to reduce waste.

Nor may BLM rely on inadequate state regulations as a proxy for fulfilling its independent obligation to prevent methane waste. While the agency's 2018 rule purports to rely on a patchwork of state regulation, this approach leads to the absurd result that waste of federal public minerals differs by state and abrogates the agency's affirmative obligation under the MLA to prevent that waste and protect the public interest in the development of public minerals. That obligation may not be delegated to the states. *See Assiniboine & Sioux Tribes of the Fort Peck Indian Reservation v. Bd. of Oil & Gas Conservation of Mont.,* 792 F.2d 782, 795 (9th Cir. 1986); *Lomax Expl. Co.*, 105 IBLA 1, 7 (1988).

The BLM must exercise its authority to minimize waste of publicly owned natural gas from all leases issued in this sale and should do so by incorporating waste minimization stipulations as lease notices in the lease terms. Specifically, BLM should consider or incorporate lease notices or stipulation provisions to address issues that were covered under the 2016 final rule but left unaddressed in the 2018 rule. Lease notices should:

- Require the submission of a waste minimization plan along with every APD;
- Mandate operators meet monthly gas capture percentage targets as outlined in the 2016 rule;
- Establish restrictions on flaring;
- Prohibit venting during liquids unloading operations;
- Require operators to report volumes of gas vented, flared and leaked;
- Require the capture of emissions associated with well drilling, completion and testing operations;
- Establish waste minimization requirements for pneumatic controllers and diaphragm pumps;
- Establish a comprehensive leak detection and repair (LDAR) inspection and reporting protocol for all well production facilities similar to that of the 2016 final rule.

In addition, BLM should require green completion techniques for every well, require operators to install vapor recovery units at new facilities, implement emission controls for storage vessels and

[47] NTL-4A requires the BLM to address venting and flaring on a case-by-case basis resulting in a tremendous administrative burden. Since NTL-4A was issued, technologies and practices for oil and gas production as well as technologies for controlling emissions have advanced considerably and "NTL-4A neither reflects today's best practices and advanced technologies, nor is particularly effective in requiring their use to avoid waste." 81 Fed. Reg. 6,616, 6,628 (Feb. 8, 2016).

glycol dehydrators that would reduce emissions by 95%, ensure at least 70% of gas compression at compressor stations and well heads would be powered by electricity, and require all pneumatic controllers at gas gathering and boosting stations, well sites, and gas processing plants to meet the EPA new source performance standards (NSPS) requirements. The inclusion of these emission control requirements would result in real and significant emission reductions and constitute reasonable and feasible mitigation measures that must be fully considered and adopted.

The BLM has required waste prevention measures aside from the requirements of the 2016 Rule in several Field Offices, including North Dakota, Price, Utah, and Royal Gorge, Colorado. BLM should provide in this lease sale for similar proactive measures to analyze and incentivize methane capture. These measures should be imposed as stipulations attached to the leases and as mandatory conditions of approval attached to drilling permits approved for existing leases.

While implementing methane waste prevention technologies or practices may result in reduced profitability for a single low-producing well, the costs associated with that business decision are spread among all the company's assets, and additional gas capture across a field can easily offset those marginal losses. BLM must consider these interests when evaluating waste and pollution in its lease sale decision. Furthermore, BLM must evaluate the economics of drilling projects by accounting for the benefits of methane reductions to public health, the climate, and the environment, as well as the costs to these same resources from impacts caused by methane emissions that could be prevented.

In short, the BLM must meet its obligation to reduce waste and increase federal revenues by ensuring lease terms include waste minimization requirements, and it has numerous reasonable and feasible tools for doing so.

The BLM needs to fully consider its obligation to prevent waste of methane at the leasing stage under the requirements in the MLA. 30 U.S.C. §§ 187 and 225. These requirements apply in addition to any national waste prevention rules that BLM may operate under. The procedures we outlined above should be required.

ii. BLM Failed to Adequately Analyze Methane Emissions under NEPA or the APA.

As discussed in the preceding sections, BLM is obligated under NEPA and the APA to fully analyze and quantify lifecycle methane emissions, associated climate impacts, and mitigation measures. First, BLM must use the best available science by analyzing the warming potential of methane emissions using both the IPCC's current upper-end 100-year global warming potential (GWP) for fossil methane of 36, and the IPCC's current upper-end 20-year GWP for fossil methane of 87. *See W. Org. of Res. Councils v. U.S. Bureau of Land Mgmt*., CV16-21-GF-BMM, 2018 WL 1475470, at *18 (D. Mont. Mar. 26, 2018). In addition to using the correct GWPs, BLM must utilize best available tools for lifecycle analyses of fossil fuel extraction, operations, transport and end-user emissions, including combustion. The Interagency Working Group developed social cost of greenhouse gases, such as the Social Cost of Methane (SCM). The 2010 SCM has been estimated to be between $370 and $2,400 per ton of methane in 2007 dollars.[48] Relative to carbon

[48] Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, *Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis under Executive Order*

dioxide, methane has much greater climate impacts in the near term than the long term, and, therefore, also including a short-term measure of climate impacts would be most effective in considering policies to avoid significant global warming within the near-term. The BLM should use the SCM methodology to analyze methane emissions that are likely to occur due to this sale.

BLM also must ensure that its analysis accurately estimates the amount of methane emitted by oil and gas operations. A recent study showed that the Federal government has underestimated the amount of methane emitted by oil and gas operations by nearly sixty percent.[49] Considering methane leaks, "the volume represents enough natural gas to fuel 10 million homes – lost gas worth an estimated $2 billion." Three research findings came about as a result of this five-year study: (1) methane emissions are significant across the whole supply chain; production of oil and gas accounts for the largest share, (2) inventories systematically underestimate overall emissions, and (3) emissions from unpredictable, widespread sources are responsible for much, but not all, of the discrepancy.[50]

And as discussed above, BLM also must fully consider the methane waste control measures described above, including implementation of mandatory mitigation measures in one or more alternatives.

The BLM has not considered using the SCM protocol in this EA, nor is it even mentioned. BLM also only disclosed the GWP for the 100-year timeframe for methane. EA at 22. As stated above, BLM must use the best available science by analyzing the warming potential of methane emissions using both the IPCC's current upper-end 100-year global warming potential (GWP) for fossil methane of 36, and the IPCC's current upper-end 20-year GWP for fossil methane of 87. Additionally, the mitigation measures almost entirely neglect methane emissions. EA at 27. These shortcomings need to be corrected.

Finally, the BLM must ensure the RMP(s) applicable to this lease sale are up to date relative to providing for methane waste prevention. The RMP must make provision for stipulations to prevent methane waste in order to demonstrate adequate measures are in place to ensure waste reduction. If the RMP has not adequately addressed methane waste prevention it cannot serve as the basis for this NEPA analysis and lease sale without amendment. In Colorado, for example, the Little Snake, Kremmling, and White River RMPs have deficiencies in their analysis of methane climate change issues.

F. BLM Must Avoid Leasing in Areas with Low or No Development Potential

1. Facilitating speculative leasing is inconsistent with the MLA and FLPMA.

The MLA is structured to facilitate the actual production of federal minerals, and thus its faithful application should discourage leasing of low potential lands. BLM's June 2020 lease sale would

12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide (2016), https://archive.epa.gov/epa/sites/production/files/2016-12/documents/addendum_to_sc-ghg_tsd_august_2016.pdf.

[49] *See* Environmental Defense Fund, *Measuring Methane: A Groundbreaking Effort to Quantify Methane Emissions from the Oil and Gas Industry* (2019), *available at* https://www.eenews.net/assets/2019/03/25/document_cw_01.pdf.

[50] *Id.* at 5.

violate this core principle in three ways: (1) the sale continues a long-extant trend of leasing lands with little or no potential for productive mineral development; (2) as a result, the sale encourages speculative, noncompetitive leasing, which creates administrative waste, not oil and gas production; and (3) it would destroy important option values by hamstringing decisional flexibility in future management.

i. The June 2020 sale would violate the MLA's core purpose by offering land with low mineral potential.

The MLA directs BLM to hold periodic oil and gas lease sales for "lands…which are known or believed to contain oil or gas deposits…" 30 U.S.C. § 226(a). DOI has, through its internal administrative review body, recognized this mandate. *See Vessels Coal Gas, Inc.*, 175 IBLA 8, 25 (2008) ("It is well-settled under the MLA that competitive leasing is to be based upon reasonable assurance of an existing mineral deposit.") Here, BLM has provided no evidence that the proposed parcels contain oil or gas deposits, as the MLA requires. *See* 30 U.S.C. § 226(a). Based on the pattern of lease sales in Nevada over the past three years, there is evidence to the contrary – that the lands encompassed by the parcels generally lack oil and gas resources. Our analysis shows all seven of the parcels proposed for this lease sale have low to very low development potential.

BLM confirms this in the EA. "Several parcels included in this lease sale are in areas with low to very low potential for development and where little to no actual oil and gas development has occurred in the last decade or more." EA at 25. And "[p]arcels with low to very low potential are again assumed to have no production." Id. at 26.

This is because the purpose of leasing lands for oil and gas development is to provide for production of oil and gas, and low potential lands are unlikely to actually produce oil and gas. Leases in low potential areas generate minimal to no revenue but can carry significant cost in terms of resource use conflicts. Leases in low potential areas are most likely to be sold at or near the minimum bid of $2/acre, or non-competitively, and they are least likely to actually produce oil or gas and generate royalties.[51] But those lands will still be encumbered by leases which limits BLM's ability to manage for other uses and resources. In offering the seven parcels involved in this sale which are in low potential lands, BLM risks precluding management decisions for other resources and uses such as wilderness, recreation, and renewable energy development. In prioritizing leasing of low potential lands, BLM is violating FLPMA's multiple use mandate and improperly elevating oil and gas leasing above other multiple uses.

BLM cannot claim that all it needs to do is meet the purpose and need stated for this project in the NEPA analysis. Meeting the multiple use mandate is *always* a purposed and need. See 43 U.S.C. § 1732(a) (requiring the Department of the Interior to apply multiple use management). And while other uses can occur on leased lands, after they have been leased the actual implementation and application of other uses, particularly fewer intensive uses, is significantly constrained due to the

[51] Center for Western Priorities, "A Fair Share" ("Oil Companies Can Obtain an Acre of Public Land for Less than the Price of a Big Mac. The minimum bid required to obtain public lands at oil and gas auctions stands at $2.00 per acre, an amount that has not been increased in decades. In 2014, oil companies obtained nearly 100,000 acres in Western states for only $2.00 per acre. . . Oil companies are sitting on nearly 22 million acres of American lands without producing oil and gas from them. It only costs $1.50 per year to keep public lands idle, which provides little incentive to generate oil and gas or avoid land speculation.").

contractual and property rights that are conveyed when public lands are leased. And subsequent analysis at the APD stage where stipulations can be applied does not alleviate this problem; the development rights have already been granted.

The Reasonably Foreseeable Development Scenario (RFD) referenced in the EA substantiates this point.

> As of June 2019, there are 165 authorized oil and gas leases in [the Battle Mountain District]. Since 1907, roughly 770 oil and gas wells had been drilled in Nevada, though there are just 96 active wells at the time of this EA.
>
> Shale Oil contains significant crude oil and may be used as a source of petroleum. The potential within the Analysis Area is low in the short term and probably low to moderate in the long term.

EA at 46.

There are currently only 119 active oil wells in Nevada and no gas wells. *Id.* at 23. "There is high uncertainty involved in drilling in Nevada; of 270 wells drilled since 1986, only 50 have produced commercial quantities of oil." *Id.* BLM only anticipates that 25 or fewer wells will be drilled on the leases being offered at the June 2020 lease sale. *Id.* at 24. In these low potential parcels, 95 percent of the wells are dry holes with less than 20% of the wells producing commercially. *Id.* at 12, 51.

BLM Nevada is currently spending an excessive amount of time and resources evaluating oil and gas leases that industry is either not bidding on or will likely never develop. Over the past 3 years, BLM has sold less than 10% of the acres it has offered for sale in Nevada, compared with other western states, which are generally selling 70% or more.[52] Multiple lease sales have garnered zero competitive bids.

Sale	**Parcels (sold / offered)**	**Acres (sold / offered)**
Mar. 2015	13 / 24	15,244 / 25,882
June 2015	0 / 124	0 / 256,875
Dec. 2015	0 / 3	0 / 3,641
Mar. 2016	0 / 39	0 / 50,416
June 2016	4 / 42	3,765 / 74,661
Mar 2017	20 / 67	35,502 / 115,970
June 2017	3 / 106	5,760 / 195,614
Sept. 2017	3 / 3	3,680 / 3,680
Dec. 2017	17 / 208	33,483 / 388,697
Mar. 2018	11 / 40	19,432 / 69,691
June 2018	22 / 166	38,579 / 313,715
Sept. 2018	0 / 144	0 / 295,174

[52] All data obtained from BLM (https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/nevada) and EnergyNet (https://www.energynet.com/govt_listing.pl).

Dec. 2018	2 / 17	3,392 / 32,924
July 2019	11 / 200	22,352 / 389,176
Sept. 2019	6 / 28	9,164 / 32,342
Oct. 2019	10 / 141	19,052 / 269,184
Nov. 2019	2 / 48	3,974 / 111,420
Dec. 2019	6 / 156	13,217 / 268,052
Total	**130 / 1,556 (8.4%)**	**226,596 / 2,897,114 (7.8%)**

Recently, The Wilderness Society and the Center for Western Priorities developed a report, *America's Public Lands Giveaway*, documenting this trend. That report can be found at https://westernpriorities.org/2019/09/19/story-map-americas-public-lands-giveaway/a and is referred to as Exhibit 6 and is attached hereto and incorporated herein by this reference. As the first table in Exhibit 6 shows, of the 827,651 acres that have been offered for lease in Nevada as of August 2019, only 114,339 acres were sold competitively for the minimum bid ($2.00 per acre) and 526,178 acres had to be leased noncompetitively with no bid, at the minimum rental rate of $1.50 per acre. This means 77% of the leases were leased for $2.00 per acre or less. And as the second table in Exhibit 6 shows, 803,454 acres out of the total of 827,651 acres leased, or 97 percent, are sitting idle with no activity on them. This pattern underscores just how inefficient and wasteful the oil and gas program in Nevada has become, and also demonstrates that BLM Nevada's oil and gas leasing program is inconsistent with the direction set forth in the MLA.

Additionally, BLM in its June 2020 EA violates NEPA because it failed to consider a reasonable range of alternatives by omitting any option that would meaningfully limit leasing and development. *Wilderness Workshop*, 342 F. Supp. 3d at 1167. In that case, conservation group plaintiffs argued that BLM should have considered "an alternative eliminating oil and gas leasing in areas determined to have only moderate or low potential for oil and gas development." *Id.* at 1166. The court agreed, finding that BLM did not closely study an alternative that closes low and medium potential lands when it admits there is an exceedingly small chance of them being leased. This alternative would be "significantly distinguishable" because it would allow BLM to consider other uses for that land. *Id.* at 1167, *citing New Mexico ex rel. Richardson v. Bureau of Land Mgmt.,* 565 F.3d at 708-09. Thus, the court held that BLM's failure to consider reasonable alternatives violated NEPA. *Id.* at 1167. The same appears to be true here.

The BLM is not excused from meeting the requirements of the MLA to avoid leasing low potential lands just because it claims leasing is in line with the purpose and need stated for this EA or the leasing guidance in the Shoshone Eureka RMP. Nor do expressions of interest mandate leasing. Leasing is a *discretionary* action (BLM "may" issue leases—30 U.S.C. § 226(a)) not mandatory, and it is limited to areas "known or believed to contain oil or gas deposits." And considering only two alternatives—lease everything or lease nothing—does not meet NEPA requirements or the requirements of FLPMA and NEPA. While leasing may not preclude other multiple uses it very decidedly limits the options that BLM has available for future land management.

ii. The June 2020 lease sale would encourage noncompetitive, speculative leasing.

Besides being wasteful and contrary to the MLA's purpose, the ongoing leasing of lands with little

or no development potential creates another related problem: it facilitates, and perhaps even encourages, below-market, speculative leasing by industry actors who don't actually intend to develop the public lands they lease. This problem creates more administrative waste and also fails to uphold the MLA's core purpose.

This has proved to be true in Nevada, where federal oil and gas lease sales have generated just $0.31 per acre offered in bonus bids over the past 3 years, compared to other western states which generate hundreds or even thousands of dollars per acre offered. This is shown in this table:

Nevada[53]	**Acres**	**Bonus Bids**
Mar. 2015	25,882	$30,496
June 2015	256,875	$0
Dec. 2015	3,641	$0
Mar. 2016	50,416	$0
June 2016	74,661	$24,740
Mar 2017	115,970	$74,780
June 2017	195,614	$29,440
Sept. 2017	3,680	$33,120
Dec. 2017	388,967	$66,978
Mar. 2018	67,791	$121,146
June 2018	313,715	$139,896
Sept. 2018	295,174	$0
Dec. 2018	32,924	$7,866
July 2019	389,176	$132,679
Sept. 2019	32,342	$23,532
Oct. 2019	269,184	$19,054
Nov. 2019	111,420	$7,950
Dec. 2019	268,052	$150,443
Total	**2,895,484**	**$862,120 ($0.30/acre)**

BLM must consider alternatives that account for and reflect the development potential of proposed leases. *See Wilderness Workshop*, 342 F. Supp. 3d at 1165 (requiring consideration of development potential when developing the range of alternatives for oil and gas decisions).

Failing to consider alternatives that would protect other public lands resources from oil and gas development also violates FLPMA. Considering only one alternative in which BLM would offer all nominated oil and gas lease parcels for sale, as is proposed here, regardless of other values present on these public lands that could be harmed by oil and gas development, would indicate a preference for oil and gas leasing and development over other multiple uses. Such an approach violates the agency's multiple use and sustained yield mandate. *See* 43 U.S.C. § 1732(a).

Going back to the MLA's language, lease sales are intended to foster responsible oil and gas

[53] All data obtained from BLM (https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/nevada) and EnergyNet (https://www.energynet.com/govt_listing.pl).

development, which lessees must carry out with "reasonable diligence." 30 U.S.C. § 187; *see also* BLM Form 3100-11 § 4 ("Lessee must exercise reasonable diligence in developing and producing…leased resources.").

BLM Nevada's oil and gas leasing program is also facilitating a surge in noncompetitive lease sales, which is fiscally irresponsible management of publicly owned lands and minerals. Because companies pay no bonus bids to purchase noncompetitive leases, taxpayers lose out in the noncompetitive leasing process. These sales do not enjoy the benefits of market forces and rarely result in productive development.

In states like Nevada that lack competition during lease sales, speculators can easily abuse the noncompetitive process to scoop up federal leases for undervalued rates, as shown in a recent report from the New York Times. Attached as Exhibit 7. The New York Times article affirms that "In states like Nevada, noncompetitive sales frequently make up a majority of leases given out by the Federal government." It provides examples of speculators, including in Nevada, intentionally using this process to nominate parcels for sale, then sitting on the sidelines during the competitive lease sales and instead purchasing the leases cheaper after the sale at noncompetitive sales. These speculators are then often unable to muster the financial resources to develop the lands they have leased, so they sit idle: "Two Grand Junction, Colo., business partners, for example — a geologist and a former Gulf Oil landman — now control 276,653 acres of federal parcels in northeastern Nevada. But they are still looking for the money they need to drill on the land, or even to pay for three-dimensional seismic surveys to determine whether there is enough oil there to try." *Id*. By failing to appropriately implement the MLA and ensure that parcels offered for sale have a "reasonable assurance" of containing mineral deposits, BLM is encouraging noncompetitive, speculative leasing, which deprives the public of bonus bids and royalties, and leaves taxpayers to foot the bill for industry speculation.

The speculative nature of noncompetitive leasing – and the administrative waste it creates – is evident from a common outcome in noncompetitive leasing: termination for non-payment of rent. A review of noncompetitive leases in Nevada shows that BLM frequently terminates these leases because the lessee stops paying rent.[54] The administrative waste this process creates is further exacerbated by the fact that there are no apparent consequences for companies engaging in this practice. Indeed, many of these companies continue to actively nominate and purchase oil and gas leases, despite the clear pattern of buying leases noncompetitively with little intent to develop and reneging on their contractual obligations shortly thereafter. This process cannot be characterized as anything other than wasteful, counterproductive, and contrary to the MLA.

Again, the stated national policy underlying oil and gas leasing is "the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs." 30 U.S.C. § 21a. Noncompetitive, speculative leasing on low-potential land does not further this policy goal, and instead occupies BLM resource specialists' time that would be better spent on other public lands

[54] This research is documented in the Center for American Progress's recent report, *Backroom Deals: The Hidden World of Noncompetitive Oil and Gas Leasing*, along with other concerns regarding speculative leasing raised in these comments. Available at https://www.americanprogress.org/issues/green/reports/2019/05/23/470140/backroom-deals/.

management activities – all while taxpayers pick up the tab.

iii. BLM must analyze the "option value" of offering parcels with low or non- existent development potential in order to avoid speculative leasing.

In addition to the concerns above, leasing lands with low potential for oil and gas development gives preference to oil and gas development at the expense of other uses while handcuffing BLM's ability to make other management decisions down the road. This is because the presence of oil and gas leases can limit BLM's willingness to manage for other resources in the future.

For example, in the Colorado River Valley RMP, BLM decided against managing lands for protection of wilderness characteristics in the Grand Hogback lands with wilderness characteristics unit based specifically on the presence of oil and gas leases, even though the leases were non-producing:

> The Grand Hogback citizens' wilderness proposal unit contains 11,360 acres of BLM lands. All of the proposed area meets the overall criteria for wilderness character…There are six active oil and gas leases within the unit, totaling approximately 2,240 acres. None of these leases shows any active drilling or has previously drilled wells. The ability to manage for wilderness character would be difficult. If the current acres in the area continue to be leased and experience any development, protecting the unit's wilderness characteristics would be infeasible…

Proposed Colorado River Valley RMP (2015) at 3-135.

Similarly, in the Grand Junction RMP, BLM expressly stated that undeveloped leases on low-potential lands had effectively prevented management to protect wilderness characteristics, stating:

> 133,900 acres of lands with wilderness characteristics have been classified as having low, very low, or no potential…While there is not potential for fluid mineral development in most of the lands with wilderness characteristics units, the majority of the areas, totaling 101,100 acres (59 percent), are already leased for oil and gas development.

Proposed Grand Junction Proposed RMP (2015) at 4-289 to 4-290.

The presence of leases can also limit BLM's ability to manage for other important, non-wilderness values, like renewable energy projects. *See*, e.g., Proposed White River RMP at 4-498 ("Areas closed to leasing…indirectly limit the potential for oil and gas developments to preclude other land use authorizations not related to oil and gas (e.g., renewable energy developments, transmission lines) in those areas.").

As stated in *America's Public Lands Giveaway*, "In September 2018 the Bureau of Land Management offered 295,000 acres of public land in Nevada for oil and gas development, many of them in prime sage-grouse habitat. Exactly zero of them sold at competitive auction, leaving all 144 parcels available for noncompetitive leasing. Within two months following the sale, 21 leases were scooped up noncompetitively for just $1.50 per acre." Similarly, here if BLM does not

consider the "option value" of the parcels it is proposing for oil and gas lease sale, it will rule the risk of precluding future management decisions to benefit other multiple use values.

The presence of leases can also limit the BLM's ability to manage for other important, non-wilderness values, like renewable-energy projects. *See, e.g.,* Proposed White River Res. Mgmt. Plan, at 4-498 (acknowledging "the potential for oil and gas developments to preclude other land use authorizations not related to oil and gas (e.g., renewable energy developments, transmission lines)"). In offering the parcels involved in this sale, the BLM runs a similar risk of precluding future management decisions for other resources and uses such as wilderness, recreation, and renewable-energy development.

In this context, BLM can and should apply the principles of option value or informational values, which permit the agency to look at the benefits of delaying irreversible decisions. *See* Jayni Foley Hein, *Harmonizing Preservation and Production 13* (June 2015) ("Option value derives from the ability to delay decisions until later when more information is available... In the leasing context, the value associated with the option to delay can be large, especially when there is a high degree of uncertainty about resource price, extraction costs, and/or the social and environmental costs of drilling."). Attached as Exhibit 8.

Thus, in evaluating this lease sale, BLM should have evaluated "option value" – the economic benefits that could arise from delaying leasing and/or exploration and development based on improvements in technology, additional benefits that could come from managing these lands for other uses, and additional information on the impacts of climate change and ways to avoid or mitigate impacts on the environment. This is essential, in particular, for lands with low or non-existent development potential. BLM has the ability and obligation to undertake an analysis of the benefits of delaying leasing, which can be both qualitative and quantitative, considering both economic and environmental needs, as shown by a recent Federal court decision.

As previously mentioned, in *Wilderness Workshop.*, the conservation group plaintiffs proposed a land use planning alternative where low and medium potential lands would be closed for leasing. BLM declined to consider the alternative, claiming it had already considered and discarded a "no leasing" alternative. The court found: "This alternative would be 'significantly distinguishable' because it would allow BLM to consider other uses for that land." 342 F. Supp. 3d at 1167. Considering such an alternative would permit BLM to consider the option value of delaying leasing on low potential lands.

As applied here, this economic principle suggests that BLM Nevada would be well-served by deferring the June 2020 lease parcels and preparing a programmatic EIS that considers alternative approaches for managing the oil and gas program in Nevada. The point of deferring and planning would be to ensure that BLM does not commit to moving forward with oil and gas leasing when, based on Nevada's current leasing patterns described above, economic and other indicators suggest doing so right now does not best serve the public interest.

America's Public Lands Giveaway, provides a detailed discussion of problems that are caused by inactive leases, many leased noncompetitively, and provides recommendations for how to improve the leasing system. Leasing at minimum bids or noncompetitively leads to many leases sitting idle

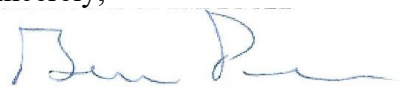
with a need to be terminated and not producing royalties since oil and gas is not produced, and other uses have been limited. *See* Exhibit 6. If BLM approached leasing based on an option value analysis, many of these problems could be avoided.

In this respect we remind you of the letter that Senator Cortez Masto sent to Kemba Anderson, the BLM Branch Chief of Fluid Minerals, on November 5, 2019 regarding the November oil and gas lease sale. In that letter the Senator asked for the protection of water resources and sensitive lands near Great Basin National Park, Ruby Lakes National Wildlife Refuge, and the Ruby Mountains. As she said, "Our public lands serve as a unique and valuable resource that boost local economies across all corners of our state, while providing public spaces for hunting, fishing, and outdoor recreation. I request that you reconsider inclusion of these parcels that are near our treasured public spaces." The same is true of the June 2020 lease sale parcels, and if BLM employed an option value analysis it would see that many of these parcels should be deferred from leasing. And Representative Horsford in his November 26, 2019 letter to the BLM regarding the March 2019 lease sale made similar points and expressed similar concerns about a number of lease parcels.

V. Conclusion

Based on the foregoing, BLM must complete additional analysis and fully comply with applicable law and guidance such as FLPMA and NEPA, prior to moving forward with this lease sale in the Battle Mountain District.

Sincerely,



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List of Exhibits

1. *WildEarth Guardians v. U.S. Bureau of Land Mgmt.,* 2020 U.S. Dist. LEXIS 77409 (D. Mont., May 1, 2020)
2. The Wilderness Society*, In the Dark*. https://www.wilderness.org/sites/default/files/media/file/In the Dark Report_FINAL_Feb_2018.pdf
3. The Wilderness Society, The Climate Report 2020: Greenhouse Gas Emissions from Public Lands. https://www.wilderness.org/sites/default/files/media/file/TWS_The%20Climate%20Report%202020_Greenhouse%20Gas%20Emissions%20from%20Public%20Lands.pdf.
4. Utah State University Climate Change Study
5. *Look Before You Lease; Reducing Fossil Fuel Dominance on Public Lands by Accounting for Option Value*. New York University School of Law; Institute for Policy Integrity
6. *America's Public Lands Giveaway*. https://westernpriorities.org/2019/09/19/story- map-americas-public-lands-giveaway/
7. "Energy Speculators Jump on Chance to Lease Public Land at Bargain Rates", The New York Times, Nov. 27, 2018. https://www.nytimes.com/2018/11/27/business/energy-speculators-public-land- leases.html
8. *Harmonizing Preservation and Production; How Modernizing the Department of the Interior's Fiscal Terms for Oil, Gas, and Coal Leases Can Ensure a Fair Return to the American Public.* New York University School of Law; Institute for Policy Integrity

Appendix

Parcel Numbers and Serial Numbers of Protested Parcels

NV-2020-06-0013
NV-2020-06-0019
NV-2020-06-0020
NV-2020-06-1273
NV-2020-06-1280
NV-2020-06-1291
NV-2020-06-1294