National Audubon Society The Wilderness Society Wyoming Outdoor Council Wyoming Wilderness Association

BLM Wyoming State Office 5353 Yellowstone Road Cheyenne, Wyoming 82009

Via Federal Express

August 11, 2018

Re: Protest of the September 18-20, 2018 Competitive Oil and Natural Gas Lease Sale of the BLM Wyoming State Office

To whom it may concern:

Please accept this protest of the above oil and natural gas lease sale that is filed by The Wilderness Society, Wyoming Outdoor Council, Wyoming Wilderness Association, and the National Audubon Society. This protest is filed pursuant to the provisions at 43 C.F.R. § 3120.1-3. In this lease sale, the Bureau of Land Management (BLM) is proposing to sell 350 parcels that would cover approximately 355,819 acres of federal minerals.

Three environmental assessments (EA) have been prepared for this lease sale:

- 1. An EA for the High Plains District lease parcels, DOI-BLM-WY-P000-2018-0001-EA, (hereinafter High Plains Part 1 EA),
- 2. An EA, for the Wind River-Bighorn Basin lease parcels, DOI-BLM-WY-R000-2018-0001-EA (hereinafter Wind River Part 1 EA), and the
- 3. Third Quarter 2018 (Part 2) Competitive Oil and Gas Lease Sale EA, DOI-BLM-WY-0000-2018-0003-EA, (hereinafter Part 2 EA).

According to the EAs, nearly all of the proposed parcels are located within habitat of the Greater Sage-grouse. Specifically, according to the High Plains Part 1 EA, "[a]ll 84 parcels are within Greater Sage-grouse habitat, excepting about 139 acres of 1 partial parcel in the [Newcastle Field Office] are outside of designated sage-grouse habitat." High Plains Part 1 EA at 52. Fully 51.2 percent of the parcel acreage lies in sage-grouse priority habitat management areas (PHMA) and 48.5 percent covers general habitat management areas (GHMA). *Id.* Of the 22 parcels that were planned for sale under the Wind River Part 1 EA, 11 parcels are in PHMA and 4 parcels are in GHMA; 80.41 percent of the sale acreage is in sage-grouse habitat. Wind River Part 1 EA at 3-35. And under the mammoth Part 2 EA, of the 256 parcels that were planned for sale, 63 percent are in PHMA and "[a]lmost all of the remainder are located in [GHMA], with only two parcels (512.87 acres) located in non-Greater sage-grouse habitats." Part 2 EA at 4-20.

I. ISSUES OF CONCERN

We have a number of concerns with the proposed actions including, in particular, the potential for significant cumulative impacts to Greater sage-grouse and other sagebrush-obligate species, and undisclosed yet potentially widespread and significant impacts to groundwater resources. In addition, the environmental analysis fails to satisfy the basic requirements of the National Environmental Policy Act (NEPA) by failing to analyze a reasonable range of alternatives to the lease everything – lease nothing approach described in the EAs, and by failing to take a hard look at the full range of direct, indirect and cumulative environmental impacts that will result from reasonably foreseeable development on the parcels. Third, the EAs describe proposals, which, if approved by BLM, will not be in conformance with the applicable Resource Management Plan (RMP) requirements to prioritize leasing outside of Greater sage-grouse habitat. Finally, the proposed lease sale is fundamentally contrary to the multiple use–sustained yield principles embodied in the Federal Land Policy and Management Act (FLPMA).

In addition, the proposed lease parcels raise concerns regarding impacts to wilderness resources and impacts to big game migration corridors and crucial winter ranges. Impacts to the Jack Morrow Hills special management area in the Rock Springs Field Office (RSFO) are also of concern. These issues will be discussed below.

II. LEASE PARCELS PROTESTED

We protest the proposal by BLM to sell the 350 parcels listed under its Notice of Competitive Oil and Gas Lease Sale. *See* Notice of Competitive Oil and Gas Lease Sale September 18-20, 2018 (listing and describing lease parcels 001 through 350, including stipulations). https://eplanning.blm.gov/epl-front-office/projects/nepa/85072/152842/187109/Final_Book.pdf. The protested lease parcels are also listed in Appendix A to this protest.

III. INTERESTS OF THE PARTIES

The Wilderness Society, Wyoming Outdoor Council, Wyoming Wilderness Association, and National Audubon Society have a long-standing interest in the management of BLM lands in Wyoming and we engage frequently in the decision-making processes for land use planning and project proposals that could potentially affect our public lands and mineral estate, including the oil and natural gas leasing process and lease sales. Our members and staff enjoy a myriad of recreational, scientific and other opportunities on BLM-managed public lands, including hiking, biking, nature-viewing, photography, and quiet contemplation in the solitude offered by wild places. Our missions are to work for the protection and enjoyment of the public lands for and by our members and the public.

The National Audubon Society's mission is to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity.

The mission of the Wilderness Society is to protect wilderness and inspire Americans to care for our wild places.

Founded in 1967, the Wyoming Outdoor Council is the state's oldest and largest independent conservation organization. Its mission is to protect Wyoming's environment and quality of life for present and future generations.

The Wyoming Wilderness Association is a non-profit organization created in 1979 by a group of wilderness advocates and outdoors people who envisioned the Wyoming Wilderness Act. Our mission is to defend Wyoming's magnificent wild landscapes from the pressures of development, mismanagement, and commodification. We represent the values and interest of nearly 2,000 Wyoming members.

Although our organizations generally support the judicious leasing and responsible development of the public's oil and gas resources when done in the right place and after full disclosure of the environmental impacts that will result from development, we have concluded that with respect to this proposal, none of those basic guiding tenets have been achieved.

IV. AUTHORIZATION TO FILE THIS PROTEST

As an attorney and Litigation and Energy Policy Specialist for The Wilderness Society, I am authorized to file this protest on behalf of The Wilderness Society and its members and supporters, and I have like authority to file this protest on behalf of the Wyoming Outdoor Council, Wyoming Wilderness Association, and National Audubon Society.

V. STATEMENT OF REASONS

A. BLM Has Not Complied with the National Environmental Policy Act.

1. The EAs fail to analyze a reasonable range of alternatives.

NEPA generally requires the BLM to conduct an alternatives analysis for "any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). The regulations further obligate BLM to "rigorously explore and objectively evaluation all reasonable alternatives" including those "reasonable alternatives not within the jurisdiction of the lead agency," so as to "provid[e] a clear basis for choice among options." 40 C.F.R. § 1502.14. The range of alternatives is the heart of a NEPA document because "[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). That analysis must cover a reasonable range of alternatives so that an agency can make an informed choice from the spectrum of reasonable options.

By contrast, in evaluating lease sales, including this one, BLM frequently analyzes only two alternatives: a no action alternative, which would exclude all lease parcels from the sale; and a lease everything alternative, which would offer for lease all proposed parcels. 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 "middleground compromise between the absolutism of the outright leasing and no action alternatives"); *Muckleshoot Indian Tribe v. US Forest Serv.*, 177 F.3d 800, 813 (9th Cir. 1999) (NEPA analysis failed to consider reasonable range of alternatives where it "considered only a no action alternative along with two virtually identical alternatives").

For this lease sale, BLM has not analyzed any alternatives that fall between the two extremes. Instead, each of the three EAs just considered the "No Action" and "Proposed Action," under which BLM would possibly sell all 350 parcels, comprising 355,819 acres of federal mineral estate in all three Wyoming BLM Districts. *See* Part 2 EA at 1-3 (showing map presenting proposed lease parcels). For example, the EAs fail to evaluate an alternative that would defer leasing in PHMA and/or GHMA for Greater sage-grouse, despite a legal obligation to do so under the Approved RMP Amendments (September 2015) (ARMPA) and associated policy guidance. *See* Wyoming BLM ARMPA at 24, Management Objective No. 14 ("Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMAs and GHMAs."); *see also* Record of Decision (ROD) and Approved RMP Amendments for the Rocky Mountain Region at 1-25 ("the ARMPs . . . prioritize oil and gas leasing and development outside of identified PHMAs and GHMAs. . . . This objective is intended to guide development to lower conflict areas and as such protect important habitat. . . ."). Because BLM has not evaluated these or any other "middle-ground" alternatives, it has violated NEPA.

BLM's statements in the EAs that deferring parcels in PHMA and GHMA was not considered as an alternative because such deferrals would not conform with the applicable RMPs is simply wrong. High Plains Part 1 EA at 14, Part 2 EA at 2-5. Designating lands as open to leasing in an RMP makes them *available* to lease but does not *require* that they be leased. Moreover, the prioritization requirement of the RMPs applies here, and clearly requires deferring at least some leasing in sage-grouse habitat. The reasonableness of such an alternative was recognized by the Wyoming Game and Fish Department, which recommended deferring parcels. High Plains Part 1 EA at 12 to 13.

BLM also is incorrect in asserting that such an alternative was "imbedded [sic] within the No Action Alternative." High Plains Part 1 EA Appendix F at 15. Nothing in the EA provides any analysis of such an alternative, making it impossible for BLM or the public to compare a middle-ground alternative with the options that are discussed in the EA. Nor are the alternatives considered in the RMP environmental impact statements (EIS) comparable to a middle-ground alternative for this lease sale. *See id.* The RMP analyses only consider alternatives generally

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¹ The Part 2 EA says that at a "BLM-Modified Alternative" is considered but this modification only involves deferring three lease parcels "since they are located in areas potentially conflicting with existing coal leasing and mining activities." Part 2 EA at 2-3. This modification does not differ significantly from the Proposed Action lease everything alternative.

opening or closing to leasing large areas measured in the millions of acres. None of the RMP alternatives addressed closing some or all of the particular parcel areas at issue here to leasing—much less a temporary deferral of leasing those parcels.

Even if lands at issue here are open for leasing under the RMPs, it would be entirely reasonable for BLM to consider deferring parcels with important sage-grouse habitat. With these comments, we are submitting and incorporating by reference a report from Dr. Matt Holloran addressing the importance of prioritization of leasing and development outside sage-grouse habitat. *See* Exhibit 1 to these comments. Dr. Holloran's report looks to the manner in which the ARMPA requires prioritizing leasing and development outside PHMAs and GHMAs, in addition to protective stipulations for leases that are offered. Dr. Holloran's report further concludes that by disregarding the prioritization requirement, BLM is failing to protect sage grouse habitat at the landscape level as required by the ARMPA. In the September 2018 lease sale, the Wyoming BLM is proposing to offer approximately 216 parcels in PHMA and 117 parcels in GHMA, meaning at least 333 of the 350 parcels proposed for sale are in sage-grouse habitat. Given the importance of these areas to the conservation of this imperiled species, the EAs should have analyzed an alternative that deferred leasing in PHMA and GHMA.

In addition, in light of ongoing and significant resource conflicts regarding proper management of big game migration corridors, and the significant threats posed by oil and gas development within these corridors, the BLM should have analyzed an alternative that deferred leasing in the Red Desert to Hoback migration corridor. The BLM decided to defer a handful of parcels within this corridor based on Wyoming Game and Fish Department (WGFD) recommendations, and to attach a Special Lease Notice to the 34 other parcels. However, in electing this approach, the BLM failed to disclose the substantive limitations of the lease notice, failed to consider applying a much stronger lease stipulation, and failed to develop an alternative that would have deferred leasing within the corridor. This needlessly narrow approach to a pressing resource management concern utterly fails to satisfy NEPA's requirement to analyze alternatives to "any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). Quite clearly, the BLM should have considered an alternative that deferred leasing inside the migration corridor, the precise management action requested by Sweetwater County in its comment letter. This issue will be discussed in more detail in sections V.D. and V.E. below.

Finally, the BLM should have considered an alternative that deferred the leasing of parcels within the RSFO in order to preserve decision space for the upcoming RMP revision. This issue is discussed further on page 15 of our protest.

2. *BLM has failed to take the necessary "hard look" at potential environmental impacts.*

BLM has not taken the required "hard look" at potential environmental impacts. Under NEPA, BLM must evaluate the "reasonably foreseeable" site-specific impacts of oil and gas leasing, prior to making an "irretrievable commitment of resources." *New Mexico ex rel. Richardson*, 565 F.3d at 718; *see also Sierra Club v. Hodel*, 848 F.2d 1068, 1093 (10th Cir. 1988) (agencies are to perform hard look NEPA analysis "before committing themselves irretrievably to a given course of action so that the action can be shaped to account for

environmental values"); *Sierra Club v. Peterson*, 717 F.2d 1409, 1411 (D.C. Cir. 1983) ([o]n land leased without a No Surface Occupancy Stipulation the Department cannot deny the permit to drill; it can only impose 'reasonable' conditions which are designed to mitigate the environmental impacts of the drilling operations.). Courts have held that BLM makes such a commitment when it issues an oil and gas lease without reserving the right to later prohibit development. *New Mexico ex rel. Richardson*, 565 F.3d at 718.

Here, BLM is in fact making an "irretrievable commitment of resources" by offering leases without reserving the right to prevent all future development; the site-specific impacts are "reasonably foreseeable" and should be analyzed in this EA, rather than waiting until a leaseholder submits an application for permit to drill (APD). Unfortunately, the EAs take exactly the wrong approach and do not adequately evaluate impacts. The EAs all claim that leasing is merely an administrative action and entails no environmental impacts or consequences. High Plains Part 1 EA at 9, Wind River Part 1 EA at 3-34, Part 2 EA at 1-4. Yet, BLM expressly defers a site-specific analysis on key resource values, including wildlife, recreation, visual resources, and useable water resources. This approach violates NEPA, and BLM must take the site-specific impacts of leasing into account at this stage.

NEPA requires that BLM analyze and disclose all reasonably foreseeable impacts from development before it issues the leases. The environmental effects of reasonably foreseeable future actions analyzed in the 2015 ARMPA were premised on the implementation of the conservation measures contained in the plan amendments, including, importantly, prioritizing oil and gas leasing and development outside of PHMAs and GHMAs, implementing the net conservation gain requirement, requiring compensatory mitigation, requiring effective noise controls in GHMA as wells as PHMA, mineral withdrawals in sagebrush focal areas, compliance with required design features, etc. For the analysis of impacts to be accurate, it must examine the direct, indirect and cumulative effects of habitat-disturbing actions in sage-grouse habitat without the implementation of those conservation measures, which have recently been abandoned by BLM or may be abandoned in the near future. *See, e.g.*, Instruction Memorandum (IM) 2018-093 (eliminating the compensatory mitigation requirement). BLM's EAs do not do so.

Moreover, BLM cannot rely for this sale on the plan-level analysis conducted for the ARMPA. Tiering is only appropriate when a subsequent NEPA document incorporates by reference earlier general matters into a subsequent narrower statement; but it does not allow a subsequent analysis to ignore the *specific* environmental issues that are presented in the later analysis. 40 C.F.R. § 1508.28. The ARMPA does not address the site-specific impacts associated with issuing these particular lease parcels. On the contrary, by requiring a prioritization analysis the ARMPA contemplates that such an analysis will occur at the leasing stage. *See S. Fork Band Council of W. Shoshone of Nevada v. U.S. Dep't of the Interior*, 588 F.3d 718, 726 (9th Cir. 2009) (holding that while tiering is sometimes permissible, "the previous document must actually discuss the impacts of the project at issue").

3. BLM has failed to consider the cumulative impacts of leasing.

NEPA requires BLM to evaluate the cumulative impacts of this lease sale "resulting

from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.27(b)(7); *Kern v. Bureau of Land Management*, 282 F.3d 1062, 1075-77 (9th Cir. 2002). To satisfy this requirement, BLM's NEPA analysis must consider the cumulative impact of all the recent and currently-planned oil and gas auctions in which BLM has offered hundreds of leases affecting sage grouse habitat protected under the RMPs. These sales include, but are not limited to:

- December 2017 Montana sale: 187 out of 204 parcels offered;²
- December 2017 Wyoming sale: of 45 parcels to be offered, 26 parcels are partly or entirely in PHMA, and 24 parcels are partly or entirely in GHMA;³
- March 2018 Wyoming sale: 96 percent of parcels to be offered under the proposed alternative for the Wind River/Bighorn Basin District are in sage grouse habitat, and 37 parcels to be offered in the High Plains District are in PHMA or GHMA; and
- December 2017 Utah sale: 30,371 acres of GHMA and 952 acres of PHMA.⁶

Numerous other lease sales covering huge amounts of public lands are pending in other states as well as in Wyoming. For example:

- Nevada June 2018 sale: 166 parcels totaling 313,000 acres offered;
- Nevada September 2018 sale: 144 parcels totaling approximately 295,000 acres;
- Utah September 2018 sale: 76 parcels totaling 158,944 acres;
- New Mexico September 2018 sale: 197 parcels;
- Colorado December 2018 sale: 227 parcels proposed totaling 236,000 acres; and

December 2017 Competitive Oil and Gas Lease Sale at 69, DOI-BLM-UT-G010-2017-0028-EA, available at: https://eplanning.blm.gov/epl-frontoffice/projects/nepa/80165/119135/145398/FEA.pdf.

² EA for BLM Montana December 2017 sale at 27-28, DOI-BLM-MT-C020-2017-0051-EA, available at: https://eplanning.blm.gov/epl-frontoffice/projects/nepa/78400/120092/146548/MCFO_EA_December_2017_Sale_Post_with_S ale List.pdf.

³ EA for BLM Wyoming December 2017 sale at 52, DOI-BLM-WY-D000-2017-0003-EA, available at: https://eplanning.blm.gov/epl-front office/projects/nepa/65707/115166/140613/20170721.HDD_EA_for_December_2017_Le ase Sale v.2.mg.pdf.

⁴ Draft EA for BLM Wind River/Bighorn Basin District First Quarter 2018 Lease Sale at 3-44, DOI-BLM-WY- R000-2017-0002-EA, available at: https://eplanning.blm.gov/epl-front office/projects/nepa/85072/114136/139365/181Q WRBBD EA ver.1.pdf.

⁵ Draft EA for BLM High Plains District First Quarter 2018 Lease Sale at 48-49, DOI-BLMWY-P000-2017- 0002-EA, available at: https://eplanning.blm.gov/epl-frontoffice/projects/nepa/85072/114129/139358/HPD_First_Quarter_2018_OG_Lease_EA.ver1.pdf.

⁶ Final Environmental Assessment for BLM Utah.

• Wyoming December 2018 sale: approximately 700,000 acres proposed, virtually all of which covers sage-grouse habitat.

These are only a few examples--other recent BLM sales have already occurred in western states that leased other sage grouse-protected areas. Many of these sales also, as discussed in more detail below, violate the prioritization requirements of the 2015 sage-grouse plans.

In fact, BLM fails to consider cumulative impacts even within this planned sale: the agency has prepared three separate EAs for different parcels to be offered at the September 2018 sale. The EAs, however, never addressed the combined impacts of all the parcels. For example, the High Plains Part 1 EA states, "[t]he cumulative impacts assessment area for this EA is the HPD which consists of the BFO, the CFO and the NFO", ignoring the rest of the state where many lease parcels are located. High Plains Part 1 EA at 68. Otherwise the EAs generally assert the RMPs for these areas provide any needed cumulative impacts analysis. BLM's description of the three groups of parcels as "separate and distinct" sales involving "distinct" land in different field offices, High Plains Part 1 EA Appendix F at 16, misses the point. Whether or not they are distinct from each other, the three groups of leases to be offered are reasonably foreseeable future actions, and thus must be considered in a cumulative impacts analysis.

In addition, the cumulative impacts from the following oil and gas projects have not been considered in the EAs:

- Continental Divide-Creston Oil and Gas Project (8,950 new wells proposed),
- Normally Pressured Lance Oil and Gas Project (3,500 new wells proposed),
- Converse County Oil and Gas Project (5,000 new wells proposed),
- Moneta Divide Natural Gas and Oil Development Project (4,250 new wells proposed), and
- Greater Crossbow Oil and Gas Project (1,500 new wells proposed).

These massive projects – which together will involve drilling over 23,000 new oil and gas wells and constructing thousands of miles of new roads and pipelines, will have significant impacts on sage-grouse and sage-grouse habitats. *See, e.g.*, Converse County Oil and Gas Project Draft EIS at 3.18-57 (estimating that 54 leks will be abandoned due to project activities; "[d]espite the recent upward trend in peak male attendance, all greater sage-grouse leks in the analysis area are at risk of being abandoned as development continues to increase."). These projects need to be considered as part of a cumulative impacts analysis.

BLM must analyze and disclose the cumulative impacts of this wave of leasing and oil and gas projects on the Greater sage-grouse and its habitat. BLM (in the Rocky Mountain Region Record of Decision and Wyoming "Nine Plan" Amendments and Revisions) and numerous authorities, as indicated in the report from Matt Holloran, have recognized the importance of addressing sage-grouse conservation on a comprehensive range-wide basis, and accounting for connectivity between state and regional populations and habitats, habitat fragmentation, and other impacts. As stated in the Rocky Mountain ROD, for the grouse plans collectively: "The cumulative effect of these measures is to conserve, enhance, and restore GRSG habitat across the

species' remaining range in the Rocky Mountain Region and to provide greater certainty that BLM resource management plan decisions in GRSG habitat in the Rocky Mountain Region can lead to conservation of the GRSG and other sagebrush-steppe-associated species in the region." Rocky Mountain ROD, p. S-2.

Under NEPA, BLM cannot lease hundreds of parcels covering many thousands of acres in Montana, Wyoming and other states without considering the cumulative and trans-boundary impacts to the greater sage-grouse and other resources. It also cannot ignore the cumulative impacts of 23,000 new oil and gas wells that are proposed to be drilled in Wyoming.

Moreover, the cumulative (as well as direct and indirect) impacts from issuing these leases and permitting these wells may result in significant impacts to the environment. It is not plausible for BLM to assert that leasing 355,819 acres (nearly 556 square miles), in addition to BLM's numerous other recent and planned large lease sales, will not have any significant impact. Thousand of new oil and gas wells will also have significant impacts. Properly analyzing those impacts will require a full EIS, not just an EA. Issuing a finding of no significant impact (FONSI) for this lease sale would be arbitrary and capricious and violate NEPA.

4. The EAs underestimate impacts to groundwater resources by incorrectly assuming that useable water sources will be protected.

In the EAs there is some discussion of the generic impacts to water resources that can occur as a result of oil and gas development. In an effort to downplay those impacts, however, the EAs make statements such as these:

Under both FLPMA and the CWA, the BLM cannot authorize any activity which does not comply with all applicable local, state, tribal and Federal water quality laws, statues, regulations, standards and implementation plans. High Plains Part 1 EA at 42. *See also id.* at 51 ("This ensures protection of surface waters and associated riparian habitats by meeting the standards outlined in Chapter 6 of the BLM's Oil and Gas Gold Book, as revised, and the respective RMPs").

If a drilling/completion proposal is found to not be protective of usable water zones, as required by 43 CFR § 3162.5- 2(d) and Onshore Oil and Gas Order No. 2, the proposal could be denied by the BLM. Part 2 EA at 4-17.

Unfortunately, the reality is that useable water zones are typically not protected. Since 1988, BLM's Onshore Order No. 2 has required operators to construct wells to isolate and protect aquifers containing "usable water," defined as having up to 10,000 ppm total dissolved solids (TDS). 53 Fed. Reg. 46,798, 46,801, 46,805 (Nov. 18, 1988). BLM adopted the 10,000-ppm standard because it matched the definition of "underground source of drinking water" used by the Environmental Protection Agency (EPA) in administering the Safe Drinking Water Act (SDWA). See id. at 46,798 (citing 40 C.F.R. § 144.3). When BLM issued its 2015 hydraulic fracturing rule, it made a housekeeping change amending the applicable provision in the Code of Federal Regulations to conform with the Onshore Order No. 2 usable water requirement. 80 Fed. Reg. 16,128, 16,141–42 (Mar. 26, 2015). But in opposing the hydraulic fracturing rule, several

industry trade associations and states informed the court that there has been widespread non-compliance with the 10,000-ppm standard, despite the fact that Onshore Order No. 2 is a legally-binding regulation promulgated by notice-and comment rulemaking. *See* 53 Fed. Reg. at 46,798; 43 C.F.R. § 3164.1(b). Based in part on concern that the hydraulic fracturing rule would require companies to change their practices, the U.S. District Court for Wyoming enjoined the rule in 2015. Order on Motions for Preliminary Injunction at 30-33, 53-54, ECF No. 130, *Wyoming v. Jewell*, 2:15-cv-00043-SWS (D. Wyo. Sept. 30, 2015) (*Wyoming v. Jewell*).

Since then, industry trade associations have continued to highlight that there is a widespread industry practice of failing to protect underground sources of drinking water. For example, in their September 25, 2017 comments supporting BLM's proposed rescission of the hydraulic fracturing rule, Western Energy Alliance and the Independent Petroleum Association of America (collectively, WEA), told the agency that the 10,000-ppm standard is inconsistent with "existing practice for locating and protecting usable water." Sept. 25, 2017 WEA comments at 59 (WEA comments). Instead, companies in Wyoming typically set well casing to a depth of only "100 feet below the deepest water well within a one mile radius of [the] oil or gas well"—usually 1,000 feet below ground or less. *Id.* at 84. And in Montana and North Dakota, WEA states that companies only install protective casing for the Pierre Shale formation, regardless of whether underground sources of drinking water may exist below that formation. *Id.*

WEA has explained that requiring companies to protect all underground sources of drinking water would result in substantial additional costs for "casing and cementing associated with isolating formations that meet the numerical definition of usable water under the [Onshore Order No. 2 standard], but which are located at depths deeper than the zones that state agencies and BLM field offices have previously designated as requiring isolation." WEA comments at 84. WEA predicted that complying with the 10,000-ppm standard would cost industry nearly \$174 million per year in additional well casing expenses. *Id.* at 84-85.

Industry's admissions raise a significant environmental concern that BLM must address before issuing new leases. Accepting WEA's statements as true, BLM and energy companies have been putting numerous underground sources of drinking water at risk. In its 2016 hydraulic fracturing study, the EPA noted that, "the depth of the surface casing relative to the base of the drinking water resource to be protected is an important factor in protecting the drinking water resource."

While water with salinity approaching 10,000 ppm TDS is considered "brackish," such aquifers are increasingly being used for drinking water. In fact, EPA adopted the 10,000-ppm standard based on the 1974 legislative history of the SDWA, which explained that Congress intended the SDWA to "protect not only currently-used sources of drinking water, but also potential drinking water sources for the future." H.R. Rep. No. 93-1185 (1974), 1974 U.S.C.C.A.N. 6454, 6484.

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⁷ A complete copy of WEA's comments is available at: https://www.regulations.gov/document?D=BLM-2017-0001-0412.

⁸ EPA, Hydraulic Fracturing for Oil and Gas: Impacts from the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States at 6-19 (2016) (EPA Study), available at: https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990.

Similarly, BLM explained in 2015 that "[g]iven the increasing water scarcity [in much of the United States] and technological improvements in water treatment equipment, it is not unreasonable to assume [these] aquifers . . . are usable now or will be usable in the future." 80 Fed. Reg. at 1,142. The agency noted that even "if we're not using that water today we may be using it ten years [or] a hundred years from now. So we don't want to contaminate it now so it's unusable in the future." Wyoming v. Jewell admin. record at DOIAR0009703, attached as Exhibit 2 to these comments. Comments from EPA and the Association of Metropolitan Water Agencies (AMWA) supported this conclusion. *Id.* at DOIAR0038117. AMWA reported that brackish groundwater is already being used for drinking in some parts of the country. See id. at DOIAR0038118 (pumping 8,000 ppm TDS groundwater in Florida); id. at DOIAR0068337 (desalination already being used for municipal water treatment in some areas). AMWA explained that because of "challenges resulting from climactic changes, population growth and land development, many utilities are turning to more challenging groundwater sources such as those that are very deep or have high salinity concentrations . . . given the lack of sufficient water elsewhere." Id. at DOIAR0038118. Higher salinity water is also being used today for some industrial purposes. See, e.g., id. at DOIAR0075763 (power plant cooling).

Our concerns are underscored by recent research showing that it is very common in this region for hydraulic fracturing and oil and gas production to occur in shallow formations that have only limited vertical separation from underground sources of drinking water. Fracturing and production also sometimes occur *within* an aquifer that represents an underground source of drinking water. For example, EPA's 2016 report found that "hydraulic fracturing within a drinking water resource" is "concentrated in some areas in the western United States" that include "the Wind River Basin near Pavillion, Wyoming, and the Powder River Basin of Montana and Wyoming." Where that occurs, EPA explained that:

. . . hydraulic fracturing within drinking water resources introduces hydraulic fracturing fluid into formations that may currently serve, or in the future could serve, as a drinking water source for public or private use. This is of concern in the short-term if people are currently using these formations as a drinking water supply. It is also of concern in the longterm because drought or other conditions may necessitate the future use of these formations for drinking water.

Id.

Other recent studies have made similar findings. Researchers investigating the oil and gas-related contamination in Pavillion, Wyoming reported that shallow fracturing also occurs in New Mexico, Colorado, Utah and Montana. Gayathri Vaidyanathan, *Fracking Can Contaminate Drinking Water* at 8, Sci. Am. (Apr. 4, 2016) (Sci. Am. Article), attached as Exhibit 3 to these comments. The researchers concluded that "it is unlikely that impact to [underground sources of drinking water] is limited to the Pavillion Field" Dominic C. DiGiulio & Robert A. Jackson, *Impact to Underground Sources of Drinking Water and Domestic Wells from Production Well Stimulation and Completion Practices in the Pavillion, Wyoming Field*, 50 Am. Chem. Society,

⁹ EPA Study at ES-27; see also *id.* at 6-44 to 6-50.

Envtl. Sci. & Tech. 4524, 4532 (Mar. 29, 2016), attached as Exhibit 4 to these comments. Another study found that approximately three quarters of all hydraulic fracturing in California occurs in shallow wells less than 2,000 feet deep. See also Exhibit 5.

WEA's description of widespread non-compliance with Onshore Order No. 2, and the evidence of shallow production and fracturing, raise a significant environmental issue that must be addressed as a reasonably foreseeable effect of the lease sale. *See Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 97 (1983) (an agency must "consider every significant aspect of the environmental impact of a proposed action"); *see also Davis v. Mineta*, 302 F.3d 1104, 1123 (10th Cir. 2002). Moreover, BLM's analysis must "state how alternatives considered in it and decisions based on it will or will not achieve the requirements of [NEPA] and other environmental laws and policies." 40 C.F.R. § 1502.2(d); *League of Wilderness Defenders v. USFS*, 585 Fed. Appx. 613, 614 (9th Cir. 2014); *Montana Wilderness Association v. McAllister*, 658 F. Supp. 2d 1249, 1255-56 (D. Mont. 2009). The Council on Environmental Quality regulations also require a discussion of possible conflicts with the objectives of state, local and federal land use plans, policies and controls for the area concerned. 40 C.F.R. § 1502.16(c).

Ignoring evidence of widespread noncompliance with BLM's standards for protecting underground sources of drinking water would violate NEPA. To make an informed decision on whether to lease these lands BLM needs to know whether doing so will put underground sources of drinking water at risk, and what additional stipulations or other steps are needed to prevent such contamination.

The information necessary to make such an assessment is readily available in BLM's own permitting files for existing oil and gas wells, from produced water records on existing wells, and from other sources such as US Geological Survey reports. 80 Fed. Reg. at 16,151–52. Moreover, to the extent any information gaps exist, it is incumbent on BLM to obtain that additional information before making an irreversible commitment of resources by issuing the leases. Additional data on, for example, aquifer quality or well construction practices is "essential to a reasoned choice among alternatives" and can be collected at a cost that is not "exorbitant." *See* 40 C.F.R. § 1502.22.

BLM cannot simply defer this issue until the APD stage and assume that all laws will be met. The record provides substantial evidence of widespread noncompliance, which BLM cannot ignore if it is to make an informed decision. Moreover, the information we are seeking to be presented in the EA is readily available; BLM cannot make an irreversible and irretrievable commitment of resources at the leasing stage when there are clearly outstanding issues, and the information we request is "essential to a reasoned choice among alternatives" and can be collected at non-exorbitant costs. Under these conditions, the BLM clearly must take steps to better protect groundwater resources at the leasing stage.

¹⁰ California Council on Science and Technology, An Independent Scientific Assessment of Well Stimulation in California at Executive Summary 10 (2015), http://ccst.us/publications/2015/2015SB4-v2ES.pdf; see also Sci. Am. Article at 8 (similar finding about California).

B. The BLM is Violating the Federal Land Policy and Management Act.

1. The EAs are not consistent with the Wyoming BLM Approved Resource Management Plan Amendments (September 2015), as required by FLPMA.

BLM has not prioritized leasing outside of PHMAs and GHMAs, as required by the Rocky Mountain Region ROD and Wyoming BLM ARMPA. Under FLPMA, BLM must manage public lands "in accordance with the [applicable] land use plans" 43 U.S.C. § 1732(a); *S. Utah Wilderness Alliance v. Norton*, 542 U.S. 55, 59-60 (2004). Here, the leasing EAs are not consistent with provisions of the Rocky Mountain ROD and Wyoming BLM ARMPA, which require the "prioritization" of oil and gas leasing outside of PHMAs and GHMAs.

Under the Rocky Mountain Region ROD, BLM must:

prioritize oil and gas leasing and development outside of identified PHMAs and GHMAs . . . to further limit future surface disturbance and to encourage new development in areas that would not conflict with GRSG. This objective is intended to guide development to lower conflict areas and, as such, protect important habitat and reduce the time and cost associated with oil and gas leasing development. It would do this by avoiding sensitive areas, reducing the complexity of environmental review and analysis of potential impacts on sensitive species, and decreasing the need for compensatory mitigation.

Rocky Mountain Region ROD at 1-25. The Wyoming BLM ARMPA echoes this directive and includes the following objective: "Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMAs and GHMAs." ARMPA Management Objective No. 14, at 24.

As noted above, the prioritization mandate applies even when lands are designated as open for leasing under the RMP. Thus, the fact that these lands are open to leasing does not excuse compliance with the prioritization requirement, as BLM asserts in its response to comments. *See* High Plains Part 1 EA Appendix F at 18-19. In addition, BLM cannot rely on stipulations as a substitute for compliance with the RMP prioritization mandate. *Id.* The RMP requirement is to apply certain stipulations *in addition to* prioritization, not instead of it. They are separate RMP provisions that both must be satisfied.

BLM's now-replaced IM 2016-143 also put in place many provisions to ensure prioritization of leasing outside of sage-grouse habitats. While IM 2016-143 has been replaced with IM 2018-026, which states, "[i]n effect, the BLM does not need to lease and develop outside of GRSG habitat management areas before considering any leasing and development within GRSG habitat," this mere IM cannot supersede the statutory obligation for BLM to manage public lands "in accordance with the [applicable] land use plans" And the RMPs are clear, BLM must "prioritize oil and gas leasing and development outside of identified PHMAs and GHMAs" and "[p]riority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMAs and GHMAs."

To the extent IM 2018-026 can be read as purporting to remove any requirement to limit leasing in sage-grouse habitat management areas, and the requirement to prioritize leasing outside those areas, it is inconsistent with the Rocky Mountain ROD and the ARMPA. The entire point of the prioritization objective is to limit development and surface disturbance in important sage-grouse habitat—not simply to order BLM's administrative paperwork. Nor is the prioritization requirement satisfied by "encourag[ing] lessees to voluntarily prioritize leasing" outside habitat management areas. IM 2018-026 at 3. The prioritization objective applies to BLM's decisions about where to offer leases—not the business choices of companies with no stewardship obligations—and it is binding on the agency.

The BLM's failure to prioritize leasing outside of sage-grouse habitats is a violation of FLPMA.

2. The BLM is not complying with FLPMA's multiple-use mandate.

Under FLPMA, BLM is required to manage the public lands on the basis of multiple use and sustained yield. 43 U.S.C. § 1732(a). As the Supreme Court has noted, "[m]ultiple 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. at 58 (internal quotations omitted).

In recognition of the environmental components of the multiple use mandate, courts have repeatedly held that under FLPMA's multiple use mandate, 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, 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."); Rocky Mtn. Oil & Gas Ass'n v. Watt, 696 F.2d 734, 738 n.4 (10th Cir. 1982) ("BLM need not permit all resource uses on a given parcel of land."). And, 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, 306-07 (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 emphasis both on environmental resources and on the need to balance between present and future generations are highly relevant to consideration of impacts to wildlife and recreation. For example, multiple use includes "the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; . . . a combination of balanced and diverse

resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources . . . ; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment. . . . " 43 U.S.C. § 1702(c).

The mere fact an RMP makes lands *available* for leasing does not mean that actually leasing the lands meets BLMs' multiple use obligations. Given BLM's acknowledged discretion to engage in leasing, or not leasing, under the Mineral Leasing Act, 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.

3. Parcels located in the Rock Springs Field Office should be deferred to preserve "decision space" in the RMP revision process.

Oil and gas leasing, per the Mineral Leasing Act, is a discretionary activity and the Secretary of the Interior and Bureau of Land Management retains significant discretion regarding leasing or not leasing specific lands. In the past, at the RSFO Manager's request, the BLM Wyoming State Director has judiciously applied this discretion and decided not to offer parcels for lease in that field office. This decision was made one year ago, in the November 2017 sale, when 74 parcels were deferred. Choosing not to lease in a field office currently seeking the input of cooperating agencies and the public on a land-use plan revision about where to lease or not lease, and how to lease, among other decisions, is a proactive decision that retains the integrity of the draft plan and the public's trust. It reduces conflict down the road and ensures that leasing does not happen under an outdated plan from 1997. We applauded the State Director's decision, and the Field Office Manager's request, for that sale and ask that the agency maintain consistency with that decision here.

We ask that all lease parcels currently offered in the RSFO be deferred. New data and public input is being weighed in connection with evaluating current leasing decisions in that field office through the plan revision and until it is complete, leasing now will be disruptive to the landscapes, will apply outdated stipulations, be out of touch with current scientific information and community attitudes, and will undermine the decision space of the field office manager.

This applies to parcels 265, and 271 to 339. Some of these are entirely in the RSFO, others have sections in the RSFO and other field offices.

C. The Part 2 EA Has Not Adequately Addressed Lands with Wilderness Characteristics, in Violation of NEPA and FLPMA.

We have reviewed the BLM's response to our comment letter regarding part 2 of the Third Quarter lease parcels that overlap Lands with Wilderness Characteristics (LWCs). We find the BLM's EA and responses to our comment letter troublesome. This lease sale will impact thousands of acres of wildlands. These areas provide wildlife essential habitat and visitors a rare opportunity

for solitude on BLM lands. The LWCs in the in the RSFO have the opportunity to be managed for their wilderness character, because the LWCs in this field office do not have management direction. The field office is undergoing a management revision process that will decide their future management. We respectfully ask that you do not take away the opportunity for the public to decide how these lands should be managed in the next plan. The Green River RMP is over 20 years old and does not contain management direction for LWCs. The LWCs inventories are new information that should be considered during this lease sale and incorporated in the next plan.

The Part 2 EA and the BLM's response to our concerns still do not properly address the violations to NEPA and FLMA in regards to thirty-five lease sale parcels. The violations include the following: 1.) the EA did not identify all the LWCs that overlapped lease parcels, 2.) the EA makes no mention of the impacts that leasing will have on LWCs, 3.) the BLM has failed to adequately respond to significant new information submitted by the public regarding wilderness resources, and 4.) the EA did not consider alternatives to protect LWCs. Given these violations, the BLM must defer the sale of the parcels in tables 1 and 2, below, entirely, or defer them until the agency completes the ongoing plan amendments and has fully analyzed the impacts to LWCs in the applicable EA.

Table 1: 23 Lease Parcels overlap BLM Identified LWCs in the RSFO.

Lease Parcel #	BLM Identified LWC	
278- 280, 288	Bear Creek Trail: WY-040-2011-088	
283, 286, 287, 291-295	Bush Creek: WY-040-2011-074	
300	Honeycomb Buttes Contiguous Northwest: WY 040-2011-116	
296, 298-300	Harris Slough West: WY 040-2011-116 (attached as Exhibit 6)	
306, 307-311	Mowing Machine Draw: WY-040-2011-069	
335	Buffalo Hump Adjacent: WY-040-2011-062	

^{*}Note: The BLM did not identify the interaction with these LWC parcels, and the proposed leases affect LWCs identified by the BLM. We have also attached BLM's inventory finding LWCs to these comments as Exhibit 7.

Table 2: 12 Lease Parcels overlap Citizen Proposed LWCs in the RSFO.

Lease Parcel #	Citizen Proposed LWC
271, 272	Honeycomb Buttes Contiguous Southeast: WY 040-2011-089, WY 040-
	2011-032
282, 289, 290,	Little Bar X Draw: Multiple BLM Identifiers-WY 040-2011-072, WY
297, 301-303	040-2011-073, WY 040-2011-075, and WY 040-2011-228
316, 317	Whitehorse Creek Contiguous West: WY 040-2011-070

^{1.} The EA did not correctly identify LWCs.

There are 23 parcels that overlap BLM identified LWCs listed in table 1. In comment number 61, the BLM states, "The BLM has requested that the High Desert District re-check the proposed parcels to confirm that those intersecting LWCs in the Rock Springs Field Office are properly identified in the EA." Response to Comments at 32. We thank the BLM for possibly updating the EA to reflect the parcels that overlap LWCs. We identified an additional four parcels (296, 298, 299, and 300) that overlap BLM-identified LWCs unit-Harris Slough West WY 040-2011-116. The boundaries of this LWC unit were not correctly identified in the EA nor are all the affected parcels that impact this LWC listed in the EA in the table titled, "HDD Parcels within Lands with Wilderness Characteristics in the EA". Part 2 EA at 5-124 to -125.

The BLM is required to accurately identify the presence of LWCs prior to deciding to make the proposed leases available for sale. FLPMA requires the BLM to inventory and consider public lands resources during the land use planning process. 43 U.S.C. § 1711(a). The U.S. Court of Appeals for the Ninth Circuit has held: "wilderness characteristics are among the 'resource and other values' of the public lands to be inventoried under § 1711. BLM's land use plans, which provide for the management of these resources and values, are to 'rely, to the extent it is available, on the inventory of the public lands, their resources, and other values.' 43 U.S.C. § 1712(c)(4)." *Ore. Natural Desert Ass'n v. Bureau of Land Management*, 531 F.3d 1114, 1119 (9th Cir. 2008).

Further, in order to evaluate impacts under NEPA, the BLM must analyze those impacts from an accurate understanding of conditions on the ground. 40 C.F.R. § 1502.15 (agencies must "describe the environment of the areas to be affected or created by the alternatives under consideration."); see also Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci, 857 F.2d 505, 510 (9th Cir. 1988) ("without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA.").

2. The EA does not properly analyze potential impacts to LWCs and WSAs.

The BLM's response to our comment letter and the EA does not mention *any* impact that leasing would have on LWCs. Most of the LWCs are also located on the border of Wilderness Study Areas (WSA), and leasing will have a significant impact on the wilderness character of these landscapes. Given the overlap of the proposed lease parcels with LWCs, and their proximity to WSAs, the BLM should provide a thorough analysis of the potential impacts that development would have on the wilderness character of these landscapes.

The purpose of an EA is to evaluate and minimize adverse environmental effects before they occur. *See*, 40 C.F.R. §§ 1508.8, 1508.9. An EA should provide "sufficient evidence and analysis" to justify this determination, in part by taking a "hard look" at potential direct, indirect and cumulative impacts of the proposed action. *See, e.g. Wilderness Soc. v. Forest Serv.*, 850 F.

Supp. 2d 1144, 1155 (D. Idaho 2012). BLM must fully evaluate the impacts of leasing on LWCs in the EAs.

Simply listing the LWC units that overlap with the proposed lease parcels, as the BLM has done in the EA, does not constitute environmental impact analysis under NEPA. NEPA requires federal agencies to consider "any adverse environmental effects which cannot be avoided." 42 U.S.C. § 4332(C)(ii). Effects that must be considered include "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative." 40 C.F.R. § 1508.8.

Federal agencies must comply with NEPA before there are "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(C)(v); see also 40 C.F.R. §§ 1501.2, 1502.5(a). 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 no-surface occupancy (NSO) stipulations and where there is reasonable foreseeability of environmental impacts. See e.g., New Mexico ex rel. Richardson v. BLM, 565 F.3d 683, 718 (10th Cir. 2009); Pennaco Energy, Inc. v. United States DOI, 377 F.3d 1147, 1160 (10th Cir. 2004). This is because oil and gas leases confer "the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold" and therefore would constitute an "irreversible and irretrievable commitment of resources." New Mexico ex rel. Richardson, 565 F.3d at 718; 40 C.F.R. § 3101.1-2; see also Sierra Club v. Hodel, 848 F.2d 1068, 1093 (10th Cir. 1988) (agencies are to perform hard look NEPA analysis "before committing themselves irretrievably to a given course of action so that the action can be shaped to account for environmental values").

The BLM's total failure to analyze the potential impacts on BLM-inventoried lands with wilderness characteristics in the Part 2 EA violates NEPA.

3. The BLM has failed to respond to significant new information regarding wilderness resources submitted by the public.

There are twelve parcels (see table 2) that overlap with citizen-identified LWCs in the RSFO that are not included in the BLM's inventoried LWCs. The RSFO has yet to conduct fieldwork to accurately determine the wilderness quality of these landscapes or adequately responded to substantial data submitted by citizens. We take issue with the BLM's failure to acknowledge these LWCs; leases should not be issued until the agency complies with its obligations under law and policy to establish a complete, up to date inventory of LWCs.

The decision to ignore public input on affected wilderness resources contravenes the "hard look" requirement of NEPA. See 42 U.S.C. § 4332(2)(C). Numerous courts have applied the hard look mandate to overturn agency decisions that ignored substantive, relevant wilderness information provided by the public, including citizen-submitted wilderness inventories. See, e.g., Or. Natural Desert Ass'n v. Rasmussen, 451 F. Supp. 2d 1202, 1211-13 (D. Ore. 2008) (holding that BLM violated the hard-look requirement of NEPA when it dismissed a citizen-submitted inventory "[w]ith a broad brush"); SUWA v. Norton, 457 Supp. 2d 1253, 1263-65 (D. Utah 2006) (stating the Southern Utah Wilderness Alliance has "presented a textbook example of significant new information about the affected environment (the wilderness attributes and characteristics...)"); Biodiversity Conservation Alliance, 183 IBLA 97, 2013 IBLA Lexis *1, *28-*29 (2013) (rejecting a claim that BLM violated the hard-look requirement where BLM "specifically evaluated citizens' wilderness proposals [so that the citizens' proposals had] become administratively final...").

By completely ignoring the significant new information submitted by the public, the BLM is failing to take the requisite "hard look" at how the sale of the parcels listed in table 2 above would affect wilderness resources in the RSFO as required by NEPA. The BLM must therefore defer leasing these parcels until the agency has updated its inventory for these areas in response to the significant new information submitted to the agency.

4. The EAs do not consider a reasonable range of alternatives for management of LWCs and preclude consideration in ongoing planning efforts.

As noted above, the BLM is required to consider a reasonable range of alternatives in the EA. However, by failing to identify LWCs and failing to evaluate potential effects on LWCs, the EA does not consider alternatives that would protect LWCs or otherwise minimize or mitigate harm to LWCs from leasing and development.

In addition, the Rock Springs RMP is currently being revised. Pursuant to BLM's Manual 6320, the BLM is to consider how to address management of LWCs as part of the planning process. Because these LWCs were not identified in the existing RMP, alternatives to manage lands to protect LWCs, or to otherwise minimize impacts to this resource, were not considered. In the ongoing RMP revision, the BLM is required to evaluate management approaches but if the BLM leases these lands, those alternatives would be foreclosed. Accordingly, pursuant to NEPA and the BLM's Land Use Planning Handbook, the BLM may defer leasing to avoid limiting the range of alternatives in an ongoing planning process. *See*,40 C.F.R. § 1506.1; Land Use Planning Handbook 1601-1, § VII (E). While we understand that the BLM has discretion in this regard, the current RMP went into effect in 1990—almost 40 years ago—and never evaluated options to protect LWC.

The BLM should also defer these LWC parcels based on the BLM's obligations under FLPMA to manage the public lands based on principles of multiple use and sustained yield. 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). Sustained yield further requires the BLM to seek "the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use." 43 U.S.C. § 1702(h). This mandate is clear that uses such as outdoor recreation, fish and wildlife, grazing, and wilderness are to be equally considered as multiple uses, along with energy development. 43 U.S.C. § 1702(l); see also, Ore. Natural Desert Ass'n v. BLM, 625 F.3d 1092, 1122 (9th Cir. 2010). Consequently, the BLM may not manage public lands primarily for energy development. Notably, the BLM also may not manage public lands in a manner that unduly or unnecessarily degrades other uses. See 43 U.S.C. § 1732(b). By failing to consider how to protect LWCs and foreclosing opportunities to protect them in the ongoing Rock Springs RMP revision, the BLM is not complying with its obligations under FLPMA and NEPA.

D. BLM Has Not Adequately Considered Impacts to Big Game Crucial Winter Range and Migration Corridors.

The EAs prepared for the September 2018 lease sale fail to analyze the impacts of leasing in big game crucial winter range and migration corridors. For example, although the EA prepared by the High Plains District recognizes the importance of crucial winter range (*see* High Plains Part 1 EA at 45), it lacks any analysis whatsoever of the impacts of leasing in those habitats. The EA simply asserts—without referencing any supporting documentation—that crucial winter range would be protected: "Parcels within designated big game crucial winter range have a CSU and/or TLS stipulation applied to protect this important habitat." High Plains Part 1 EA at 53. These few sentences in the EA do not come close to satisfying NEPA's basic requirement that the environmental impacts of a proposed action and alternatives must be disclosed.

The EA prepared by the Wind River/Bighorn Basin District fares no better. It contains no analysis of impacts, yet again makes unsupported assertions that crucial habitats will be protected:

Parcels offered for sale are subject to the stipulations shown in Attachment 1, with protections for wildlife, special status wildlife, fish, and birds. The lease sale includes some parcels that are open to oil and gas leasing subject to an NSO or CSU stipulation for the protection of habitat or life cycle for pygmy rabbits, mountain plover, fish spawning, raptors, and big game crucial winter range. Further protections are implemented through standard Lease Notice 1 and standard Lease Stipulation No. 2.

Wind River Part 1 EA at 3-33.

The Part 2 EA suffers from the same deficiencies and omissions and, in addition, fails in the most fundamental way by not even identifying proposed lease parcels that contain crucial

winter range, making review by the public impossible. Moreover, crucial winter range is not mentioned in the description of affected environment (*see* Part 2 EA § 3.10 at pp. 3-21-24) and the disclosure of impacts contained in the EA (§ 4.2.8) offers nothing except a generic, non-specific disclosure akin to what is typically included in RMPs. This generic assessment is followed by an unsupported conclusion that these important wildlife habitats would be protected and impacts would be mitigated:

As required by the applicable RMPs, wildlife impacts are mitigated through NSO, TLS, and/or CSU stipulations. See Attachment 5.1. In the event the proposed leases are issued and lease operations are proposed, BMPs such as directional and/or horizontal drilling, habitat avoidance, and consolidation of infrastructure may be implemented to mitigate site-specific impacts to wildlife and their habitats. Additionally, the BLM would coordinate with the WGFD and consider their guidelines (such as those in "Recommendations for Development of Oil and Gas Resources within Crucial and Important Habitat" (2010)).

Part 2 EA at 4-20.

The Part 2 EA reveals (at 3-24) that several parcels encompass "the known and mapped Sublette mule deer migration corridor (*see* Map at 3-25), yet offers a single sentence describing the potential impacts of leasing inside the corridor: "If the proposed parcels located in the known and mapped mule deer migration corridors are leased, and if operations are authorized by the BLM, oil and gas activities may adversely affect use of the migration corridors by mule deer." Part 2 EA at 4-21. The EA then asserts, again without citing any scientific support for its claim, that impacts will be mitigated: "... the BLM may require, in coordination with the WGFD, additional measures at the time operations are authorized to mitigate impacts to mule deer migration corridors." *Id*.

In comments on all three EAs, the Wyoming Outdoor Council (WOC) expressed its concerns about the BLM's failure to disclose the impacts of leasing in crucial big game winter range and migration corridors and suggested, among other things, that the agency defer the issuance of parcels located in those habitats. *See, e.g.*, WOC comments on Part 2 EA, pp 5-8 ("BLM has failed to take the necessary 'hard look' at potential environmental impacts.").

In responding to those concerns, the BLM brushed off any need to analyze impacts to crucial wildlife habitats, asserting that leasing is simply an administrative action with no on-the-ground impacts, that impacts would be mitigated, and that deferring parcels in crucial winter range or migration corridors is "beyond the scope of this document." *See*, e.g., Wind River Part 1 EA, Public Comments and Agency Response, WOC comment #10. As discussed further below, the BLM's assertions are incorrect.

Importantly, the mitigation measures relied upon by BLM to "protect" big game crucial winter range have been proven to be ineffective. A recent BLM-funded study of mule deer in the Pinedale area conducted by Hall Sawyer, et al., demonstrated that despite the application of onsite mitigation required by BLM, population effects to the herd were "considerable" and "not fully offset through mitigation or best management practices." *See Mule deer and energy*

development - Long-term trends of habituation and abundance, at 4527, attached as Exhibit 8 and fully incorporated by reference herein. 11 The study found that "[f]ollowing fifteen years of natural gas development in western Wyoming, mule deer did not habituate to disturbance and continued to avoid energy infrastructure. Even during the last 3 years of development when most wells were in production and well pads were in various states of reclamation, we found no evidence of habituation. Instead, mule deer used areas that averaged nearly 1 km further from well pads compared with animals before development occurred." *Id.* at 4526. Among other things, the EAs fail to disclose that:

Long-term avoidance behavior is problematic because indirect habitat loss reduces the size of winter range available for mule deer—habitat that would otherwise be used is functionally unavailable to the animals that occupy the range (Korfanta, Mobley, & Burke, 2015; Northrup et al., 2015; Sawyer et al., 2006). Winter range for temperate ungulates is often geographically restricted, particularly in migratory herds, so that habitat loss cannot be offset by simple range expansion. Thus, when habitat is lost directly through conversion to infrastructure and additionally through behavioral avoidance, carrying capacity is also reduced.

Id.

The information presented in Sawyer's mule deer study is not disclosed in the EAs, nor is it disclosed in any of the RMPs that BLM references in the EAs. Indeed, not only is the information not disclosed, the study emphasizes that:

Our findings contradict many NEPA documents (e.g. Environmental Impact Statements, Environmental Assessments) that guide federal land use on millions of acres in the western USA and consider natural gas development a short-term impact to which animals can readily habituate once drilling activities are complete (e.g. BLM, 2005, 2006, 2012). We understand that a paucity of data on the longterm impacts of development likely led to this type of conclusion in the NEPA process. However, our long-term dataset comprising multiple generations of animals indicates that avoidance of energy infrastructure is a long-term effect that can be associated with significant population declines.

Id. at 4527. While obviously not specifically referencing the leasing EAs, the researcher's findings nonetheless highlight fundamental flaws in both the BLM's impacts analysis as well as its misinformed and inadequate approach to management of important big game habitats.

The researchers continued:

Our work has important implications for applying the mitigation hierarchy (Council on Environmental Quality, 2000), which seeks to reduce negative effects of development by sequentially avoiding, minimizing, and offsetting impacts. First, effective mitigation seeks to match the mitigation activity with the duration

¹¹ The study is available online at: https://onlinelibrary.wiley.com/doi/epdf/10.1111/gcb.13711.

of the impact (Council on Environmental Quality, 2000). Our study indicates that impacts of energy development in sagebrush steppe can be long term, if not permanent, and mitigation measures should be accordingly long term. Second, minimizing impacts through onsite mitigation, although desirable for species that exhibit high site fidelity, may not be possible. Onsite mitigation was insufficient to abate behavioral and demographic consequences to mule deer during our study. Third, given the limitations of onsite mitigation, avoidance of impacts by strategically foregoing leasing or reducing intensity of development of critical habitats is likely the most effective approach to averting population-level impacts. And finally, where avoidance and minimization are not possible or effective, offsite mitigation approaches such as biodiversity offsets or conservation banks that aim to compensate for biological impacts in one area with protected or improved habitat elsewhere (Bull, Suttle, Gordon, Singh, & Milner-Gulland, 2013; Carroll, Fox, & Bayon, 2008) are untested but warrant consideration.

Id. at 4527.

Our long-term study refutes the prevailing notion that mule deer habituate to human disturbance, and instead, demonstrates that energy development can have long-term consequences for deer populations simply through avoidance behavior and the indirect habitat loss that ensues. Furthermore, as the NEPA process is based on full disclosure of the potential impacts from a proposed action, our work indicates that future impact assessments should disclose that the impacts to ungulate habitat in the shrub-steppe environment of the West may well be long-term and perhaps an irretrievable commitment of resources.

Id. at 4528.

In failing to adequately disclose impacts to mule deer from leasing, and in relying on mitigation measures that have been conclusively shown to be ineffective, the EAs cannot properly be relied on to justify the proposed leasing decision. BLM may not lawfully rely on outdated, erroneous, and incomplete environmental information presented in the EAs along with inadequate mitigation measures based on outdated science and faulty assumptions to justify its FONSI.

E. BLM Has Failed to Consider Reasonable Alternatives to Leasing in Big Game Crucial Winter Range and Migration Corridors, and Failed to Consider Relevant Information Critical to Informed Decision-Making.

WOC *et al.* recommended in our comments on the EAs that BLM defer leasing in big game crucial winter range and migration corridors and asked the agency to "consider one or more alternatives that would defer parcels containing important and highly sensitive big game habitats such as big game crucial winter range, parturition areas and migration routes." *See* June 7, 2018 letter at 4, and February 20, 2018 letter at unpaginated 11, 12 ("The BLM should defer leasing in big game crucial winter range and migration corridors until compliance with Secretarial Order 3362 can be assured.") Our requests were summarily rejected: "See comment

responses Nos. 1-2, 6-8, 17-19, 21, and 23, above." *See* BLM Part 2 EA, Response to Comment 52. What these responses reveal is that BLM apparently fails to appreciate that coordinating with the State of Wyoming and the WGFD on the development of a Special Lease Notice, and deferring three parcels in the Sublette mule deer migration corridor, in no way satisfies BLM's obligations under NEPA to consider alternatives to its proposal to offer oil and gas leases encompassing these important habitats.

In arguing for an analysis of one or more alternatives that would defer leasing in crucial big game habitats, we wrote: "Crucial winter range is a key requirement for the health and survival of big game herds. The availability of good winter range where big game can find shelter and adequate food means all the difference between strong populations or a herd weakened by starvation and at increased risk for disease and predation." *See* June 7th letter at 4. We stressed that, "[s]tudies have demonstrated that oil and gas development—even development that is subject to protective stipulations and conditions of approval—has a negative impact on ungulates such as mule deer." *Id.* We pointed out that, "well documented impacts to crucial big game habitats and migration routes from oil and gas development – undisclosed in the EA – support the need to consider alternatives that would defer leasing parcels that contain these resources." *Id.* And we offered that, "[r]ecognizing that damage to these habitats may be difficult or impossible to avoid or fully mitigate with lease stipulations, or efforts at the APD stage, analyzing an alternative that defers offering parcels containing these habitats avoids the possibility of damage to these vital resources and therefore should be analyzed in this EA." *Id.* at 5.

Yet despite the clear need for an analysis of alternatives to leasing in crucial wildlife habitats, BLM simply chose not to address the issue at all. The BLM's refusal to consider reasonable alternatives is not permissible under NEPA, and EAs that fail to contain an analysis of reasonable alternatives to leasing in crucial wildlife habitats should not be approved by the Wyoming BLM State Office.

The BLM is proposing to lease 33 parcels encompassing the Sublette mule deer migration corridor, also more commonly known as the Red Desert to Hoback (RD2H) migration corridor: WY-183Q-289, 290, 296, 298, 299, 300, 302-316, 318-323, 328, 331, and 336-339. See Exhibit 9 (presenting map showing parcels within the RD2H migration corridor). Despite widespread knowledge of its existence by resource and wildlife professionals, the BLM failed to consider the Wyoming Migration Initiative's Red Desert to Hoback Migration Assessment. See http://migrationinitiative.org/content/red-desert-hoback-migration-assessment. The assessment was published in March 2014, over four years before the release of the BLM leasing EAs. WMI's website provides the following project overview:

Western Wyoming supports some of the largest and most diverse ungulate populations in North America. The performance of these herds is largely dependent on their ability to seasonally migrate from low-elevation winter ranges to high-elevation summer ranges, where they gain fat needed to survive the long Wyoming winters. Recently, the longest mule deer migration ever recorded (and 2nd longest land migration in North America) was discovered where deer travel a

one-way distance of 150 miles from the low-elevation winter ranges in the Red Desert to the high mountain slopes surrounding the Hoback Basin. The deer that complete this journey spend 4 months of each year migrating and encounter a variety of natural and anthropogenic obstacles, including sand dunes, lake and river crossings, multiple highways, and more than 100 fences.

Migrations like this are unique to Wyoming and are an important part of our cultural, hunting, and conservation heritage. However, given the increasing levels of energy development and recreation on public lands, sprawling housing development on private lands, and increasing traffic volumes on our roadways, the persistence of this migration route (and others) is uncertain. Additionally, the biological and political complexities involved with managing or conserving long-distance migrations outside of national parks is daunting. There is a pressing need to better connect the science of migration with conservation, education, and policy so that these management challenges can be met.

In an effort to better convey the science to migration stakeholders, the Wyoming Migration Initiative conducted a "migration assessment" of this newly discovered mule deer migration. The assessment identified specific locales of potential risks (e.g., fences, road crossings, bottlenecks, energy development) and considered the complex land-use patterns and associated policies through detailed mapping and analysis. By identifying potential risks to migrating deer, the assessment provides a roadmap for agencies, non-government organizations, landowners, industry, and other stakeholders to improve management and conservation efforts directed at the Red Desert to Hoback migration.

To complement our scientific assessment, we also built an outreach and educational program to generate interest and allow the broader public to learn about the migration. Specifically, we worked with National Geographic photographer Joe Riis to compile a traveling photo exhibit (12 photos and 2 maps) and short film that convey the story of this spectacular migration and the challenges mule deer must overcome to complete their 300-mile round-trip journey.

This project is led by Hall Sawyer, a research biologist at the Western Ecosystems Technology (WEST), Inc.

The Migration Assessment contains detailed information about the RD2H migration corridor and each of its segments including, importantly, the Red Desert Segment at issue here. The assessment contains the latest science on ungulate migrations and should have been considered by the BLM in this EA. Indeed, the BLM's failure to consider the assessment defeated its fundamental purpose: "By identifying potential risks to migrating deer, the assessment provides a roadmap for agencies, non-governmental organizations, landowners, industry, and other stakeholders to improve management and conservation efforts directed at the Red Desert to Hoback migration. Unfortunately,

instead of following the "roadmap" to improve management and conservation efforts, the BLM simply plowed ahead with incomplete information and a firm reluctance to consider any option other than to lease in the RD2H corridor. Due to its importance and relevance to the issues presented in this protest, we have attached a copy of the WMI's *Red Desert to Hoback Migration Assessment*, and fully adopt and incorporate by reference its contents. *See* Exhibit 10

Recognizing importance of the state's big game migration corridors, WGFD has developed a wildlife mitigation policy and an ungulate migration corridor strategy to address the needs of wildlife in the face of multiple threats. See attached exhibits 11 and 12. We discussed the relevance and application of these policies to BLM's oil and gas leasing decisions in a recent letter to Wyoming BLM State Director Mary Jo Rugwell. This April 13, 2018 letter is attached as exhibit 13. Our letter to Director Rugwell included a *Statement of Reasons in Support of Deferral of Lease Parcels* offered in the upcoming December 2018 Wyoming BLM oil and gas lease sale. The arguments made in our April 13th letter in support of a deferral of leases within the Sublette mule deer migration corridor are directly relevant to the September 2018 lease sale, and are therefore incorporated by reference herein as if fully set forth below. For the reasons set forth above, and in the April 13th statement of reasons provided to Director Rugwell, we request that BLM defer all parcels offered at the September 2018 lease sale that overlap the Sublette (RD2H) mule deer migration corridor.

F. The BLM Should Defer Leases in the Jack Morrow Hills Because They Do Not Conform to the Resource Management Plan.

In addition to the concerns about migration corridors, many of these parcels are located in the Jack Morrow Hills (JMH) special management area and are governed by the Coordinated Activity Plan (CAP) for that area that was adopted in July 2006. In this portion of the protest we will address concerns regarding proposed lease parcels in the JMH.

The CAP made many promises of protection of the resource—especially in relation to oil and gas development, based on an implementation plan that strongly relied on monitoring and mitigation. This is summarized in the CAP ROD under 4.2 "Implementation Strategy" on page 113 where it states:

The implementation strategy recognizes valid existing rights (such as oil and gas leases) and needs (such as grazing) involving public lands, as well as the need to maintain or enhance the natural values in the planning area. To accomplish this, the planning area is divided into three areas that represent the relative importance of the contained resource values. Surface disturbing or disruptive activities will be tightly controlled in areas where the greatest concentration of sensitive resources occur. The planning area division allows different policies or practices to be adopted, their effectiveness evaluated, and changes to be made to increase their effectiveness in achieving the resource objectives and the management vision.

The following list shows key elements of the Implementation, Monitoring, and Evaluation Process:

- Employing field data and observations in the evaluation of projects and proposals;
- Considering the condition of all resources (as shown by the indicators) before allowing further surface disturbing or disruptive activity;
- Improving understanding and ability to predict impacts associated with the uses of the various resources in the planning area;
- Allowing judicious testing of assumptions, practices, policies, and mitigation measures; and
- Applying best management practices, mitigation, and conditions of approval developed through the monitoring and evaluation process.

As part of the Implementation, Monitoring, and Evaluation Process, resource indicator data will be collected to assess the condition and level of use of the various resources and provide information for project or proposal evaluation and development of the most effective mitigation measures. This process will allow management actions and decisions of the JMH CAP to be tracked and evaluated to determine their effectiveness and whether the objectives of the JMH CAP are being met. If evaluation indicates that the JMH CAP decisions are not working as expected or needed, or if situations in the resource area change, it may become necessary to modify, amend, or revise the JMH CAP.

This commitment to require strong mitigation, and design controlled surface use (CSU) stipulations based on the site-specific circumstances of the special resources in the area, and for monitoring, is reflected throughout the CAP in its discussion of special areas (such as Area 2, special management areas, and areas of critical environmental concern (ACECs)). For example, in the ROD's description of oil and gas lease stipulations, for Area 2, it states (page 52):

Area 2 is open to leasing considering such factors as operational need, resource recovery, geology, and ability to mitigate impacts and with stipulations applied to protect sensitive resources in Area 2 (Table 3). BLM may request potential lessees to share data (such as reservoir data or geologic data) or plans related to the development of the potential oil and gas resource prior to leasing; sharing of these data is voluntary.

As leases expire within Area 2, they will be considered for subsequent lease offerings. Stipulations identified in Table 5 and those identified through monitoring as described in the implementation, monitoring, and evaluation management strategy (Appendix 2) and the Lease Stipulations paragraphs (Section 3.10.3.1.2) will be applied to new leases if deemed necessary.

Table 5 stipulations (page 50) specifically identify CSU stipulations for these areas in Area 2: Steamboat Mountain. Management Area, ACECs, and the Red Desert Watershed Management

Area. Footnote 5 to these CSU stipulations also identifies a very strong mitigation standard (see page 51) and footnote 6 to these stipulations refer to Appendix 5 in the final EIS, stating "These requirements apply to all surface disturbing activities." In that referenced Appendix 5, it states on page A5-2 that "Surface disturbance will be prohibited in any of the areas or conditions listed below" and includes "b. Within important scenic areas (Class I and II) visual resource management [VRM] areas."

This mitigation guidance is to "inform interested parties (potential lessees, permittees or operators) that when one or more of the five conditions (1a through 1e above) exist, surface disturbing activities will be prohibited unless or until a permittee or his designated representative and the surface management agency (SMA) arrive at an acceptable plan for the mitigation of anticipated impacts."

Similar mitigation guidance is also identified as applicable to other special resources on pages A5-4-5, including "c. special management areas." It further states there that "A detailed plan addressing specific mitigation and special restrictions will be required prior to disturbance or development and will become a condition for approval of the permit, plan of development or other use authorization."

Yet, these promised CSU stipulations are missing in the vast majority of these JMH leases, and there is no follow-through on this commitment for special stipulations to protect these special areas, which includes the South Pass Historic Landscape ACEC (all of which is VRM Class II) and its viewshed, which has to be protected beyond just the trail corridor; the Steamboat Mountain Management Area (also a VRM Class II); and the Red Desert Watershed Management Area, and other lands in Area 2. Table 5 specifically lists these areas for no surface occupancy (NSO) and CSU stipulations.

Specific concerns for each lease are listed below.

- 1) It appears that the following leases fall entirely in the NSO buffer surrounding Area 3, with none of the lease area outside of that, so these leases fail to clearly state that all the leases are NSO: 302, 303, 308, 311, 313, 322, 321, 323.
- 2) These leases: 314-317 and 296-300 fall entirely or in part within the South Pass Historic Landscape ACEC, but there is no notice that this area is VRM Class II, nor that under the CAP the following restrictions apply (pages 91-92) which require more upfront analysis and restrictions than the stipulations on these leases:

Surface Use Activities: Portions of the ACEC will be open to some activities if they will not result in irreversible adverse effects (Table 4 and Map A). Because the ACEC contains a high concentration of sensitive resource values, proposals for all surface activity will be closely examined. Users are charged with showing that resource development activities are needed and will result in acceptable impacts. This action may mean proposing novel methods, systems, and technologies for BLM consideration. APDs and other use applications may

require stringent conditions of approval and mitigation measures to address specific issues related to impacts. Surface use proposals and projects (e.g., rangeland improvement, grazing, access, and recreation) can expect to undergo an in-depth, comprehensive review. Field data and observations, cumulative impacts of likely and foreseeable competing uses, understanding of impacts, conditions within the ACEC, and management goals will be employed during the decision-making process (Map 4 and Table 4)...

The South Pass Historic Landscape ACEC viewshed will be maintained from approximately 3 miles either side of the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails. Intrusions within the viewshed area could be allowed provided the results of a visual analysis (as part of a site-specific analysis) indicate they are not visible from the trail routes or that they can be mitigated.

Summary of Actions Unique to the Portion of the ACEC That Is Visible From the Historic Trails (Viewshed): About 25,925 acres surrounding the trails and visible from the trails are closed to surface disturbing activities that could adversely affect the viewshed. This portion of the ACEC will continue to be managed as a right-of-way exclusion area for any right-of-way action that will adversely affect the viewshed (such as major transmission facilities or high-profile facilities). An NSO lease stipulation will apply to all oil and gas leases. This area is closed to solid leasable minerals and exploration and to saleable mineral activities (mineral material sales).

Summary of Actions Unique to the Portion of the ACEC That Is Not Visible From the Historic Trails: About 20,000 acres that are shielded by topography and not visible from the trail are open to development activities if they are subordinate to the landform and not visible from the historic trails and provided that environmental analysis indicates that the visual integrity of the area can be maintained. The portion of the ACEC shielded by topography and not visible from the trail is open to consideration of mineral material sales provided that effects to visual, cultural, and other sensitive resource values can be mitigated. Rights-of-way will be managed to avoid this area, and this area will not be considered as a preferred route for linear facilities. Rights-of-way applications will be examined for necessity. Paralleling, consolidation, or rerouting may be necessary to minimize cumulative surface disturbance and to meet transportation planning objectives.

3) These leases fall within the Steamboat Mountain Management Area and Area 2, but lack any CSU stipulations that reference the more stringent mitigation and monitoring language in the CAP for these areas: 319, 306 – 313.

4) And these leases fall within the Red Desert Watershed Management Area and Area 2: 279, 280, 282, 283, 286, 288-294, 302, 303 – and have no CSU stipulations either. Parcels 289, 290, 292, 293 just have a CSU for the spur trail – Point of Rocks.

In summary – the JMH CAP committed to a high standard of assessment of the need for and impacts of oil and gas development in these special areas, and a very high level of mitigation and monitoring to design the proper conditions for these stipulations. This commitment is not reflected in the lease stipulations attached to these leases, nor the manner in which these are being leased. As a result, the proposed leases fail to conform to the Jack Morrow Hills Coordinated Management Plan in violation of FLPMA section 1732(a) and its implementing regulations at 43 C.F.R. Part 1600.

C. CONCLUSION

For the reasons stated above, we protest the sale of all 350 parcels proposed for sale at the September 2018 oil and gas lease sale, principally because these parcels are located in crucial sage-grouse habitats. There is a need to provide for better protection for this species by prioritizing leasing outside of GHMA and PHMA, as BLM's land use plans, and FLPMA, require. In addition, the proposed leasing is not based on a reasonable range of alternatives, the EAs do not provide a "hard look" at environmental impacts or consider the cumulative impacts of leasing, they underestimate the impacts to groundwater resources and needed mitigation, and the leasing would not comply with the FLPMA multiple use mandate. Parcels in the Rock Springs Field Office should also be deferred to allow for an adequate decision space during the RMP revision in that office. There is also a need for better analysis of Lands with Wilderness Characteristics and big game migration corridors and crucial winter ranges. Lease parcels in the Jack Morrow Hills special management area also need to be reconsidered.

Sincerely,

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List of Exhibits:

1. Report by Dr. Matthew J. Holloran addressing potential effect to sage-grouse

from the June 2018 oil and gas lease sale, and CV for Dr. Holloran.

- 2. Wyoming v. Jewell admin. record at DOIAR0009703.
- 3. Gayathri Vaidyanathan, *Fracking Can Contaminate Drinking Water* at 8, Sci. Am. (Apr. 4, 2016) (Sci. Am. Article).
- 4. Dominic C. DiGiulio & Robert A. Jackson, *Impact to Underground Sources of Drinking Water and Domestic Wells from Production Well Stimulation and Completion Practices in the Pavillion, Wyoming Field,* 50 Am. Chem. Society, Envtl. Sci. & Tech. 4524, 4532 (Mar. 29, 2016).
- 5. "Former EPA lead investigator in Pavillion releases study linking fracking to water contamination." Casper Star Tribune, March 29, 2016.
- 6. Lands with Wilderness Characteristics map.
- 7. Lands with Wilderness Characteristics analysis.
- 8. Migration corridor map.
- 9. Mule deer article.
- 10. Migration corridor assessment.
- 11. Wyoming Game and Fish Department mitigation policy.
- 12. WGFD migration corridor strategy.
- 13. Wyoming Outdoor Council letter.

Appendix A

Lease Parcels Protested—As Listed in the Notice of Competitive Oil and Gas Lease Sale September 18-20, 2018

WY-183Q-001	WY-183Q-042	WY-183Q-083
WY-183Q-002	WY-183Q-043	WY-183Q-084
WY-183Q-003	WY-183Q-044	WY-183Q-085
WY-183Q-004	WY-183Q-045	WY-183Q-086
WY-183Q-005	WY-183Q-046	WY-183Q-087
WY-183Q-006	WY-183Q-047	WY-183Q-088
WY-183Q-007	WY-183Q-048	WY-183Q-089
WY-183Q-008	WY-183Q-049	WY-183Q-090
WY-183Q-009	WY-183Q-050	WY-183Q-091
WY-183Q-010	WY-183Q-051	WY-183Q-092
WY-183Q-011	WY-183Q-052	WY-183Q-093
WY-183Q-012	WY-183Q-053	WY-183Q-094
WY-183Q-013	WY-183Q-054	WY-183Q-095
WY-183Q-014	WY-183Q-055	WY-183Q-096
WY-183Q-015	WY-183Q-056	WY-183Q-097
WY-183Q-016	WY-183Q-057	WY-183Q-098
WY-183Q-017	WY-183Q-058	WY-183Q-099
WY-183Q-018	WY-183Q-059	WY-183Q-100
WY-183Q-019	WY-183Q-060	WY-183Q-101
WY-183Q-020	WY-183Q-061	WY-183Q-102
WY-183Q-021	WY-183Q-062	WY-183Q-103
WY-183Q-022	WY-183Q-063	WY-183Q-104
WY-183Q-023	WY-183Q-064	WY-183Q-105
WY-183Q-024	WY-183Q-065	WY-183Q-106
WY-183Q-025	WY-183Q-066	WY-183Q-107
WY-183Q-026	WY-183Q-067	WY-183Q-108
WY-183Q-027	WY-183Q-068	WY-183Q-109
WY-183Q-028	WY-183Q-069	WY-183Q-110
WY-183Q-029	WY-183Q-070	WY-183Q-111
WY-183Q-030	WY-183Q-071	WY-183Q-112
WY-183Q-031	WY-183Q-072	WY-183Q-113
WY-183Q-032	WY-183Q-073	WY-183Q-114
WY-183Q-033	WY-183Q-074	WY-183Q-115
WY-183Q-034	WY-183Q-075	WY-183Q-116
WY-183Q-035	WY-183Q-076	WY-183Q-117
WY-183Q-036	WY-183Q-077	WY-183Q-118
WY-183Q-037	WY-183Q-078	WY-183Q-119
WY-183Q-038	WY-183Q-079	WY-183Q-120
WY-183Q-039	WY-183Q-080	WY-183Q-121
WY-183Q-040	WY-183Q-081	WY-183Q-122
WY-183Q-041	WY-183Q-082	WY-183Q-123

WW 1020 124	WW 1020 170	WW 1020 216
WY-183Q-124	WY-183Q-170	WY-183Q-216
WY-183Q-125	WY-183Q-171	WY-183Q-217
WY-183Q-126	WY-183Q-172	WY-183Q-218
WY-183Q-127	WY-183Q-173	WY-183Q-219
WY-183Q-128	WY-183Q-174	WY-183Q-220
WY-183Q-129	WY-183Q-175	WY-183Q-221
WY-183Q-130	WY-183Q-176	WY-183Q-222
WY-183Q-131	WY-183Q-177	WY-183Q-223
WY-183Q-131 WY-183Q-132	~	•
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WY-183Q-133	WY-183Q-179	WY-183Q-225
WY-183Q-134	WY-183Q-180	WY-183Q-226
WY-183Q-135	WY-183Q-181	WY-183Q-227
WY-183Q-136	WY-183Q-182	WY-183Q-228
WY-183Q-137	WY-183Q-183	WY-183Q-229
WY-183Q-138	WY-183Q-184	WY-183Q-230
WY-183Q-139	WY-183Q-185	WY-183Q-231
WY-183Q-140	WY-183Q-186	WY-183Q-232
WY-183Q-141	WY-183Q-187	WY-183Q-233
WY-183Q-142	WY-183Q-188	WY-183Q-234
WY-183Q-143	WY-183Q-189	WY-183Q-235
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WY-183Q-144	WY-183Q-190	WY-183Q-236
WY-183Q-145	WY-183Q-191	WY-183Q-237
WY-183Q-146	WY-183Q-192	WY-183Q-238
WY-183Q-147	WY-183Q-193	WY-183Q-239
WY-183Q-148	WY-183Q-194	WY-183Q-240
WY-183Q-149	WY-183Q-195	WY-183Q-241
WY-183Q-150	WY-183Q-196	WY-183Q-242
WY-183Q-151	WY-183Q-197	WY-183Q-243
WY-183Q-152	WY-183Q-198	WY-183Q-244
WY-183Q-153	WY-183Q-199	WY-183Q-245
WY-183Q-154	WY-183Q-200	WY-183Q-246
WY-183Q-155	WY-183Q-201	WY-183Q-247
WY-183Q-156	WY-183Q-202	WY-183Q-248
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WY-183Q-157	WY-183Q-203	•
WY-183Q-158	WY-183Q-204	WY-183Q-250
WY-183Q-159	WY-183Q-205	WY-183Q-251
WY-183Q-160	WY-183Q-206	WY-183Q-252
WY-183Q-161	WY-183Q-207	WY-183Q-253
WY-183Q-162	WY-183Q-208	WY-183Q-254
WY-183Q-163	WY-183Q-209	WY-183Q-255
WY-183Q-164	WY-183Q-210	WY-183Q-256
WY-183Q-165	WY-183Q-211	WY-183Q-257
WY-183Q-166	WY-183Q-212	WY-183Q-258
WY-183Q-167	WY-183Q-213	WY-183Q-259
WY-183Q-168	WY-183Q-214	WY-183Q-260
WY-183Q-169	WY-183Q-215	WY-183Q-261
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WY-183Q-262	WY-183Q-292	WY-183Q-322
WY-183Q-263	WY-183Q-293	WY-183Q-323
WY-183Q-264	WY-183Q-294	WY-183Q-324
WY-183Q-265	WY-183Q-295	WY-183Q-325
WY-183Q-266	WY-183Q-296	WY-183Q-326
WY-183Q-267	WY-183Q-297	WY-183Q-327
WY-183Q-268	WY-183Q-298	WY-183Q-328
WY-183Q-269	WY-183Q-299	WY-183Q-329
WY-183Q-270	WY-183Q-300	WY-183Q-330
WY-183Q-271	WY-183Q-301	WY-183Q-331
WY-183Q-272	WY-183Q-302	WY-183Q-332
WY-183Q-273	WY-183Q-303	WY-183Q-333
WY-183Q-274	WY-183Q-304	WY-183Q-334
WY-183Q-275	WY-183Q-305	WY-183Q-335
WY-183Q-276	WY-183Q-306	WY-183Q-336
WY-183Q-277	WY-183Q-307	WY-183Q-337
WY-183Q-278	WY-183Q-308	WY-183Q-338
WY-183Q-279	WY-183Q-309	WY-183Q-339
WY-183Q-280	WY-183Q-310	WY-183Q-340
WY-183Q-281	WY-183Q-311	WY-183Q-341
WY-183Q-282	WY-183Q-312	WY-183Q-342
WY-183Q-283	WY-183Q-313	WY-183Q-343
WY-183Q-284	WY-183Q-314	WY-183Q-344
WY-183Q-285	WY-183Q-315	WY-183Q-345
WY-183Q-286	WY-183Q-316	WY-183Q-346
WY-183Q-287	WY-183Q-317	WY-183Q-347
WY-183Q-288	WY-183Q-318	WY-183Q-348
WY-183Q-289	WY-183Q-319	WY-183Q-349
WY-183Q-290	WY-183Q-320	WY-183Q-350
WY-183Q-291	WY-183Q-321	