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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
GREAT FALLS DIVISION

WILDEARTH GUARDIANS, MONTANA
ENVIRONMENTAL INFORMATION
CENTER, DAVID KATZ, BONNIE
MARTINELL, and JACK MARTINELL,

Plaintiffs,

vs.

U.S. BUREAU OF LAND
MANAGEMENT, an agency within the
U.S. Department of the Interior; DAVID
BERNHARDT, in his official capacity as
Secretary of the United States Department
of the Interior; DONATO JUDICE, in his
official capacity as Montana Bureau of
Land Management Deputy State Director,

Defendants.

No. 4:18-cv-00073-BMM

REPLY IN SUPPORT OF
PLAINTIFFS' MOTION FOR
SUMMARY JUDGMENT
AND RESPONSE IN
OPPOSITION TO
DEFENDANTS' CROSS-
MOTION FOR SUMMARY
JUDGMENT

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INTRODUCTION

The Bureau of Land Management (BLM) violated the National Environmental Policy Act (NEPA) when it failed to take a “hard look” at impacts to climate change and groundwater caused by its December 2017 and March 2018 Montana oil and gas lease sales. Plaintiffs’ opening brief explained that BLM unlawfully ignored cumulative climate impacts and improperly diluted the climate impacts of the March 2018 lease sale by dividing it into separate, smaller NEPA analyses. BLM overlooked evidence showing the potential for shallow fracturing and inadequate surface casing to contaminate groundwater, while also refusing to consider reasonable alternatives to protect groundwater. Finally, BLM improperly determined that the lease sales would not significantly impact the environment.

BLM’s Response hides behind string cites collecting general statements about climate and water, without analyzing impacts on either resource. Though BLM claims such analysis is impossible, the record shows this is not true. BLM erroneously ignored and refused to collect available information that would allow it to analyze climate and groundwater impacts.

BLM’s attempted shell game—relying on planning stage analysis and deferring analysis to the drilling stage—also must fail. Agencies must analyze impacts at the earliest possible time, before making an irretrievable commitment of resources. NEPA does not allow BLM to rely on planning-stage analysis where it

did not consider relevant issues at that stage. Nor can BLM defer analysis to the drilling stage (after resources have been committed), when such analysis was possible at the leasing stage.

The Court should therefore set aside BLM's inadequate oil and gas leasing analyses and require BLM to take a hard look at impacts to the climate and Montana's groundwater.

ARGUMENT

I. BLM Failed to Take a Hard Look at Cumulative Climate Impacts.

As Plaintiffs have shown, BLM does not include *any* cumulative impacts analysis in the Environmental Assessments (EAs) for the challenged lease sales. Doc. 25-1 at 21-26 (MSJ). In particular, BLM fails to assess the incremental climate impacts of greenhouse gas emissions (GHGs) from each of its leasing decisions, added to other past, present and foreseeable future impacts. *Id.*; 40 C.F.R. § 1508.7. “The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.” *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin. (NHTSA)*, 538 F.3d 1172, 1217 (9th Cir. 2008).

In its Response, BLM admits NEPA requires analyzing the cumulative impacts of its lease sales on climate change. Doc. 29 at 13, 15 (Response). Rather than addressing this obligation, BLM's Response is focused on recapping the EAs'

detached discussions of the lease sales' direct and downstream GHG emissions, *see id.* at 8-15, while altogether ignoring the cumulative impacts of emissions at a regional and national scale as required by NEPA, *see* 40 C.F.R. § 1508.7; *see also NHTSA*, 538 F.3d at 1217.

BLM also argues that by (1) including “narrative explanations of climate change and its effects, including cumulative effects,” (2) comparing emissions from these lease sales to state and federal emissions inventories, and (3) conducting analysis in resource management plans (RMPs), it has satisfied NEPA. Response 13, 15. BLM is incorrect.

A. BLM’s “Narrative Explanations of Climate Change” Do not Amount to Cumulative Impacts Analyses.

BLM’s citations, Response 15-17, come from the EAs’ background discussions of climate change, not their “cumulative impacts” sections, which contain zero discussion of cumulative climate impacts. *See* BLM-MT-BI-000050-52, BLM-MT-BU-000043-46, BLM-MT-HI-000038-41, BLM-MT-MC-002492-95; *see also* BLM-MT-BI-0002019-21, BLM-MT-BI-0002331-32 (excerpts from the Billings RMP); BLM-MT-BI-00010623, 010629-36 (excerpts from BLM’s Climate Change Supplementary Information Report). The characterization of this material as cumulative impacts analysis is an improper *post hoc* rationalization. *See Mont. Env’tl. Info. Ctr. v. OSMRE (MEIC)*, 274 F. Supp. 3d 1074, 1089-90, 1100-01 (D. Mont. 2017).

Moreover, narrative explanations of climate change are not enough; some quantitative analysis is required. *See Klamath-Siskiyou Wildlands Ctr. v. BLM (Klamath-Siskiyou)*, 387 F.3d 989, 993 (9th Cir. 2004) (consideration of cumulative impacts requires “some quantified or detailed information; general statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided” (quotation marks and alterations omitted)). “While BLM’s qualitative discussions of GHG emissions and climate change no doubt contributed to informed decisionmaking, they alone were not enough.” *WildEarth Guardians v. Zinke (Zinke)*, No. CV 16-1724 (RC), 2019 WL 1273181, at *16 (D.D.C. Mar. 19, 2019); *see also Diné Citizens Against Ruining Our Env’t v. Bernhardt (Diné CARE)*, No. 18-2089, 2019 WL 1999298, at *21 (10th Cir. May 7, 2019) (qualitative cumulative impacts analysis of drilling impacts insufficient where BLM has information available to quantify those impacts).

B. Comparing Lease Emissions to State and Federal Emissions Inventories Does not Satisfy NEPA.

BLM argues it placed the GHGs from these lease sales “into context” by showing what percentage of Montana-wide or nationwide emissions they represent. Response 13.

This argument misapprehends the purpose of NEPA’s cumulative impacts requirement. Under NEPA, BLM must identify and quantify GHGs from all

reasonably foreseeable developments, to assess whether “the addition of a small amount here, a small amount there, and still more at another point could add up to something with a much greater impact.” *Klamath-Siskiyou*, 387 F.3d at 994; *see also* 40 C.F.R. § 1508.7. For GHGs, the analysis should show whether the challenged lease sales are part of a larger regional pattern of BLM leasing that significantly impacts climate change. *Zinke*, 2019 WL 1273181, at *22 (“To the extent other BLM actions in the region—such as other lease sales—are reasonably foreseeable when an EA is issued, BLM must discuss them as well.”). Rather than engaging in this straightforward exercise of aggregation, BLM engages in an exercise in dilution that merely shows subgroups of wells from different lease sales result in a correspondingly small fraction of statewide and national climate pollution.

This shortcoming is illustrated by BLM’s March 2018 Lease Sale. The 83 parcels in that sale were split into three EAs. MSJ 22. In each EA, BLM quantified the GHGs associated with only a portion of the sale, but never quantified the combined emissions for all 83 parcels. Moreover, none of the EAs considered the GHGs of any other lease sale, even though BLM was simultaneously selling hundreds of leases in the region. *See, e.g.*, BLM-MT-BI-005979 (BLM offered for lease at least 859 parcels in just three of its western state offices in 2017); *see also Diné CARE*, 2019 WL 1999298, at *17 (holding that BLM must consider the

cumulative impacts of *all* reasonably foreseeable oil and gas development it knows about in the relevant area); *Zinke*, 2019 WL 1273181, at *22 (requiring BLM to address cumulative emissions from other lease sales). BLM’s reference to state or national emissions inventories does not tell the agency or the public anything about the cumulative impact of the March 2018 leases considered together with other lease sales.¹

BLM’s claim that “it would be impossible to individually assess the incremental contributions of each individual source of GHG emissions state-wide or nation-wide” is a straw man. Response 27 n.6. “BLM is correct that NEPA does not require the impossible. It does, however, require that BLM quantify the emissions from each leasing decision—past, present, or reasonably foreseeable—and compare those emissions to regional and national emissions, setting forth with reasonable specificity the cumulative effect of the leasing decision at issue.” *Zinke*,

¹ The cases BLM cites to support its position are inapposite. *See* Response 13. In *WildEarth Guardians v. BLM*, 8 F. Supp. 3d 17 (D.D.C. 2014), in evaluating two proposed coal leases, BLM provided a comparison to a state emissions inventory *but also* quantified the coal lease emissions “in combination with coal mining at other [Powder River Basin] mines and with other pending leases.” *Id.* at 35. BLM also cites *WildEarth Guardians v. Jewell*, 738 F.3d 298 (D.C. Cir. 2013), where BLM compared a coal mining proposal with state and national emissions. *Id.* at 309. But there, the court found that other projects were at too preliminary a stage to be “reasonably foreseeable” and thus did not need to be addressed in a cumulative impacts analysis. *Id.* at 310. Here, by contrast, there are numerous other lease sales that BLM was required to consider. *See, e.g.*, BLM-MT-BI-005979 (identifying past and concurrent lease sales).

2019 WL 1273181, at *22. BLM therefore must: (1) quantify the challenged lease sales' emissions, including all parcels in those sales; and (2) *add* emissions from the challenged sales to emissions from other BLM actions in the region and the nation, such as other lease sales. *Id.*; MSJ 21. BLM arbitrarily failed to do so here.

C. BLM's RMPs Do not Provide the Missing Analysis.

Finally, BLM asserts that the EAs tier to Environmental Impact Statements (EISs) for RMPs that quantified GHGs for each BLM field office. Response 28. This argument overlooks that the RMPs omitted foreseeable downstream emissions from oil and gas development, and thus are inaccurate. *See* MSJ 24; *Zinke*, 2019 WL 1273181, at *22 (holding that a hard look at cumulative climate impacts should include downstream emissions).

BLM argues that only the Miles City RMP was overturned for failing to quantify downstream emissions, and that the EA for the Miles City portion of the lease sale complied with that ruling by addressing downstream emissions. Response 29 (citing *W. Org. of Res. Councils v. BLM (WORC)*, No. CV 16-21-GF-BMM, 2018 WL 1475470, at *19 (D. Mont. Mar. 26, 2018)). While *WORC* did not rule on the other RMPs, they suffer from the same flaw as the Miles City RMP: they all failed to quantify downstream emissions. *See* BLM-MT-BI-002334-35; BLM-MT-BU-000980; BLM-MT-HI-001349. Moreover, addressing site-specific downstream emissions in lease sale EAs does not remedy BLM's failure to analyze

cumulative effects. Nowhere has BLM given the public the full picture of its activities: a quantification of all emissions, direct and indirect, from the challenged lease sales, cumulatively with those from other lease sales in the region and the nation. It therefore has not satisfied NEPA. *See NHTSA*, 538 F.3d at 1217.

II. BLM Failed to Take a Hard Look at Groundwater Pollution.

In their opening brief, Plaintiffs explained that BLM failed to take a hard look at groundwater contamination, for two reasons. MSJ 10-18, 26-35. First, record evidence shows that in Montana and elsewhere, it is a widespread practice for operators not to extend surface casing below all drinking water aquifers, increasing the risk of groundwater pollution by up to a thousand-fold. *Id.* at 27-28. Second, shallow fracturing—injecting fracturing fluid close to or within drinking water aquifers—occurs in Montana. *Id.* at 28. Despite this record evidence, BLM failed to analyze the groundwater risks posed by the challenged leases, and wrongly assumed that state and federal rules would protect groundwater despite evidence of widespread noncompliance. *Id.* at 28-33 (discussing *N.M. ex rel. Richardson v. BLM (Richardson)*, 565 F.3d 683, 713-15 (10th Cir. 2009)).

A. BLM’s General Statements Fail to Satisfy NEPA’s Hard Look Mandate.

In its Response, BLM provides string cites to references of “water” in its NEPA analyses. Response 18-22. But BLM’s general statements about water are not a substitute for actual analysis of specific threats to groundwater caused by

inadequate surface casing and shallow fracturing. “[G]eneral statements about possible effects and some risk do not constitute a hard look absent a justification for why an agency could not supply more definitive information.” *Or. Nat. Desert Ass’n v. Rose (Rose)*, No. 18-35258, 2019 WL 1855419, at *4 (9th Cir. Apr. 25, 2019) (quotation omitted); *accord Blue Mountains Biodiversity Project v. Blackwood (Blackwood)*, 161 F.3d 1208, 1213 (9th Cir. 1998); *see also Or. Nat. Res. Council Fund v. Brong (Brong)*, 492 F.3d 1120, 1134 (9th Cir. 2007). NEPA’s hard look obligation requires agencies to “provid[e] a reasonably thorough discussion of the significant aspects of the probable environmental consequences.” *NHTSA*, 538 F.3d at 1194 (quotation omitted).

BLM does not identify a single example where the challenged EAs address the potential for groundwater pollution caused by surface casing not extending below all drinking water aquifers.² BLM highlights the discussion of water *quantity* in its NEPA documents, which is unrelated to groundwater *quality*.

² Rather than address Plaintiffs’ specific allegations, BLM describes Plaintiffs’ claims as “challeng[ing] BLM’s consideration of water quality impacts.” Response 22. This overly broad characterization is inaccurate. For the same reason, BLM’s citation to *Citizens for a Healthy Community v. BLM*, No. 17-cv-02519-LTB-GPG, 2019 WL 1382785 (D. Colo. Mar. 27, 2019), is inapposite. There, plaintiffs raised general concerns that BLM failed to consider “threats to resources and human health from ... hydraulic fracturing.” *Id.* at *11. That court concluded that BLM’s general summary of hydraulic fracturing’s risks to groundwater was sufficient to address those general concerns. *Id.* Here, by contrast, Plaintiffs challenge specific, well-documented flaws in BLM’s groundwater analysis.

Response 18-20. The water quality issues BLM discusses—surface disturbance causing erosion, toxic drilling fluid chemicals, coalbed fires, and surface spills—are different issues from inadequate surface casing and shallow fracturing raised by the Plaintiffs. *Id.* at 20-21.

With regard to shallow fracturing, BLM cites boilerplate language from the EAs acknowledging that, as a general matter, there can be risks to groundwater if there is little to no vertical distance between the formations being fractured and underground sources of drinking water. *See id.* at 21-22 (discussing BLM-MT-BI-000066-67, BLM-MT-BU-000058-59, BLM-MT-HI-000051). But this is exactly the sort of “general statement[] about possible effects and some risk” that the Ninth Circuit has repeatedly held does “not constitute a hard look absent a justification for why an agency could not supply more definitive information.” *Rose*, 2019 WL 1855419, at *4; *see also Brong*, 492 F.3d at 1134.

BLM fails to explain why it cannot provide more than a “general statement” about these groundwater risks. In fact, the record contains extensive evidence showing that BLM *could* have taken a hard look at the threats to the aquifers under the challenged leases. The record contains a comprehensive EPA study documenting the risks of inadequate surface casing. MSJ 11-12 (citing BLM-MT-BI-013403). It also includes admissions by industry trade associations of a widespread failure in Montana and elsewhere to extend casing to depths that

protect all usable groundwater. *Id.* at 14-15 (citing BLM-MT-BI-007479, 007481-82). Further, an expert review of Montana oil and gas well records confirms surface casing often does not extend below all usable aquifers. *Id.* at 15 (citing BLM-MT-BI-005068). And it includes scientific research documenting that shallow fracturing likely poses risks to Montana’s groundwater. *Id.* at 18 (citing BLM-MT-BI-007486, 007494, 007500).

BLM’s reliance on general statements, while overlooking contrary record evidence, is exactly the approach the Tenth Circuit rejected in *Richardson*, which held that BLM violated NEPA by characterizing impacts to an aquifer as minimal despite data showing that oil and gas development threatened the aquifer. 565 F.3d at 713-15. The court explained that “NEPA does not permit an agency to remain oblivious to differing environmental impacts, or hide these from the public, simply because it understands the general type of impact likely to occur.” *Id.* at 707; *see also Diné CARE*, 2019 WL 1999298, at *20-22 (holding that BLM failed to consider an important aspect of the problem by relying on general statements about impacts to water resources and ignoring information about the water use associated with hydraulic fracturing).³ The same is true here.

³ BLM attempts to distinguish *Richardson* because there, BLM devoted “little” analysis to groundwater contamination and stated that it was “not a realistic concern.” Response 22. Yet that is exactly what BLM did here. *See* MSJ 20, 31; BLM-MT-BI-004769-70 (dismissing Plaintiffs’ protest and minimizing concerns about groundwater contamination).

B. BLM May not Defer Analysis of Groundwater Impacts to the APD Stage.

BLM argues that the law allows it to defer analysis of groundwater impacts until the Application for Permit to Drill (APD) stage. Response 22-26. This is incorrect. Courts have repeatedly held that when an agency is capable of assessing environmental impacts, it must do so as soon as possible and before making an irretrievable commitment of resources. *See, e.g., Conner v. Burford*, 848 F.2d 1441, 1450-51 (9th Cir. 1988); *see also Richardson*, 565 F.3d at 714-15, 717-18; *Zinke*, 2019 WL 1273181, at *16; *Los Padres ForestWatch v. BLM*, No. CV 15-4378-MWF-JEMX, 2016 WL 5172009, at *12 (C.D. Cal. Sept. 6, 2016) (“NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment. Rather, it is designed to require such analysis as soon as it can reasonably be done.”).⁴

⁴ The cases BLM cites to the contrary are not applicable. *See* Response 23. First, *Friends of Yosemite Valley v. Norton*, 348 F.3d 789, 800-01 (9th Cir. 2003) addressed a comprehensive management plan, and held that the agency was not required to address possible future actions that might later affect the river corridor at issue. Unlike this case, *Friends* did not involve a failure to address the impacts from a site-specific decision. Second, BLM cites a case where a court concluded that it was “impossible” for BLM to conduct a parcel-by-parcel analysis of potential impacts from hundreds of parcels covering 8.8 million acres. *N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969, 973-74, 979 (9th Cir. 2006). That is a far cry from this case, where BLM can reasonably address the risks to the 83 parcels covering just 46,174 acres of land. MSJ 19.

Here, BLM had substantial evidence allowing it to analyze the threats posed by inadequate surface casing and shallow fracturing. For example, the record includes information about aquifer depth and quality in the areas where the leases are located. *See, e.g.*, BLM-MT-BI-000062 (describing characteristics, including water quality, of area aquifers), BLM-MT-BI-002034 (similar, also describing aquifer depth), BLM-MT-BI-004974-78 (analyzing U.S. Geological Survey (USGS) data on aquifer depths and water quality in areas where leases are located); BLM-MT-HI-007442-44 (detailed USGS maps of geological formations in north-central Montana).

Moreover, records of existing wells drilled in the area allow BLM to assess the risks of shallow fracturing and inadequate surface casing on the challenged leases. BLM-MT-BI-004974-78 (report concluding that surface casing practices leave usable groundwater at risk). The record also includes an EPA study identifying where shallow fracturing is most likely to occur in Montana. BLM-MT-BI-013177, 013430-31.

BLM argues that additional analysis is impossible at the leasing stage because groundwater locations, depth, and quality “vary across the state of Montana.” Response 23. But the relevant scale is not “across the state of Montana”—it is the area covered by each lease, which is generally only about one or two square miles. *See, e.g.*, BLM-MT-BI-000035-37; BLM-MT-BU-000029;

BLM-MT-HI-000030 (listing parcels by acreage).⁵ Aquifers are much larger in scale than leases, and their characteristics do not change dramatically over distances of only one or two miles. *See* BLM-MT-BU-7099-7102. There is no reason BLM cannot combine the maps already in its possession to assess the groundwater characteristics for each parcel. *See* Response 23 (citing BLM-MT-HI-000146-59, 007442-44 (USGS maps showing characteristics of Montana’s aquifers at a broad regional scale and maps of lease sale parcels)). BLM also cites a statement that south-central Montana’s aquifers are “highly variable.” Response 23 (citing BLM-MT-BI-000062). But that statement discusses aquifer conditions in a broad region of south-central Montana—not within a single lease. BLM-MT-BI-000062. Indeed, this illustrates how much information is available about site-specific conditions on each lease, which BLM ignored. BLM-MT-BI-000062-63 (state data indicating there are 47 domestic water wells near the leases at issue and several parcels are in areas serving public water systems). BLM has enough information to consider reasonably foreseeable aquifer risks on each lease.

A court recently reached this conclusion in rejecting BLM’s argument that it could defer assessing the impacts of oil and gas development on water quantity until the APD stage. *San Juan Citizens All. v. BLM (SJCA)*, 326 F. Supp. 3d 1227, 1254 (D.N.M. 2018). The court acknowledged that BLM would have more

⁵ There are 640 acres in a square mile. *See* BLM-MT-MC-001366.

information at the APD stage, but concluded “sufficient information is available at this [the leasing] stage to make estimates of potential water usage for the different methods of hydraulic fracturing, and thus BLM must use that information in deciding whether the action results in a significant impact.” *Id.* As in *SJCA*, BLM potentially obtaining more information later does not excuse the agency from its obligation to take a hard look at impacts using the extensive information already available.

BLM also argues that state and federal regulations (including Onshore Order 2) will be applied at the APD stage to prevent groundwater contamination.

Response 25.⁶ But the record shows this assumption is often incorrect, and an agency violates NEPA when it relies on factually incorrect assumptions. *See Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 965 (9th Cir. 2005) (“To take the required ‘hard look’ at a proposed project’s effects, an agency may not rely on incorrect assumptions.” (citing 40 C.F.R. § 1500.1(b))). Moreover, such an approach is arbitrary and capricious. *Or. Nat. Desert Ass’n v. Jewell*, 840 F.3d

⁶ In its EAs, BLM also points to other mitigation measures and best practices, such as those included in BLM’s “Gold Book” and American Petroleum Institute standards. *See* BLM-MT-BI-000068; BLM-MT-BU-000060. But courts have rejected an agency’s similar approach where it “does nothing more than provide a list of its mitigation measures” without showing the measures will actually reduce specific risks. *Klamath-Siskiyou Wildlands Ctr. v. U.S. Forest Serv.*, 373 F. Supp. 2d 1069, 1085 (E.D. Cal. 2004).

562, 570 (9th Cir. 2016) (rejecting agency reliance on inaccurate data); *Sierra Club v. EPA*, 671 F.3d 955, 967 (9th Cir. 2012) (same).

As Plaintiffs explained, neither federal nor Montana regulations provide specific requirements to ensure that surface casing extends deep enough to protect all usable aquifers, or to even identify all usable water zones before drilling. MSJ 13-16, 29-30, 31-33.⁷ Record evidence shows that in practice, well casing often does not comply with BLM regulations or protect all usable aquifers. For example, trade association comments admit that companies in Montana and elsewhere do not actually comply with federal requirements to protect all usable water. MSJ 14-15 (citing BLM-MT-BI-007479, 007481-82). This is confirmed by existing oil and gas well records. BLM-MT-BI-004974-78. BLM cannot ignore record evidence and blindly assume that such problems will not occur on the leases at issue. *Native Ecosystems*, 418 F.3d at 964-65 (agencies cannot rely on incorrect assumptions); *see also W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 493 (9th Cir. 2011) (holding agency's decision arbitrary where "BLM entirely failed to consider an

⁷ The state regulations that BLM references, Response 25, require Montana operators to test their well casing at the maximum anticipated pressure. *See* Mont. Admin. R. 36.22.1106(2). But the regulations say nothing about the *depth* to which that casing must extend.

important aspect of the problem”) (quotation omitted); *MEIC*, 274 F. Supp. 3d at 1090, 1094, 1101 (same).⁸

Considering the risks of potential groundwater pollution *before* issuing the challenged leases is important as a practical matter, because leasing constitutes an irreversible commitment of resources. Once a lease is issued, BLM generally cannot prevent development of the lease altogether—it can only add conditions to APDs that mitigate impacts of that development. *Mont. Wilderness Ass’n v. Fry* (*Fry*), 310 F. Supp. 2d 1127, 1145 (D. Mont. 2004); *accord Conner*, 848 F.2d at 1450-51. In contrast, taking a hard look before offering the leases could lead BLM to decide not to sell some of those leases, or to add protective stipulations to leases it does offer. By delaying its analysis, BLM foreclosed those options. The agency violated NEPA by failing to take a hard look at groundwater threats before making this irreversible commitment.⁹

⁸ BLM’s final argument for deferring analysis to the APD stage is that surface water quality impacts vary based on seasonal timing and vegetation condition. Response 24, 26. This is a non-sequitur. Plaintiffs challenge BLM’s failure to analyze the groundwater impacts of inadequate surface casing and shallow fracturing. MSJ 26-35. Surface water quality, seasonal timing, and vegetation are unrelated.

⁹ The administrative record also undercuts BLM’s contention that it will actually evaluate lease-specific aquifer conditions at the APD stage. The record includes an EA prepared for an APD, but that EA shows that, in practice, BLM does not obtain additional information at the APD stage about aquifer characteristics at different locations within each lease, or analyze site-specific groundwater conditions. BLM-MT-BI-011978. Indeed, the APD EA contains essentially the same information as

III. BLM Failed to Consider a Reasonable Range of Alternatives.

BLM violated NEPA by considering only two alternatives in the three EAs it prepared for the March 2018 lease sale: leasing all parcels, or no parcels.

Muckleshoot Indian Tribe v. U.S. Forest Serv., 177 F.3d 800, 813 (9th Cir. 1999).

BLM failed to evaluate reasonable alternatives Plaintiffs suggested to protect groundwater, including not leasing certain areas and adding stipulations to protect groundwater (such as requiring specific casing and cementing depths, or requiring lessees to test groundwater to identify usable groundwater prior to drilling). MSJ 36-37. Courts have consistently rejected similar failures to consider viable middle-ground alternatives. *See Nat. Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 813-14 (9th Cir. 2005); *Muckleshoot*, 177 F.3d at 813; *WORC*, 2018 WL 1475470, at *9; *Wilderness Workshop v. BLM*, 342 F. Supp. 3d 1145, 1166-67 (D. Colo. 2018); *Colo. Env'tl. Coal. v. Salazar (CEC)*, 875 F. Supp. 2d 1233, 1248-50 (D. Colo. 2012); *The Wilderness Soc'y v. Wisely (Wisely)*, 524 F. Supp. 2d 1285, 1312 (D. Colo. 2007).¹⁰

BLM's leasing EAs. *Cf., e.g., BLM-MT-BI-000062* (noting basic characteristics, such as depth, of aquifers in eastern Montana).

¹⁰ BLM largely ignores this extensive body of caselaw. Its only response in a footnote is that one of the cases involved an RMP, rather than a lease sale. Response 35 n.8 (citing *CEC*, 875 F. Supp. 2d at 1248-50). But the same requirement applies both for RMP-level decisions and leasing decisions. Multiple courts have held that BLM violated NEPA by failing to consider an adequate range of alternatives before issuing oil and gas leases. *See, e.g., Bob Marshall All. v. Hodel*, 852 F.2d 1223, 1228-30 (9th Cir. 1988); *Wisely*, 524 F. Supp. 2d at 1293, 1310-12; *S. Utah*

A. BLM Had Adequate Notice of the Groundwater Protection Alternative.

BLM argues that the EAs analyzed an adequate range of alternatives because Plaintiffs first raised the issue in their lease sale protests. Response 35-36.

First, BLM is factually wrong. BLM had notice at the comment stage of objections to its consideration of only two alternatives. *See* BLM-MT-BI-005958-59 (“BLM has not considered any alternatives that fall between the two extremes, and instead just considered the ‘No Action’ and ‘Proposed Action.’”); BLM-MT-BI-007447-49 (similar); BLM-MT-BI-007587-88 (similar). BLM was also aware that groundwater pollution was a crucial issue for it to consider. *See* BLM-MT-BI-007471-73 (explaining that obtaining additional data about groundwater quality was “essential to a reasoned choice among alternatives”); BLM-MT-BI-007472 (explaining that BLM’s proposed EA was inadequate because it did not “state how alternatives considered in it ... will or will not achieve the requirements of NEPA”); *see also* BLM-MT-BI-005955-57 (raising concerns about groundwater); BLM-MT-BI-007553-54 (same); BLM-MT-BI-007588-92 (same).¹¹ BLM

Wilderness All. v. Norton, 457 F. Supp. 2d 1253, 1263-64 (D. Utah 2006); *Fry*, 310 F. Supp. 2d at 1145-46. Moreover, BLM does not argue that the applicable RMPs governing this case analyzed any comparable alternatives to protect groundwater.

¹¹ The record confirms that BLM was aware of these comments. *See* BLM-MT-BU-006694, 006696 (email between BLM staff reviewing groundwater comments stating that “I’m pretty sure that California BLM lost in court on this same/similar issue”).

declined to correct these flaws in the final EAs, thus leading Plaintiffs to raise these issues again at the protest stage.

Second, BLM is legally incorrect that it can ignore issues raised for the first time at the protest stage. Response 35-36. The purpose of a protest is to give BLM an opportunity to remedy flaws with its leasing proposal before finalizing that decision. *See generally W. Watersheds Project v. Zinke*, 336 F. Supp. 3d 1204, 1228 (D. Idaho 2018) (discussing purpose and importance of protest period for oil and gas lease sales). If BLM were unable to make changes to its analysis or proposed decision based on issues raised in a protest, it would render the protest process meaningless. *Kraayenbrink*, 632 F.3d at 492-93 (explaining that if BLM solicits public input and then refuses to consider or meaningfully respond to that input, the agency “renders the procedural requirement meaningless”).

A court recently rejected an identical argument. In that case, BLM argued that it did not need to consider an alternative that a plaintiff raised for the first time in a protest. *W. Watersheds Project v. U.S. Dep’t of the Interior*, No. 1:15-cv-00047-REB, 2016 WL 5745094, at *15-16 (D. Idaho Sept. 30, 2016). The court reasoned that there was no regulatory requirement to include an issue in comments in order to raise it in a protest, and that language inviting any “person whose

interest is adversely affected” to protest the decision at issue meant that there was no restriction on issues that could be raised for the first time in a protest. *Id.*¹²

In fact, BLM roots its argument in a case that actually supports Plaintiffs’ position. Response 36 (citing *Or. Nat. Desert Ass’n v. BLM*, 625 F.3d 1092, 1120 n.23 (9th Cir. 2010) (*ONDA*)). In *ONDA*, BLM argued that plaintiffs failed to put the agency on notice about an issue because they did not raise it in their scoping comments, when in fact plaintiffs submitted “extensive” comments on the draft EIS. *ONDA*, 625 F.3d at 1120 n.23. The court rejected BLM’s argument that failure to raise an issue at the earliest stage of an administrative process precludes raising the issue at a later stage of the process, explaining “[a]ll that is required of [p]ersons challenging an agency’s compliance with NEPA’ is that they ‘structure their participation so that it ... alerts the agency to the parties’ position and contentions, in order to allow the agency to give the issue meaningful consideration.’” *Id.* (alterations in original)).

The other cases BLM cites simply stand for the proposition that parties must provide agencies with reasonable notice of their objections through the public participation process. Response 36 (citing *Vt. Yankee Nuclear Power Corp. v. Nat.*

¹² BLM’s regulations do not specify what must be included in a protest, and the agency’s lease sale notice describing procedures for protests does not limit parties to protesting issues already raised in public comments. *See* 43 C.F.R. § 3120.1-3; BLM-MT-BI-005792.

Res. Def. Council, 435 U.S. 519, 553 (1978); *United States v. L.A. Tucker Truck Lines, Inc.*, 344 U.S. 33, 37 (1952)). By giving BLM notice of their objections through comments and protests, Plaintiffs “structure[d] their participation so that it is meaningful” and “alert[ed] the agency to [their] position and contentions.” *Vt. Yankee*, 435 U.S. at 553.

B. BLM’s Other Arguments Fail.

Apart from its faulty procedural theory, BLM offers no defense that Plaintiffs’ proposed groundwater protection alternative was unreasonable or otherwise flawed. Instead, BLM argues that it “adequately assessed groundwater impacts.” Response 36. But BLM’s obligation to consider alternatives to an action is distinct from its general “hard look” obligation to assess an action’s impacts. *See Lands Council v. Powell*, 395 F.3d 1019, 1027 (9th Cir. 2005) (explaining that NEPA’s purpose is to require agencies to prepare “a sufficiently detailed statement of environmental impacts *and* alternatives so as to permit informed decision making” (emphasis added)).

BLM notes that it deferred leasing 28 parcels. Response 37. But, similarly, a decision to defer some leases does not fulfill BLM’s NEPA obligation to analyze an adequate range of alternatives. BLM deferred the parcels for several reasons, mostly unrelated to groundwater protection. *See* BLM-MT-BI-000006 (explaining parcels were deferred to reduce impacts on viewsheds, the local economy, and air

quality). Two parcels were deferred because they were located in areas designated as “source water protection areas,” Response 37, but this decision was based on the City of Livingston’s municipal ordinance prohibiting oil and gas development in such areas, BLM-MT-BU-006655-59, 006665-67. BLM’s decision to defer some parcels does not substitute for considering an alternative deferring additional leases in areas not already protected by local laws, and adding additional stipulations to the leases being offered, such as requiring groundwater testing prior to drilling.

Finally, BLM argues that it need not consider a middle-ground alternative to protect groundwater because the leases include stipulations generally intended to protect water. Response 36-37 & n.9. But BLM including stipulations to protect some water resources in the proposed action alternative is no substitute for the agency considering other alternatives that would provide substantially more robust protections. *See* BLM-MT-BI-004971-72. Moreover, the agency is already obliged to apply the appropriate stipulations identified in its applicable RMPs. *Compare* BLM-MT-BU-000248-51, 000372-98 *and* 000437 (map and list of stipulations in Butte Field Office RMP) *with* BLM-MT-BU-000084, 000127 (map and stipulation list for parcel 108952, reflecting application of stipulations from RMP).

Complying with mitigation measures identified in an RMP does not replace NEPA’s separate obligation to consider alternatives at the leasing stage. *See* 40 C.F.R. §§ 1508.9(b) (alternatives), 1508.20 (mitigation); *accord WildEarth*

Guardians, 8 F. Supp. 3d at 37 (explaining that NEPA’s alternatives and mitigation obligations are distinct).

IV. Because the FONSI’s Are Arbitrary and Capricious, BLM Must Prepare an EIS.

BLM’s failure to assess cumulative impacts to climate and groundwater also rendered its Findings of No Significant Impact (FONSI’s) arbitrary and capricious. BLM’s only response to this argument is to cite caselaw stating that an agency’s issuance of a FONSI is entitled to “substantial deference.” Response 33. However, no deference is due conclusory and unsupported assertions that actions will not have significant effects, which is all BLM provided in its FONSI’s. *See The Steamboaters v. FERC*, 759 F.2d 1382, 1393 (9th Cir. 1985) (finding a conclusory statement inadequate to support a FONSI). Because BLM failed to include a “convincing statement of reasons” why potential effects are insignificant, its FONSI’s are arbitrary and capricious. *Blackwood*, 161 F.3d at 1211-12 (quotation omitted).

For example, by quantifying only emissions generated by individual lease sales (or portions thereof), BLM has merely demonstrated that, when divided into sufficiently small pieces, the lease sales’ climate impacts are “individually minor,” without confronting the question of whether those impacts, considered cumulatively, are “collectively significant.” *NHTSA*, 538 F.3d at 1217 (quoting 40 C.F.R. § 1508.7). Yet the FONSI’s leap to a finding that the lease sales “will not

significantly affect the quality of the human environment, individually *or cumulatively with other actions in the general area.*” BLM-MT-BI-000012 (emphasis added), BLM-MT-BU-000011, BLM-MT-HI-000006, BLM-MT-MC-000005-06. Because this conclusion lacks explanation and is unsupported by any analysis in the EAs, it is arbitrary and capricious. *See Sierra Club v. Mainella*, 459 F. Supp. 2d 76, 106-08 (D.D.C. 2006) (holding FONSI for oil and gas project were arbitrary “bare conclusion[s]” with a “lack of explanation,” that included “virtually no cumulative impacts assessment including the other ... wells outside of the ... [u]nit”).

If anything, BLM’s narrative discussions of climate change suggest that the lease sales’ cumulative climate impacts will indeed be significant. BLM acknowledges: (1) the contribution of oil and gas production and combustion to climate change, and (2) the significant impacts of climate change to Montana, including major increases in wildfire and droughts; the loss of numerous species; water shortages; and the disappearance of Montana’s iconic glaciers. Response 11, 16-17; *see also* MSJ 6-10. BLM does not explain why the lease sales’ cumulative impacts, which contribute substantially to these severe impacts, are not significant. *See Sierra Club v. U.S. Forest Serv.*, 843 F.2d 1190, 1194-95 (9th Cir. 1988)

(evidence of potential cumulative effects undermined FONSI).¹³ An EIS is therefore required.

Similarly, BLM's conclusory assertion that the lease sales will not have significant effects on groundwater is unsupported by a "convincing statement of reasons." *Steamboaters*, 759 F.2d at 1393. As discussed above, substantial record evidence shows that the lease sales may have a significant effect on usable groundwater. *See supra* pp. 8-17. BLM's conclusion that the lease sales would not significantly impact groundwater, despite this contrary evidence, is arbitrary. *See Ctr. for Biological Diversity v. BLM*, 937 F. Supp. 2d 1140, 1155-56, 1158-59 (N.D. Cal. 2013) (rejecting failure to prepare an EIS for an oil and gas lease without considering evidence that hydraulic fracturing could cause water pollution).

In contrast, the record shows that an EIS is required. "[T]o prevail on a claim that the [agency] violated its statutory duty to prepare an EIS, a plaintiff need

¹³ BLM also disputes whether there is truly uncertainty surrounding the appropriate methodology for calculating the costs of climate change, Response 34, a factor that would weigh in favor of the agency preparing an EIS, 40 C.F.R. § 1508.27(b)(5). Yet BLM asserted in response to comments that the appropriate social cost of carbon methodology is uncertain. *See* BLM-MT-MC-002830-33; *see also* BLM-MT-BI-004751 (presenting evidence that each metric ton of carbon dioxide released to the atmosphere costs society between \$10 and \$212). Such uncertainty compels further analysis in the form of an EIS. *See MEIC*, 274 F. Supp. 3d at 1104 (holding that "uncertainty" over GHGs "militates in favor of an EIS, not against it"); *accord Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 870-71 (9th Cir. 2005).

not show that significant effects will in fact occur. It is enough for the plaintiff to raise substantial questions whether a project may have a significant effect on the environment.” *Blackwood*, 161 F.3d at 1212 (quotations and citations omitted). Here, Plaintiffs have raised “substantial questions.” MSJ 39-42.¹⁴

Rather than refute those substantial questions, BLM dismissively asserts its “analyses of cumulative impacts satisfied NEPA’s requirements” regarding climate change and groundwater impacts. Response 34. This is incorrect. *Supra* pp. 3-7, 8-17. BLM has failed to take a hard look at climate and groundwater impacts—meaning “substantial questions” about those impacts remain, and should be addressed in an EIS.

V. Remedy

The Court should vacate the leases, which is the presumed remedy for an APA violation. *See, e.g., Pollinator Stewardship Council v. EPA*, 806 F.3d 520, 532 (9th Cir. 2015) (vacatur required except in “limited circumstances” (quoting *Cal. Cmty. Against Toxics v. EPA*, 688 F.3d 989, 994 (9th Cir. 2012))). However, Plaintiffs do not oppose BLM’s request for separate briefing on the appropriate

¹⁴ BLM contends that *Conner*, 848 F.2d at 1449-50, does not require preparing an EIS for every lease sale, Response 30-33. But Plaintiffs never argued that it does. *See* MSJ 26 (citing *Conner* for a different proposition). BLM’s arguments about *Conner* are nonresponsive to Plaintiffs’ argument that the lease sales challenged here require an EIS because their impacts may be significant. MSJ 40-42.

remedy if the Court determines such briefing to be necessary and helpful.

Response 37. A separate briefing process on remedy would offer additional detail why the default remedy of vacating the leases should apply.

CONCLUSION

The Court should: (1) find that BLM violated NEPA by failing to adequately analyze the lease sales' climate and groundwater impacts, and (2) set aside BLM's EAs, decision documents, and the leases.

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