UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

WILDERNESS SOCIETY, et al.,

Plaintiffs,

v.

Case No. 22-cv-1871 (CRC)

U.S. DEPARTMENT OF INTERIOR, *et al.*,

Defendants.

MEMORANDUM OPINION AND ORDER

Over two days in June 2022, the Bureau of Land Management ("BLM" or "the Bureau") finalized six lease sales of federal land for oil and gas development across the western United States. Far and away the largest sale occurred in Wyoming, where the Bureau auctioned almost 120,000 acres of public land for future drilling.

Wasting no time, the Wilderness Society and other conservation groups (collectively, "the Conservation Groups") filed suit the day of the Wyoming sale. The Conservation Groups contend that BLM failed to take a hard look at the potential environmental impacts of the Wyoming lease sale as required by the National Environmental Policy Act of 1969 ("NEPA"), 42 U.S.C. § 4321 <u>et seq.</u> Additionally, they charge that the Bureau violated the Administrative Procedure Act ("APA"), 5 U.S.C. § 500 <u>et seq.</u>, by treating the Wyoming lease sale differently from the others and by failing to justify a sale of this magnitude in light of the mounting climate crisis and its own estimates of the steep social costs from the projected greenhouse gas ("GHG") emissions.

Pending before the Court are cross-motions for summary judgment. Having considered the briefs and held a hearing on the matter, the Court agrees with the Conservation Groups that BLM erred at times when assessing the Wyoming sale's impact on groundwater and wildlife and in explaining how its analysis of GHG emissions influenced its leasing decisions. By contrast, the Court is unpersuaded by several other challenges, including that BLM failed to consider a reasonable slate of alternatives when setting the Wyoming lease sale's scope. A split decision is thus in order. And, per the parties' joint request, the Court will await another round of briefing before fashioning an appropriate remedy.

I. Background

A. Legal Background

The Department of Interior ("Interior" or "the Department"), where BLM resides, manages oil and gas development on federal land pursuant to the Mineral Leasing Act of 1920 ("MLA"), 30 U.S.C. §§ 181–287, and the Federal Land Policy and Management Act of 1976 ("FLPMA"), 43 U.S.C. § 1701 <u>et seq.</u> The MLA directs the Secretary of the Interior to manage fossil-fuel development on federal land in a manner that "safeguard[s] . . . the public welfare." <u>Id.</u> § 187. It further provides that "[l]ease sales shall be held for each State where eligible lands are available [for oil and gas development] at least quarterly and more frequently if the Secretary of Interior determines such sales are necessary." <u>Id.</u> § 226(b)(1)(A). Despite the mandatory language, however, the Secretary has discretion to decide where, when, and under what terms and conditions oil and gas development should occur. <u>See id.</u> § 226; 43 C.F.R. § 3101.1-2.

That discretion is guided and constrained by the FLPMA, which directs Interior to "manage the public lands under principles of multiple use and substantial yield." 43 U.S.C. § 1732(a). "Multiple use" means "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife

and fish, and natural scenic, scientific and historical values." <u>Id.</u> § 1702(c). The FLPMA lists "mineral exploration and production" as one of the "principal or major uses" of public lands. <u>Id.</u> § 1702(l). But development is not the only, or even the primary, use Interior must balance. The FLPMA further instructs Interior to prevent "permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output." <u>Id.</u> § 1702(c). To that end, the Department must "take any action necessary to prevent unnecessary or undue degradation of the lands" and "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." <u>Id.</u> § 1732(b), (d)(2)(A).

Pursuant to these statutory requirements, BLM manages oil and gas development on federal lands through a three-stage process of planning, leasing, and drilling. At the first stage, each BLM field office prepares a resource management plan ("RMP") for its assigned region. Id. § 1712(a); 43 C.F.R. §§ 1601.0-5(n), 1610.1. The RMP "describes, for a particular area, allowable uses, goals for future condition of the land, and specific next steps." Norton v. S. Utah Wilderness All., 542 U.S. 55, 59 (2004) (citation omitted). This includes determining which areas will be open to oil and gas leasing and what conditions will be placed on later development. See 43 U.S.C. § 1712(a); 43 C.F.R. § 1601.0-5(n).

At the second stage, BLM may issue leases for the development of oil and gas on specific parcels within an area designated as open to leasing under the RMP. 43 U.S.C. § 1712(e); 43 C.F.R. § 3120.1-1. In accordance with the MLA, lease sales occur quarterly via a competitive bidding process. <u>See</u> 30 U.S.C. § 226(b)(1)(A). The Bureau first receives public expressions of interest ("EOIs") and conducts an internal review to ensure that nominated parcels conform with

the relevant RMPs. 43 C.F.R. §§ 3120.1-1, 3120.3-1. It then posts online a list of the parcels under consideration for public scoping and, after soliciting comments, selects certain parcels as candidates for oil and gas leases. <u>Id.</u> § 3120.4-2. These 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." <u>Id.</u> § 3101.1-2. But they do not directly authorize development or surface disturbance, <u>see id.</u> § 3162.3-1(c), as BLM may impose "stipulations as conditions of lease issuance" to "minimize adverse impacts to other resource values," <u>id.</u> §§ 3101.1-2, 3101.1-3.

At the third and final stage, a lessee seeking to extract oil or gas on an issued lease must file an Application for Permit to Drill ("APD"). Before approving the APD, the Bureau must confirm the application complies with the RMP, <u>see id.</u> § 1610.5-3, and may condition approval on the lessee's adoption of "reasonable measures" to mitigate the environmental impact, <u>see id.</u> § 3101.1-2.

At each step along the way, BLM must comply with the procedures set forth in NEPA. Known as our "basic national charter for the protection of the environment," 40 C.F.R. § 1500.1, NEPA implements a series of procedural requirements to ensure "agencies take a hard look at the environmental consequences" before making "any irreversible and irretrievable commitment of resources." <u>Robertson v. Methow Valley Citizens Council</u>, 490 U.S. 332, 348, 350 (1989) (citations omitted); <u>see also</u> 42 U.S.C. § 4332(2)(C)(v). NEPA requires that agencies prepare a "detailed statement," known as an Environmental Impact Statement ("EIS"), for "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). If it is uncertain whether a proposed action will significantly affect the environment, and thus whether an EIS is required, an agency may prepare an Environmental Assessment ("EA"). <u>See</u>

40 C.F.R. § 1501.3–4. An EA is a "concise public document" discussing the proposed action's environmental impacts, which informs the agency's decision on whether to prepare an EIS. <u>Id.</u> § 1508.1(h). If the agency concludes an EIS is not required, it issues a Finding of No Significant Impact ("FONSI") "briefly presenting the reasons why an action . . . will not have a significant effect on the human environment." <u>Id.</u> § 1508.1(l). "The statement of reasons is crucial to determining whether the agency took a 'hard look' at the potential environmental impact of a project." <u>Blue Mountains Biodiversity Project v. Blackwood</u>, 161 F.3d 1208, 1212 (9th Cir. 1998) (citations omitted).

By regulation, "[a]pproval of a resource management plan is considered a major Federal action significantly affecting the quality of the human environment" and requiring an EIS. 43 C.F.R. § 1601.0-6. While the sale of oil and gas leases also represents an "irreversible and irretrievable commitment of resources" that triggers NEPA duties, <u>Sierra Club v. Peterson</u>, 717 F.2d 1409, 1414 (D.C. Cir. 1983), BLM must perform a full-blown EIS at this stage only if the sale is projected to have a "significant" environmental impact, 43 C.F.R. § 3162.3-1(c). At the lease stage, then, BLM usually starts by preparing an EA. If it determines based on the EA that the lease sale will significantly affect the environment, it prepares an EIS. Otherwise, it issues a FONSI along with a "Record of Decision" specifying which, if any, parcels it is offering for sale that quarter.

This case involves the second stage—the sale of oil and gas leases—and BLM's alleged failure to perform a proper environmental analysis before leasing swaths of land in Wyoming.

B. Factual & Procedural Background

The origins of the current dispute date back to the early days of the Biden Administration. Shortly after taking office, President Biden issued Executive Order 14008 titled "Tackling the Climate Crisis at Home and Abroad." 86 Fed. Reg. 7,619 (Jan. 27, 2021). Section 208 of that Order directed Interior to "pause new oil and natural gas leases on public lands . . . pending completion of a comprehensive review and reconsideration of Federal oil and gas permitting and leasing practices in light of the Secretary of the Interior's broad stewardship responsibilities over the public lands . . . including potential climate and other impacts." <u>Id.</u> at 7,624–25. The acting Solicitor of Interior heeded that Order several weeks later by issuing an opinion directing BLM to postpone the first quarter lease sales across several States to allow further NEPA review. HQ_4441–42. The following month, the Bureau announced it was "exercising its discretion to not hold lease sales in the 2nd quarter of Calendar Year 2021" due to an "ongoing review of the federal oil and gas program in assessing compliance with applicable laws and, as directed by Executive Order 14008, reviewing whether the current leasing process provides taxpayers with a fair return." Press Release, BLM, Statement on Second Quarter Oil and Gas Lease Sales (Apr. 21, 2021), https://www.blm.gov/press-release/statement-second-quarter-oil-and-gas-lease-sales.

That momentary "pause" came to a sudden halt in June 2021 when a judge on the United States District Court for the Western District of Louisiana preliminarily enjoined BLM "from implementing the [p]ause of new oil and natural gas leases on public lands or in offshore waters as set forth in Section 208 of Executive Order 14008." <u>Louisiana v. Biden</u>, 543 F. Supp. 3d 388, 419 (W.D. La. 2021). In response, Interior ordered BLM to resume the leasing program, starting with the parcels it had deferred in the first and second quarters of 2021. HQ_60–62.

The Bureau began by posting preliminary parcel lists for potential lease sales within the jurisdictions of its Colorado, Montana-Dakotas, Nevada, New Mexico-Oklahoma, Wyoming, Utah, and Eastern States offices. <u>See, e.g.</u>, WY400027–147 (parcel list); WY485693–94 (explanation in EA). After reviewing comments, in November 2021, each BLM State Office

posted online draft EAs and unsigned FONSIs for public comment. <u>See, e.g.</u>, WY425332–36 (draft EA); WY425560–68 (draft FONSI).

BLM initially planned to hold the lease sales in the first quarter of 2022 but hit another snag when a different judge in the Western District of Louisiana enjoined its use of the Social Cost of Greenhouse Gases ("SC-GHG"), which the Bureau had used in its EAs to assess the estimated environmental effect of GHG emissions from the project. <u>See Louisiana v. Biden</u>, 585 F. Supp. 3d 840, 862–70 (W.D. La. 2022). In response, BLM again paused all lease sales to consider the effect of the injunction—only to restart once more in April 2022 after the Fifth Circuit stayed the injunction. <u>See Louisiana v. Biden</u>, No. 22-30087, 2022 WL 866282 (5th Cir. Mar. 16, 2022).

That same month, BLM issued the final EAs and FONSIs for lease sales within areas managed by its Colorado, Montana-Dakotas, Nevada, New Mexico-Oklahoma, Wyoming, and Utah offices. HQ_4415. After a protest period, the Bureau finalized the sales on June 28 and 29, 2022 by issuing its protest decisions and posting the final EA, a signed FONSI, and the Record of Decision for each lease sale. <u>See, e.g.</u>, WY485685 (EA); WY485956 (FONSI); WY485952 (Record of Decision). The final totals of parcels and acreage offered by each BLM State Office are as follows:

BLM Office	Parcels (Acreage)	Parcels Not Made	Parcels (Acreage)
	Scoped	Available for Sale	Offered Day of Sale
Wyoming	459 (568,196)	337	122 (119,564)
Nevada	10 (10,496.59)	5	5 (2,560)
Colorado	119 (141,675.22)	113	6 (2,444)
Montana-Dakotas	29 (6,849.16)	6	23 (3,405.80)
Oklahoma	1 (14.92)	0	1 (14.92)
New Mexico	5 (520.8)	0	5 (520.8)

As the chart shows, the Wyoming lease sale was the largest by far: Of the 459 parcels that BLM evaluated in Wyoming, it offered 122 parcels, totaling 119,564 acres. WY485953–55. Among

the parcels that BLM scoped but did not lease, it deferred 260 parcels because they were located in critical habitats of the largest grouse found in North America, the greater sage grouse ("sage grouse"), five parcels as a result of technical discrepancies, 61 parcels through its discretionary deferral review, and another eight parcels in response to protests. <u>Id.</u>

Without delay, the Conservation Groups filed two suits on the same day BLM finalized the Wyoming lease sale. One challenged the climate analysis that the Bureau performed for all six lease sales and is addressed in a separate opinion. See Dakota Res. Council v. Haaland, No. 22-cv-1853, Mem. Op. (ECF No. 85). The present action, by contrast, focused exclusively on the Wyoming lease sale but raised a fuller suite of challenges to BLM's environmental analysis and its authorization of such a sizeable sale in that State. First, the Conservation Groups allege that the Bureau did not adequately assess the impacts to groundwater in Wyoming because it did not account for the proven possibility that inadequate well casing or hydraulic fracturing near usable water sources may cause contamination. Second, they say the Bureau failed to take a hard look at effects on various wildlife—namely, the greater sage grouse and the mule deer. Third, the groups maintain that the Wyoming Office failed to consider a reasonable set of alternatives, as NEPA requires, when authorizing such a large-scale sale that far outstripped what the other BLM field offices put up for auction in June 2022. And fourth, they claim BLM failed to rationally address climate impacts when deciding to offer a lease sale of this magnitude.¹ The State of Wyoming promptly intervened to defend the sale. See Sept. 1, 2022 Minute Order.

¹ In their motion, the Conservation Groups have established their standing to bring these challenges by submitting declarations from members who frequent the affected areas and fear that oil and gas development will impair their enjoyment of the region going forward. <u>See Hunt v. Wash. State Apple Adver. Comm'n</u>, 432 U.S. 333, 343 (1977) (specifying requirements for associational standing).

Pending before the Court are cross-motions for summary judgment filed by the parties and intervenor. After considering the briefs and holding a hearing on the matter, the Court will now resolve these dueling motions.

II. Legal Standards

When evaluating cross motions for summary judgment under the APA, "the Rule 56 standard does not apply." <u>Alfa Int'l Seafood v. Ross</u>, 264 F. Supp. 3d 23, 36 (D.D.C. 2017). The court instead "sits as an appellate tribunal," and "[t]he entire case on review is a question of law." <u>Id.</u> (quoting <u>Am. Biosci., Inc. v. Thompson</u>, 269 F.3d 1077, 1083 (D.C. Cir. 2001)). Judicial review is limited to "deciding whether, as a matter of law, an agency action is supported by the administrative record and is otherwise consistent with the APA standard of review." <u>Gulf Restoration Network v. Bernhardt</u>, 456 F. Supp. 3d 81, 93 (D.D.C. 2020).

Under the APA, a reviewing court may set aside agency action if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2). Agency action is "arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." <u>Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.</u>, 463 U.S. 29, 43 (1983). "Although this inquiry into the facts is to be searching and careful, the ultimate standard of review is a narrow one. The court is not empowered to substitute its judgment for that of the agency." <u>Citizens to Pres. Overton Park, Inc. v. Volpe</u>, 401 U.S. 402, 416 (1971).

"This standard applies when assessing an agency's compliance with NEPA." <u>WildEarth</u> <u>Guardians v. Zinke</u>, 368 F. Supp. 3d 41, 57–58 (D.D.C. 2019) (<u>WildEarth I</u>). An EIS or EA "is

reviewed to ensure that the agency took a hard look at the environmental consequences of its decision to go forward with the project." <u>Nat'l Comm. for the New River v. FERC</u>, 373 F.3d 1323, 1327 (D.C. Cir. 2004) (quotation marks omitted). "When an agency is evaluating scientific data within its technical expertise, an extreme degree of deference to the agency is warranted." <u>Id.</u> (quotation marks omitted). The Court's task "is not to 'flyspeck" the agency's analysis "for 'any deficiency no matter how minor." <u>Sierra Club v. FERC</u>, 827 F.3d 36, 46 (D.C. Cir. 2016) (quoting <u>Theodore Roosevelt Conservation P'ship v. Salazar</u>, 661 F.3d 66, 75 (D.C. Cir. 2011) ("<u>TRCP</u>")). Rather, NEPA's "rule of reason" dictates that an agency's assessment is sufficient unless its "deficiencies are significant enough to undermine informed public comment and informed decisionmaking." <u>Sierra Club v. FERC</u>, 867 F.3d 1357, 1367 (D.C. Cir. 2017) (citing Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 767 (2004)).

III. Analysis

A. Groundwater

The Conservation Groups first challenge the Wyoming EA's assessment of the effects on groundwater—a critique that itself comes in three parts. First, they fault the Bureau for not performing a more granular analysis at the lease stage and deferring such review until operators file APDs at the third and last step of the process. Second, they maintain that the Bureau ignored credible evidence of deficient well construction in Wyoming, such as inadequate cementing and surface casing. Third, the groups claim that BLM overlooked evidence that hydraulic fracturing (or "fracking") oftentimes occurs near aquifers and, as a result, risks contaminating usable water sources.

The Court agrees with the Bureau, however, that it was not required to conduct a more fine-grained analysis at the lease stage. The Court also finds that BLM did not act arbitrarily when concluding, based on recent scientific studies, that any subsequent fracking on the leased parcels is unlikely to negatively impact usable water. By contrast, the Bureau erred by failing to address credible evidence suggesting that there may be inadequate enforcement of the wellconstruction regulations on which it relied when finding no significant impact to groundwater.

1. Timing and Type of Analysis

As all sides acknowledge, the decision to auction oil and gas leases is an "irretrievable commitment" of resources for future development that requires a hard-look review under NEPA. <u>See Peterson</u>, 717 F.2d at 1414. Beyond that basic consensus, though, the parties splinter on what level of review is required at the lease stage and whether the Bureau can defer more site-specific analysis until it has greater intel at the APD phase. The Court finds that the Bureau has the better of the argument, as the approach it employed here was a reasonable way of assessing potential groundwater effects at this juncture.

Before delving into the dispute, it is worth sketching out the groundwater analysis that the Bureau did perform. The Wyoming EA tiered its analysis to several EISs that were prepared at the RMP stage for the planning areas where the leased parcels are located. WY485692–93. Those EISs contain a general analysis of water resources in the planning areas and potential impacts to those waters from various activities, including oil and gas development. <u>See, e.g.</u>, WY494760–75. Building on that prior work, the EA assessed the groundwater hydrology in the affected areas and uses of those waters. WY485726–27. It also addressed concerns about future fracking on the parcels in the Hydraulic Fracturing White Paper—prepared by the Wyoming Office and attached to the EA as Appendix E—which detailed hydraulic fracturing techniques, their potential impacts on water resources, and best practices to avoid water contamination. <u>See</u> WY485902–10. The EA further evaluated several studies on the impacts of past fracking

activities in Wyoming on water resources, including a study of the Pinedale Anticline gas field and a Wyoming Department of Environmental Quality's ("WDEQ") report on the Pavillion gas field. WY485727–28; WY559178–83 (Pinedale Anticline study); WY562422–522 (Pavillion study). It then explained that impacts from fracking or other forms of development would be minimized through regulatory requirements and stipulations that it was imposing on the leased parcels, such as Standard Lease Notice No. 1, which requires that all wells be drilled at least 500 feet from perennial surface waters and possibly farther depending on a more detailed sitespecific analysis conducted at the APD stage. WY485727; WY485883–84. Based on these various studies, regulations, and mitigation measures, the Bureau resolved that significant groundwater effects from conventional drilling or fracking on the leased parcels were unlikely. WY485728.

The Bureau maintains that this analysis suffices at the leasing stage and that it is not required to perform a parcel-by-parcel examination of possible groundwater impacts before it knows the precise locations of future wells and the methods of extraction that will be deployed. BLM Br. at 9–10; <u>see N. Alaska Envtl. Ctr. v. Kempthorne</u>, 457 F.3d 969, 977 (9th Cir. 2006) ("<u>N. Alaska I</u>") (finding Interior was not required to conduct a "parcel by parcel examination of potential environmental effects" when offering areas for lease). In response to protests, the Bureau explained that "[b]ecause most impacts to surface and groundwater are localized[,] . . . a finer level of impact analysis is not possible." WY486056. Courts in this jurisdiction and beyond regularly have deferred to such a determination that a site-specific analysis is not feasible before future drilling plans come into greater focus with submission of APDs. <u>See, e.g.</u>, <u>WildEarth I</u>, 368 F. Supp. 3d at 66 ("At the leasing stage, BLM could not reasonably foresee the projects to be undertaken on specific leased parcels, nor could it evaluate the impacts of those

projects on a parcel-by-parcel basis"); <u>Wilderness Soc'y v. Salazar</u>, 603 F. Supp. 2d 52, 62 (D.D.C. 2009) (finding BLM did not need to conduct a more detailed analysis at leasing stage when it "did not know the exact location of exploratory wells and development"); <u>accord N.</u> <u>Alaska Envtl. Ctr. v. U.S. Dep't of the Interior</u>, 983 F.3d 1077, 1088 (9th Cir. 2020) ("<u>N. Alaska</u> <u>II</u>") (holding courts should "defer to the agency's judgment about the appropriate level of analysis so long as" it "provides as much environmental analysis as is reasonably possible under the circumstances, thereby providing sufficient detail to foster informed decision-making at the stage in question" (cleaned up)). Such deference is similarly warranted here.

The Conservation Groups disagree. Reframing the dispute, they renounce any request that BLM perform the sort of parcel-by-parcel analysis that courts have found is not needed at the leasing stage. Rather, they maintain that they seek only a fuller review of groundwater depth and quality across the entire affected region-an analysis that, in their eyes, is possible with the existing information. See Pls' Reply at 6. "For example," they say, "BLM could have reviewed permitting files and produced water records for existing oil and gas wells to assess groundwater quality and depth, and to determine what surface casing depth should be required." Pls' Br. at 23. Or it "could have also obtained information from other sources, such as U.S. Geological Survey reports, showing aquifer depth and quality to help determine which areas overlie usable groundwater and are most at risk for shallow fracturing." Id. Had it done so, they posit, the Bureau could have predicted groundwater effects with greater precision. Instead, they accuse the Bureau of throwing up its hands and feigning that such an analysis is not possible before the APDs are submitted. See WY486056. The analysis was doable, in their view, because "at the same time BLM claimed an assessment of groundwater risks was impossible in Wyoming, the agency was already preparing such an analysis in Montana," where it offered an account of

"aquifer depths, water wells, and nearby existing oil and gas wells." Pls' Br. at 23 (citing MT_0094975–88). Because Montana proved that the Bureau could have evaluated groundwater threats more thoroughly, they conclude, the Wyoming Office must do the same here in order to satisfy its basic NEPA duty of "provid[ing] as much environmental analysis as is reasonably possible." <u>N. Alaska II</u>, 983 F.3d at 1088.

In support of this argument, the Conservation Groups point to two out-of-circuit cases: New Mexico ex rel. Richardson v. BLM, 565 F.3d 683 (10th Cir. 2009), and WildEarth Guardians v. BLM, 457 F. Supp. 3d 880 (D. Mont. 2020) (WildEarth II). In Richardson, the Tenth Circuit held "there is no bright line rule that site-specific analysis may wait until the APD stage" and that an agency must perform such an analysis as soon as site-specific effects are reasonably foreseeable. 565 F.3d at 717–18. The court then found that the effects at issue there were foreseeable at the leasing stage because the developer had "concrete plans to build approximately 30 wells on the [parcels] and . . . ha[d] obtained the necessary permits for a gas pipeline connecting these wells to a larger pipeline in Texas." Id. at 718. And in WildEarth II, the District of Montana similarly held that the inability to fully ascertain the effects on groundwater at the leasing stage does not permit an agency to defer all analysis until a later date. In doing so, it faulted the Bureau for providing "almost no analysis related to shallow fracturing and surface casing depth" even though the record there "show[ed] that BLM possessed the information necessary to undertake a more specific analysis at the leasing stage than it did." 457 F. Supp. 3d at 889. Specifically, it noted that "BLM had access to records showing aquifer depth and quality in the areas where the leases are located and records of existing wells drilled in the area" and that the "record also included an [Environmental Protection Agency ("EPA")] study identifying where shallow fracturing is most likely to occur in Montana." Id. (cleaned up).

"This information alone," the court held, would have allowed "BLM to forecast any potential impacts to groundwater from surface casing depth and shallow fracturing at the leasing stage." <u>Id.</u> On that record, the court found that the Bureau must "include some sort of forecasting on potential groundwater impacts," even if it was not required to perform a "parcel-by-parcel analysis." <u>Id.</u>

None of this persuades the Court that BLM's approach to analyzing groundwater effects here was unreasonable. First off, neither Richardson nor WildEarth II are on all fours with this case. As noted above, the developer in Richardson had concrete plans for 30 wells, allowing the agency to perform the sort of site-specific analysis that is typically reserved for the APD stage. It was within that specific context that the Tenth Circuit held a more detailed review was required. In doing so, though, the court recognized the inquiry is "necessarily contextual" and the level of analysis required will differ depending on the case. 565 F.3d. at 718. Here, the Conservation Groups do not claim the same level of in-depth information is available, and there is no evidence in the record concerning any developer's plans with the leased parcels. WildEarth II is closer to the current case. But still, the EA at issue here is far more detailed than the one before the District of Montana. The Wyoming EA contains a much more robust analysis of the groundwater hydrology; details the risks of particular types of oil and gas development; assesses studies of fracking's impact in Wyoming; and describes mitigation measures that will limit such effects. The upshot is that the Bureau is not deferring all groundwater analysis until a later day. It instead assessed the scientific literature on past drilling in Wyoming to predict the future effects of its proposals and to mitigate potential threats. As courts in this District have found, that is a reasonable approach at the leasing stage. See WildEarth I, 368 F. Supp. 3d at 66

("NEPA does not require an agency to issue these types of wholly speculative assessments at the leasing stage, even assuming an irretrievable commitment of resources.").

That the Montana Office employed different tactics does not render the Wyoming Office's approach unreasonable either. The Montana EA mapped the depths of existing wells and assessed the depths of past drilling expeditions to predict the vertical separation of future drilling. The Wyoming EA, by contrast, explained why it could not perform a meaningful parcel-specific analysis based on the available data and that it had instead used other devices, such as analyzing how its regulatory regime has fared in the past, to assess likely impacts. See WY486055–56. That expert judgment is entitled a high degree of deference. It is also not clear that Montana's approach is necessarily superior. The Court doubts the Conservation Groups would be satisfied with the analysis that the Montana Office performed because it focused only on aquifers that are currently in use within a five-mile radius of the parcels. But, as the Conservation Groups note, examining only existing wells overlooks other usable water sources that may be tapped in the future. See Pls' Br. at 23 (noting the "Montana analysis had several shortcomings"). And even if the Wyoming EA had performed the same analysis and found that drilling would likely occur near existing water wells, its conclusions regarding the likely impacts on groundwater would still turn on its view of whether past drilling expeditions have contaminated groundwater and whether existing regulations and the stipulations imposed properly mitigated the risks—*i.e.*, the exact sort of analysis that Wyoming performed.

Finally, even if it would have been optimal for the Bureau to perform the same analysis in Wyoming as it did in Montana, the Court must be mindful that "[t]he NEPA process involves an almost endless series of judgment calls, and the line-drawing decisions necessitated by the NEPA process are vested in the agencies, not the courts." <u>Duncan's Point Lot Owners Ass'n v.</u>

<u>FERC</u>, 522 F.3d 371, 376 (D.C. Cir. 2008) (cleaned up). Other courts have upheld BLM's use of the Hydraulic Fracturing White Paper to assess the impacts on groundwater and rejected calls that the Bureau "conduct[] a specific analysis of the impacts of fracking on the parcels . . . to be offered for lease." <u>Ctr. for Biological Diversity v. BLM</u>, No. 3:17-cv-553-LRH-WGC, 2019 WL 236727, at *6 (D. Nev. Jan. 15, 2019). Such an approach is indeed fairly commonplace, as this case shows. The other BLM State Offices that auctioned leases in June 2022 did not adopt the Montana approach, instead tracking the Wyoming Office's approach of projecting the likely effects on groundwater and promising to perform a parcel-by-parcel analysis at the APD stage once further information on drilling proposals become available. The Court cannot substitute its own judgment for the Bureau's informed assessment of what level of analysis was reasonably possible and useful at the leasing stage and, as a result, cannot conclude that the Bureau's general approach was unreasonable.

With that said, the question of whether the Bureau's approach to analyzing groundwater effects was reasonable is distinct from the question of whether BLM conducted that analysis in an appropriate manner. On the latter issue, the Conservation Groups raise particular challenges to the Bureau's analysis of cement well casing and hydraulic fracturing to which the Court now turns.

2. Casing

Starting with casing, the Conservation Groups contend that the Bureau failed to address valid concerns regarding well construction issues like inadequate surface casing and cementing. The Court agrees. Though far from conclusive, the Conservation Groups have raised "credible evidence" calling into question the Bureau's and Wyoming's regulatory enforcement, which,

under the D.C. Circuit's decision in <u>Gulf Restoration Network v. Haaland</u>, 47 F.4th 795 (D.C. Cir. 2022), the Bureau was not free to ignore.

Oil and gas development involves boring wells far below the ground's surface, often through underground aquifers. Without proper well construction, drilling can contaminate groundwater because drilling fluids, gases, and chemicals can seep out of the wellbore and into aquifers. WY483251–53. One central element of proper well construction is "surface casing," which refers to pipe set and cemented in the drilling hole to seal off groundwater from the oil and gas well. According to EPA guidance, the "presence of multiple cemented casings that extend from the ground surface to below designated drinking water resources is one of the primary well construction features that protects underground drinking water resources." WY483250. "[I]f the surface casing is not set deeper than the bottom of the drinking water resource," the EPA cautions, "the risk of aquifer contamination increases a thousand-fold." WY483536.

To ensure proper surface casing and cementing, a BLM regulation commonly known as Onshore Oil and Gas Order No. 2 sets requirements for oil and gas wells on public lands designed to "protect and/or isolate all usable water zones," defined as zones with groundwater containing up to 10,000 parts per million ("ppm") of total dissolved solids ("TDS"). 53 Fed. Reg. 46,798, 46,805, 46,808 (Nov. 18, 1988). This standard mirrors the Safe Drinking Water Act. <u>See</u> 40 C.F.R. §§ 144.3, 146.3. Beyond the general directive to protect usable water sources, however, Onshore Order No. 2 does not specify what exactly operators must do to ensure compliance. Nor does it expressly require operators to test underground water sources to identify all usable water zones before drilling can commence. The Bureau tried to close this regulatory gap in 2015 by imposing new standards designed to "ensure that wells are properly constructed to protect water supplies," 80 Fed. Reg. 16,128, 16,128 (Mar. 26, 2015) ("2015

Rule"), but it later reversed course in 2017 when it rescinded the 2015 Rule, see 82 Fed. Reg. 61,924 (Dec. 29, 2017).

In determining that the lease sale here would not jeopardize groundwater safety, BLM heavily relied on Onshore Order No. 2, along with several other federal and state regulations, and resolved that enforcement of these rules would sufficiently mitigate the threat of contamination. "Individual states, including Wyoming, and the BLM have casing programs for oil and gas wells to limit cross contamination of aquifers," the Wyoming EA noted. WY485728. "Any proposed drilling/completion activities would have to comply with Onshore Order [No.] 2, 43 CFR § 3160 regulations, and not result in a violation of a Federal and/or State law. If these conditions were not met, the proposal would be denied." <u>Id.</u> As a result, it concluded, "no significant impacts to groundwater from the proposed action [were] expected." WY485728. The Bureau maintains that such regulatory reliance was proper, noting <u>Gulf Restoration Network</u>'s observation that "an agency may assume effective enforcement in the ordinary case." 47 F.4th at 803 (citing <u>United States v. Armstrong</u>, 517 U.S. 456, 464 (1996)).

Yet this is no ordinary case, the Conservation Groups argue. <u>Gulf Restoration Network</u> recognized that, while agencies typically can assume proper regulatory compliance, that is not always true because an agency "may not reach a conclusion that 'runs counter to the evidence.'" <u>Id.</u> (quoting <u>State Farm</u>, 463 U.S. at 43). Therefore, "more is required when credible evidence seems to undercut the assumption" that the regulations are working as intended. <u>Id.</u> In these sorts of instances, the D.C. Circuit has held, it is "not good enough" for an agency to "sidestep[]" such evidence with "unelaborated" assertions that the regulations will be effective. <u>Id.</u> This case falls within this exception to the general rule that effective regulatory compliance can be assumed, the Conservation Groups maintain, because the regulations on which BLM relied—

such as Onshore Order No. 2—are vague and do not set specific directives agencies and operators must follow to ensure casing is sufficient to protect all usable water. <u>See</u> Pls' Br. at 6. And, even more importantly, the Conservation Groups presented credible evidence that, in their view, cuts against the Bureau's assumption that these regulations sufficiently protect against water contamination by guaranteeing adequate casing and cementing.

The Conservation Groups point to two strands of evidence that, from their vantage, cast doubt on the effectiveness and enforcement of casing regulations. The first is a comment that two trade associations-the Independent Petroleum Association of America and the Western Energy Alliance—submitted during BLM's rulemaking to revoke the 2015 Rule which, as noted above, filled in some of the details that Onshore Order No. 2 leaves blank. WY483898. Relevant here, the trade associations complained that the 2015 Rule burdened operators with new responsibilities to identify usable water. "For decades, state oil and gas agencies and BLM field offices have informed operators about the location of usable water that must be protected . . . and directed the depths at which it is acceptable to set well casing," they wrote. WY483902. But under the 2015 Rule, they complained, "operators would have been assigned an affirmative obligation to identify the location of usable water to be protected based on a quantitative TDS calculation. This would have posed a new burden." Id. (footnote omitted). Beyond mere burden shifting, the trade associations also griped that the 2015 Rule imposed new casing requirements beyond what States had required. "Current laws in the states require operators to case their wells to protect drinking water aquifers and other 'usable' water aquifers, with the recognition that for aquifers to be deemed usable, they should be economically viable," they explained. WY483904. "In Wyoming, casing needs to be set to a level 100 feet below the deepest water well within a one mile radius of either an oil or gas well." Id. But under the 2015 Rule, they lamented,

developers had to locate usable water themselves and construct their drilling wells accordingly even when no water well existed in the vicinity. <u>Id.</u> "Because of the significant differences in aquifer depth across states," the associations estimated an average of "2,350 feet of additional casing that might be required under the 2015 Rule, . . . add[ing around] \$173.9 million in costs." <u>Id.</u> Because these trade associations (and their allies) proved successful in reversing the 2015 Rule, the Conservation Groups contend that these statements indicate that existing practices in Wyoming are inadequate because the "approach of relying on existing water wells to determine surface casing depths may address aquifers currently being used for drinking water, but it ignores deeper groundwater that may be needed in the future." Pls' Br. at 7; <u>see also id.</u> at 8 ("[The] record shows that underground sources of drinking water are found at depths much greater than 1,000 feet below the surface[.]" (citing WY483886–90)).

The second strand of evidence the Conservation Groups marshalled is found in a report titled "Examination of Groundwater Resources in Areas of Wyoming Proposed for the June 2022 BLM Lease Sale." WY483877. Prepared by Dr. Rebecca Tisherman and others, the "Tisherman study" compared potential usable water aquifers identified using data from the U.S. Geological Survey with data on 62 existing federal oil and gas wells in Wyoming's Powder River Basin and found significant gaps in casing that suggested breaches in regulatory enforcement. WY483880–81. "In the Powder River [B]asin," it noted, "there are 62 federal wells that have been completed since January 1, 2000, and remained active within the last 5 years in the same townships and ranges as the proposed lease parcels" here. WY483890. Among those 62 wells, the study found that "36 have a gap between the bottom of surface casing and the top of cement" and that the gaps "cross usable water zones." Id. "The length of these gaps[] ranges from 275 to 7,714 ft with an average gap length of 2,653 ft." Id. Thus, while not reaching a definitive conclusion

that these wells were noncompliant with applicable regulations, the Tisherman Study concluded that many "wells have a gap in cement and surface casing that is threatening usable water and thus may not be in compliance with Onshore Oil and Gas Order No. 2." WY483891. It went on to warn that if "current active federal wells . . . are not adequately cased and cemented, then it can be assumed that a significant portion of future wells installed on these proposed parcels will also be inadequately cased/cemented and thus pose a threat to usable water." <u>Id.</u>

The Court agrees that these materials, and the Tisherman Study in particular, call into question BLM's contention that federal and state regulations adequately protect underground drinking water from contamination. Though not conclusive proof of regulatory noncompliance, they present credible evidence contrary to the assumption that the regulations are adequately enforced to protect all usable groundwater. Under <u>Gulf Restoration Network</u>, then, the Bureau could not ignore this contradictory evidence. But that is exactly what it did: Nowhere in the administrative record did BLM engage with the Tisherman study or its findings.²

The Bureau's post hoc justifications for its silence on this score are unpersuasive. As its first line of defense, BLM contends that it was not required to respond to the Tisherman study because the Conservation Groups first submitted it after the close of notice-and-comment, during the "protest period." Reply at 4 n.1. That fact alone, however, does not relieve BLM of its duty to respond to this evidence. While parties must "structure their participation so [they] . . . alert[] the agency to [their] position and contentions . . . in order to allow the agency to give the issue meaningful consideration," <u>Dep't of Transp. v. Pub. Citizen</u>, 541 U.S. 752, 764 (2004)

² Wyoming's brief also details the myriad of state regulations designed to protect usable water and argues that the Bureau was not arbitrary in relying on this set of regulations to analyze groundwater impacts. <u>See</u> Wyoming Br. at 9–11, 19–21. But the Tisherman study and the trade associations' comment equally call into question the effectiveness and enforcement of these state regulations.

(quotation marks omitted), the touchstone here is whether the party "waited too long to raise [the issue] forcefully during the administrative process" such that the agency did not have "adequate time and opportunity to respond," Vill. of Barrington v. Surf. Transp. Bd., 636 F.3d 650, 655–56 (D.C. Cir. 2011). Here, the Bureau had a clear chance to respond to the Tisherman study: When resolving protests, it referenced the Tisherman study when recounting the Wilderness Society's protest but then, for some reason, failed to engage with it in the answer. See WY486104-05. To allow such sidestepping "would negate much of the purpose of the protest process," Wildearth II, 457 F. Supp. 3d at 890, which is to give concerned parties one last chance to raise grievances and afford the agency an opportunity to respond, see W. Watersheds Project v. Zinke, 336 F. Supp. 3d 1204, 1228 (D. Idaho 2018). To be sure, as discussed in more detail below, an agency may not have to provide a thorough and thoughtful explanation to every last-ditch effort to sandbag the agency with late-breaking objections. See WildEarth Guardians v. Jewell, 738 F.3d 298, 310 (D.C. Cir. 2013). But that is not what happened here. While the Conservation Groups did not present the Tisherman study until the protest phase, that was not indicative of gamesmanship; rather, it reflected the simple fact that the Tisherman study was fresh off the presses. Moreover, while its data was new, the Tisherman study was of a piece with the concerns about casing that the Conservation Groups had voiced all along. See, e.g., WY479933. The Bureau therefore could, and should, have responded to it.

As its next line of defense, the Bureau contends that—even if this argument was properly presented—the Tisherman study is far afield from the evidence of regulatory noncompliance present in <u>Gulf Restoration Network</u>. There, the D.C. Circuit held that the Bureau of Ocean Energy Management could not assume the effective enforcement of safety and environmental regulations by its sister agency, the Bureau of Safety and Environmental Enforcement ("BSEE"),

because a Government Accountability Office report had identified significant deficiencies with BSEE's enforcement. See 47 F.4th at 803. That is not the case here, BLM argues: "Whereas in that case the court relied on a report issued by the federal government to conclude that BSEE's regulations were not being adequately enforced," the Conservation Groups "seek to rely on the report prepared by their own experts" and a letter drafted by trade associations. BLM's Br. at 16. That is an accurate distinction, but the fact that the concerns over regulatory enforcement came from a government report was not decisive in <u>Gulf Restoration Network</u>. What mattered was that "credible evidence" undercut the ordinary assumption of effective regulatory enforcement. 47 F.4th at 803.

Addressing this standard head-on, as its last defense, the Bureau argues that the evidence the Conservation Groups marshal does not *credibly* call into question its enforcement of Onshore Order No. 2 and other casing rules—including its general statement that "BLM would deny any APD where proposed drilling and/or cementing process was deemed not to be protective of usable water zones." WY483879. On the trade associations' comment, the Bureau minimizes these statements as mere whinging that the 2015 Rule shifted the burden of ascertaining the presence of usable water onto operators' shoulders. <u>See</u> BLM Reply at 4. This cramped reading overlooks that these trade associations complained not just about the burden of identifying usable water but also the substantive component of the 2015 Rule requiring operators to provide casing so as to protect *all* usable water sources under the 10,000-ppm standard—which, in the trade association's telling, pushed beyond existing federal and state requirements. Thus, the comment, combined with the repeal of the 2015 Rule, raises questions about how Onshore Order No. 2 is actually applied on the ground today. Those concerns are magnified by the Tisherman study. The Bureau highlights that the Tisherman study did not *definitively* find regulatory violations,

concluding only that the studied oil wells "*may* not be in compliance with Onshore Oil and Gas Order No. 2." WY483891 (emphasis added); <u>see also</u> BLM Br. at 16 (emphasizing this point). Such tentativeness was warranted, it contends, because the Tisherman study "did not evaluate the applications for these particular permits, the corresponding geologic and engineering reviews, or the environmental analyses associated with them," and thus could not definitively say that any of the wells in question did not comply with applicable regulations. BLM Reply at 3. Yet even if not definitive, the study nonetheless raised "credible" concerns about the Bureau's regulatory enforcement that warranted a response during the decision-making process, and the Bureau cannot fill in the gaps by raising rebuttals during litigation. <u>See Gulf Restor. Network</u>, 47 F.4th at 804 ("[Interior] should have explained its position in an EIS. We cannot affirm based on a post hoc litigation rationalization pressed by agency counsel.").

In sum, the Court finds that the Tisherman study and the trade associations' comment raised credible concerns about the Bureau's enforcement regime for ensuring adequate casing and cementing of oil and gas wells to protect usable water sources from contamination. Under <u>Gulf Restoration Network</u>, the Bureau was required to respond to such credible evidence that appeared to undermine its heavy reliance on federal and state regulations. <u>Accord Richardson</u>, 565 F.3d at 715 ("[T]he mere presence of these regulations cannot make up for BLM's failure to demonstrate that it 'examined relevant data' supporting a finding that impacts on the aquifer will be minimal."). Because the Bureau cannot correct the record by rebutting this evidence in the throes of litigation, the Court must award summary judgment to the Conservation Groups on this score.

3. Fracking

Turning to fracking, the Conservation Groups' critique sounds similar: They charge that the Bureau overlooked scientific studies when determining that any future fracking on the leased parcels would likely not negatively impact usable water. Even if the Bureau's analysis was not as clear as it could be, however, the Court finds that it reasonably considered the evidence and reached an informed determination that any ensuing fracking would not threaten water sources.

The Hydraulic Fracturing White Paper, appended to the EA, discusses various fracking techniques and their potential impacts on groundwater-including "[c]ontamination of aquifers through the introduction of drilling and/or completion fluids through spills or drilling problems"; "[c]ommunication of the induced hydraulic fractures with existing fractures potentially allowing frac fluid migration into usable water zones/supplies"; "[c]ross-contamination" that "may result when fluids from a deeper aquifer . . . migrate into a shallower aquifer" due to improper well casings; and "[p]rogressive contamination of deep confined, shallow confined, and unconfined aquifers if the deep confined aquifers are not completely cased off, and geologically isolated, from deeper units." WY485906. The White Paper further acknowledges that these risks are amplified where "the aquifer is shallow (within 100 feet of the surface depending on surface geology)." Id.; see also WY485910 ("The intensity, and likelihood, of potential impacts to public health and safety, and to the quality of usable water aquifers is directly related to proximity of the proposed action to domestic and/or community water supplies[.]"). To mitigate these hazards, the EA provided that all future drilling must comply with applicable regulations and Standard Lease Notice No. 1 which, to repeat, "requires at a minimum 500 [feet] offset from perennial surface waters" and potentially further depending on site-specific analysis conducted at the APD stage. WY485727; see WY485883-84 (Standard Lease Notice No. 1).

As noted above, the EA also evaluated several studies concerning the impact of fracking on water resources in Wyoming. For example, it considered a study conducted in the Pinedale Anticline gas field in western Wyoming that found no direct link between detected hydrocarbons in water resources and fracking. WY485727; see also WY558902 ("The investigation identified no evidence of widespread impacts to groundwater in [the Pinedale Anticline] as a result of natural gas exploration and production."). Though the Pinedale Anticline study found limited "organic material" in the tested waters, it concluded that these materials could not be traced to fracking because "[u]pward seepage of natural gas into groundwater and naturally occurring organic matter in groundwater reflect natural conditions." WY558902; see also WY559183 ("The source of the low-level detections of volatile organic constituents in groundwater is attributed to the upward seepage of natural gas by natural processes over geologic time."). The Bureau further assessed the WDEQ studies of the Pavillion gas field, which reinforced these findings. First conducted in 2016, the WDEQ study collected samples of 13 water supply wells in the Pavillion gas field and found no organic compounds exceeding applicable drinking water standards. WY508090. And to the extent there were organic compounds in the water samples, the WDEQ determined that "[e]vidence does not indicate that hydraulic fracturing fluids have risen to shallow depths utilized by water-supply wells," as there appears to have been upward seepage "happening naturally before gas well development." Id.; see also id. ("The relative contribution of potential gas seepage along gas wells versus natural upward migration of gas is undefined and would be very difficult to quantify."). In 2019, after further sampling and testing, WDEQ issued a final report confirming these conclusions. WY509130 ("Data collected and evaluated as part of this 2019 Final Report confirm the conclusions drawn in the WDEQ 2016 Final Report.").

According to the Conservation Groups, that analysis does not suffice because the Bureau overlooked conflicting evidence. They point to an EPA report titled "Hydraulic Fracturing for Oil and Gas: Impacts from the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States." WY483190. In that report, the EPA warned that the lack of vertical separation between hydraulically fractured oil- or gas-bearing rock formations and usable water sources can cause contamination and that the issue of shallow fracking is largely concentrated in certain areas, such as Wyoming (and, particularly, Pavillion). See WY483255; WY483508. The EPA then profiled a study conducted at Pavillion by two researchers, Dominic DiGiulio and Robert Jackson, finding that "approximately 50% of fracture jobs were within 1,969 ft (600 m) of the deepest domestic drinking water well in the area, and that 10% were within 820 ft (250 m)." WY483510; see WY483864-76 ("DiGiulio and Jackson report"). Collecting samples from two monitoring wells in Pavillion, DiGiulio and Jackson also found "unexpectedly high" amounts of organic compounds that *could* have derived from fracking in the region. WY483511. They warned that these results were likely not exclusive to Pavillion and could exist elsewhere. See WY483872. "However," the EPA summarized, "the investigative reports conclude that identifying the precise source(s) of the water quality issues is challenging due to the lack of comprehensive pre-drilling water quality and other baseline monitoring, the unique hydrogeologic setting, and the difficulty [with] identifying specific geological and well pathways." WY483512. DeGiulio was upfront about the study's limits as well. "Right now, we are saying that data *suggests* impacts, which is a different statement than a definitive impact," he explained in an interview in *Scientific American*. WY483861 (emphasis added). "We are saying the dots need to be connected here, monitoring wells need to be installed." Id. In short, the DiGiulio and Jackson study did not conclusively show contamination resulting from fracking in

Pavillion. Still, the Conservation Groups contend that the study conflicts with the Bureau's upbeat narrative on fracking and should have been addressed rather than shunted.

To the extent the Conservation Groups' grievance redounds to a dispute over which set of studies to credit, the agency wins hands down. "When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive." Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 378 (1989). "[S]uch judgments are entitled to deference, and a challenge to the agency's assumptions must be more than an effort by a petitioner to substitute its own analysis for the agency's." State v. U.S. Nuclear Regul. Comm'n, 824 F.3d 1012, 1022 (D.C. Cir. 2016) (cleaned up). "On the other hand, it is the Court's job to ensure that the agency has 'examine[d] the relevant data and [has] articulate[d] a satisfactory explanation for its action." Nat. Res. Def. Council, Inc. v. Rauch, 244 F. Supp. 3d 66, 86 (D.D.C. 2017) (quoting State Farm, 463 U.S. at 43). Crafting a satisfactory explanation is incompatible with failing to consider an important aspect of the problem, including evidence that runs counter to the agency's chosen outcome. See Genuine Parts Co. v. EPA, 890 F.3d 304, 312 (D.C. Cir. 2018). Enforcing this duty, the D.C. Circuit has "not hesitated" to set aside agency action when the agency ignores "evidence contradicting its position." Water Quality Ins. Syndicate v. United States, 225 F. Supp. 3d 41, 64, 68 (D.D.C. 2016) (quoting Butte Cnty. v. Hogen, 613 F.3d 190, 194 (D.C. Cir. 2010). So, the key question becomes: Did the Bureau adequately address the Conservation Groups' competing evidence on fracking? The answer is yes, just barely.

During the protest period, the Conservation Groups raised the DiGiulio and Jackson "study of hydraulic fracturing in Pavillion, Wyoming," which, in their telling "confirmed that oil

and gas drilling had contaminated underground sources of drinking water in that area due to lack of vertical separation between the aquifer and target formation." WY486056. BLM responded:

The protest does not submit any evidence documenting that hydraulic fracturing approved by BLM has systematically contaminated groundwater or that offering these parcels for lease will significantly impact water resources. Water resource impacts of proposed operations would be addressed if and when a site-specific development plan is submitted (APD). . . . In addition, the Hydraulic Fracturing White Paper (Appendix 4.3) discusses available water supply in WY, potential future water demands from the relevant Reasonably Foreseeable Development Scenario Reports, available sources of water, and potential impacts to water resources from the use of hydraulic fracturing. To the 2019 "Final Pavillion, Wyoming Gas Field Domestic Water Wells Report on Recommendations for Further Investigation", ... the conclusion states, "Data collected and evaluated as part of this 2019 Final Report confirm the conclusions drawn in the WDEQ 2016 Final Report." BLM has also reviewed the key findings located within the "Pavillion Groundwater Report Fact Sheet, November 7, 2016".... The second bullet point in the key findings states, "Evidence does not indicate that hydraulic fracturing fluids have risen to shallow depths utilized by water-supply wells." While the third main bullet point states, "Gas in the upper Wind River Formation appears to have originated mainly from upward migration from deeper commercial gas-bearing zones and evidence suggests that upward gas seepage (or gas charging of shall sands) was happening naturally before gas well development." Based upon the conclusions within these two reports, potential impacts from hydraulic fracturing are similar to those discussed in the Wyoming EA.

WY486055–56. Though it did not name DiGiulio and Jackson (and did not mention their study elsewhere), the Bureau was plainly aware of the study and sought to rebut its findings or, at a minimum, explain why the study did not alter its thinking. The first line of the response is an accurate correction of the protest: The DiGiulio and Jackson study did *not* prove "that hydraulic fracturing approved by BLM has systematically contaminated groundwater." Rather, it resolved that fracturing in the Pavillion *may* be the source of the detected organic compounds. Yet, the Bureau reasoned, subsequent studies of that same region—namely, the 2016 and 2019 CEQ reports—have tested even more well sites in the area and found that hydraulic fracturing was likely *not* the culprit. From this exchange, the Court is assured that the Bureau did not ignore conflicting evidence. Instead, it decided to rely on more recent studies of the same sites that

assuaged concerns raised by these prior reports. The Court must defer to that expert judgment about which studies to credit.

The Conservation Groups alternatively assert that, even if there is no direct evidence that shallow fracturing in the Pavillion (or elsewhere) has caused contamination, the Bureau still did not adequately address the reality that shallow fracturing poses a threat to water sources and that, according to the EPA, these dangerous drilling techniques are concentrated in Wyoming. <u>See</u> Pls' Reply at 4–5; Hearing Tr. at 61–65. The record indicates otherwise. The Bureau did not shy away from the fact that shallow fracking poses unique threats to water sources. Indeed, the White Paper acknowledges that all the risks of fracking are amplified when the aquifer is shallow and there is not much separation from the rock formation that is being fractured. WY485906. The Bureau has attempted to mitigate these risks through a variety of measures, such as Standard Lease Notice No. 1. WY485883–84. And by focusing intently on Pavillion, the Bureau studied what the EPA identified as an epicenter for shallow fracturing and still found that there was no evidence that fracking had contaminated the water supplies there. That finding gave the Bureau confidence that contamination was unlikely to occur as a result of fracking on the leased parcels.

Therefore, while the Bureau could have done a better job at showing its work and explaining its reasoning, an agency's decision need not be "a model of analytic precision," and a court must "uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned." <u>Dickson v. Sec'y of Def.</u>, 68 F.3d 1396, 1404 (D.C. Cir. 1995) (quotation marks omitted). Here, the Court finds that the Bureau considered the relevant studies and concluded, based on the available evidence, that any future fracking on the leased parcels was unlikely to contaminate usable water supplies. That was all that was required to comply with NEPA. With that said, the Bureau may find it worthwhile in any subsequent remand to color in the details of

its reasoning by more explicitly grappling with the DiGiulio and Jackson report and the potential (even if not realized) threats of shallow fracking where there is not much separation between the fractured formation and usable aquifers.

B. <u>Wildlife</u>

The Conservation Groups next contend that the Bureau failed to take a hard look at the impact of its leasing decision on wildlife—specifically, the sage grouse and "big game" species like the mule deer. The Court finds that, in both instances, the Wyoming EA improperly relied on earlier analysis prepared during the RMP phase even though those higher-level assessments do not offer any insight into how a lease sale of this magnitude and in these particular areas will likely affect these species. Moreover, for the sage grouse, the Bureau overlooked significant developments postdating its promulgation of the RMPs. The Court therefore cannot conclude, based on this record, that the Bureau took a hard look at the lease sale's impact on wildlife.

1. Sage Grouse

The sage grouse, a long-time Wyoming denizen, has come under increasing threat due to rampant oil and gas development in the region. <u>See</u> 80 Fed. Reg. 59,858, 59,888–90 (Oct. 2, 2015). Sage grouse now occupy only half their historic range, WY485729, and populations in one planning area in Wyoming plummeted nearly 90% between 1952 and 2003, WY501602. In 2010, the U.S. Fish and Wildlife Service ("FWS") found that listing the sage grouse under the Endangered Species Act was warranted but precluded by higher enforcement priorities. 75 Fed. Reg. 13,910, 13,910 (Mar. 5, 2010). In doing so, FWS identified the primary threats as habitat loss and fragmentation exacerbated by inadequate regulatory mechanisms. <u>Id.</u>

To "stop the bleeding," the Bureau and the U.S. Forest Service conducted an extensive planning process to amend their respective land use plans across the western United States in

order to provide greater protection for sage grouse habitat. <u>See</u> WY485729. Their joint effort culminated in 2015 with the finalization of the Greater Sage-Grouse Plan Amendments, which updated 98 RMPs across the bird's habitat. WY555632–33. The Plan Amendments followed Wyoming's lead by adopting a tiered habitat designation consisting of (1) priority habitat management areas ("PHMA") with the highest value to maintaining populations; (2) general habitat management areas ("GHMA"); and (3) nonhabitat areas. <u>Id.</u> It then pledged greater protection of PHMA and, to a lesser extent, GHMA. <u>Id.</u> Based on these efforts, FWS issued a new finding in 2015 concluding that the sage grouse no longer warranted listing under the Endangered Species Act. See 80 Fed. Reg. at 59,858.

Sadly for the sage grouse, though, the story does not end there. In 2021, the Bureau issued a notice of proposed rulemaking notifying stakeholders that it was planning to revamp the sage grouse RMPs once more because "new science and rapid changes affecting the BLM's management of the public lands, including the effects of climate change (e.g., drought, loss of habitat, more frequent wildland fires, less riparian areas)" have undermined assumptions on which the Plan Amendments were predicated. 86 Fed. Reg. 66,331, 66,331 (Nov. 22, 2021). Thus, at the same time it was conducting the June 2022 lease sale, the Bureau was also retooling the sage grouse RMPs to provide greater protection for the broad-chested, beleaguered bird. With revisions ongoing, environmental groups implored the Bureau to defer all leases in sage grouse habitat until the new plans took effect. See, e.g., WY484588–89. "Deferring all PHMA and GHMA is warranted because BLM is in the process of reviewing and amending its 2015 Greater Sage-Grouse Resource Management Plan Amendments (the 2015 Plans) to address changed conditions and new information since 2015 (>300 publications since 2015), which includes the U.S. Geological Survey's finding of alarming declines of sage-grouse populations

range-wide, including the impacts of climate change and drought on the sage-grouse," one group wrote. <u>Id.</u> But BLM opted to forge forward, resolving that it was not required to stay all leasing until the revisions were completed. <u>See</u> WY481314.

In assessing the projected impact on the sage grouse in the EA, the Bureau extensively detailed its processes for selecting parcels and how those selections tracked the prioritization scheme set forth in the existing Plan Amendments. <u>See</u> WY485730–32. After cataloguing all available parcels, <u>see</u> WY485733–42, BLM identified eight non-habitat parcels on offer, <u>see</u> WY485742. It then moved to the GHMA tracts, the vast majority of which it recommended for lease. <u>See</u> WY485742–46. Only then did it turn to PHMA, screening all parcels located in low-population ranges and evaluating the remaining ones based on whether they were subject to drainage from adjacent parcels; within an existing oil and gas unit; in an area prioritized for restoration; in regions that were meeting "land health" standards; within an existing oil and gas development field; or in areas that possessed development potential. <u>See</u> WY485746–51. It further evaluated all parcels located in PHMA and GHMA based on their proximity to sage grouse "leks"—areas where male birds congregate and engage in elaborate courtship rituals—documenting if the parcels were within 1, 2, 3, or 4 miles of such a site. <u>See</u> WY485751–61.

After this multi-page cataloging of the parcels under review, the Bureau offered a terse four-paragraph assessment of each alternative's estimated impact on sage grouse. <u>See</u> WY485761. "Due to the uncertainties from a lease development standpoint," BLM explained, "it is difficult to predict exactly what impacts may occur. However, impacts from development, such as the anticipated noise, permanent and temporary facilities, and traffic, would be similar to those discussed in the individual field office RMP and the 2015 [Plan Amendments]." <u>Id.; see also id.</u> ("Alternative 2 proposes to offer 455 parcels. Impacts are similar to those discussed

within the approved RMPs and include, but [are] not limited to, potential loss of habitat, disturbance from noise, and dispersal of individuals into less desirable habitats."). "To minimize impacts," it assured, "all parcels offered in this sale include Standard Lease Notice 3," which provides that "an operator may be required to implement specific measures to reduce impacts of oil and gas operations on the [sage grouse] populations and habitat quality. Such measures shall be developed during the Application for Permit to Drill (APD) on-site and environmental review process." <u>Id.</u> Additionally, the Bureau explained, further lease stipulations will apply if the parcel is located near a lek or within GHMA. <u>Id.; see also</u> WY485788–886 (lease stipulations). It then reiterated that impacts beyond those outlined in the RMPs and Plan Amendments were "not expected" and that BLM will coordinate with other agencies, such as the Wyoming Game and Fish Department, as necessary. WY485761.

BLM clearly selected the available parcels with sage grouse protection in mind. But its analysis still falls short of the hard-look review that NEPA requires in several respects. For starters, the Bureau improperly tiered its assessment to the RMPs and Plan Amendments. As discussed earlier, the leasing process occurs in three parts: (1) designing RMPs, (2) auctioning leases, and (3) approving the ADPs. NEPA analysis is required at each step. To avoid needless repetition, the NEPA regulations encourage agencies to "tier" their review by "incorporat[ing] by reference the issues discussed in the broader document" so the later document can "concentrate on the issues specific to that subsequent action." 40 C.F.R. § 1501.11(a). "Tiering is appropriate when," as relevant here, an EA conducted at the lease stage can rely on the broader EIS prepared during the RMP phase and, as a result, "exclude from consideration issues already decided" and analysis that already has been performed. <u>Id.</u> § 1501.11(c). "In other words, an EA prepared in support of an individual proposed action can be tiered to a programmatic or other broader-scope

EIS for a proposed action . . . if the broader EIS fully analyzed those . . . effects." <u>WildEarth I</u>, 368 F. Supp. 3d at 54 (cleaned up). That final caveat is critical. Tiering aims to prevent undue duplication so the agency can "concentrate on the issues specific to the subsequent action." 40 C.F.R. § 1501.11(b). But tiering has no teeth when the prior review did not evaluate an issue at hand because, in such cases, there's no work to duplicate. <u>See Theodore Roosevelt Conservation</u> <u>P'ship v. Salazar</u>, 616 F.3d 497, 511–12 (D.C. Cir. 2010) (explaining tiering is not appropriate "when the broader analysis did not address the impact in question at all"). The Bureau broke that rule when tiering its analysis here to the RMPs and Plan Amendments, stating that the projected impacts will be similar to those previously identified, because those earlier assessments did not attempt to evaluate the impacts from any particular lease sale or drilling activity. In fact, those documents expressly deferred such analysis until later, stating that the "Proposed RMP and Final EIS involves only the RMP tier; therefore, it does not further consider activity-level and projectlevel plans." WY502947. Having deferred analysis of future lease sales when preparing its RMPs, the Bureau cannot now point back to those plans in lieu of doing additional analysis.

The District of Idaho reached the same conclusion in <u>Western Watersheds Project v.</u> <u>Bernhardt</u>, finding that BLM had not adequately analyzed the impacts on sage grouse of its decisions to lease potential drilling sites in Wyoming and Montana when, as here, the agency simply referenced the Plan Amendments rather than conduct a new, more probing analysis. 543 F. Supp. 3d 958 (D. Idaho 2021). There, the court held that BLM could not tier its analysis at the leasing stage to the RMPs because "the RMP EISs are too generic to foster informed decisionmaking about leasing in particular locations" because they consist primarily of a high-level comparison between "various plan alternatives" that "does not (and cannot) reflect the sort of effective site-specific impacts analysis contemplated by NEPA." <u>Id.</u> at 991–92. "Most

importantly," as here, the court noted that "BLM expressly deferred such analysis to later implementing decisions." Id. In short, it concluded, "[t]hose earlier-in-time discussions . . . are no substitute for more precise cumulative impact analyses for later-in-time lease sales." Id. at 993. This inappropriate tiering prevented the court from finding that BLM had scrutinized the cumulative impacts of its leasing decision "because the RMP EISs consider cumulative effects to greater sage-grouse at a large geographic scale, as opposed to the specific locales affected by each lease sale. This may be useful to the kinds of decisions made at the RMP stage (e.g., how many total acres in each management zone to open up to leasing with various restrictions), but they are not a one-size-fits-all cumulative impacts discussion capable of taking into account a more nuanced/focused situation particular to greater sage-grouse to help inform decision-making on related lease sales." Id. That analysis applies equally here. While the RMPs and Plan Amendments provide detailed overviews of threats to sage grouse, see WY504396-401, they primarily contain a comparison between different approaches to stop the bleeding, see WY555632–33 (summarizing findings). That general analysis does not substitute for a more specific review at the leasing stage—especially when these earlier reviews promised a more granular analysis was forthcoming. See WY502947.

And the problems here are more pronounced than in <u>Western Watersheds Project</u> because the record suggests that the prior analysis performed for the RMPs and Plan Amendments may now be outdated. As noted above, the Bureau has recognized that "new science and rapid changes affecting the BLM's management of the public lands, including the effects of climate change" have undermined many of the Plan Amendments' basic assumptions. 86 Fed. Reg. at 66,331. Commentors repeatedly raised these studies during the NEPA process and voiced their concerns that the Plan Amendments may be stale. For instance, the Center for Biological

Diversity surveyed recent literature detailing the negative effect that oil development has had on sage grouse populations. See WY424947–50. In view of these developments, environmental groups pressed the Bureau to defer *all* leases in sage grouse habitat, both PHMA and GHMA alike, until the new rule went into effect. The Bureau rebuffed these overtures, noting that it was under no obligation to put all leases on hold until it completed the RMP updates. See WY481317–18 (responding to comments); WY486096 (responding to protests). That is true. But it is nonetheless arbitrary and capricious to claim the leases will have the same effects as projected in the RMPs and Plan Amendments without acknowledging superseding developments calling into question their analysis or explaining how past predictions square with new data that has pushed BLM back to the drawing board. Under these circumstances, the Bureau must do more to justify its conclusion that the effects would be the same as those outlined in the RMPs and Plan Amendments (whatever those predictions were) in light of intervening events that appear to have shaken the Bureau's confidence in those plans. After all, a hallmark of arbitrary and capricious action is the failure "to consider an important aspect of the problem." State Farm, 463 U.S. at 43. BLM broke this cardinal rule by not grappling with the new developments.

The Bureau also cannot escape this outcome by claiming that a "more precise analysis is not feasible" and promising a more probing review of the site-specific effects at the APD stage. WY486101. The court in <u>Western Watersheds Project</u> rejected similar efforts to defer all review until a later day, <u>see</u> 543 F. Supp. 3d at 989, and this Court likewise finds that the Bureau's explanations do not excuse its failure to acknowledge the scientific studies postdating the Plan Amendments. Though assessments of feasibility rightly receive a high degree of deference, such deference is not absolute. "[R]easonable forecasting and speculation is implicit in NEPA," so courts must reject agencies' attempts "to shirk their responsibilities under NEPA by labeling any

and all discussion of future environmental effects as 'crystal ball inquiry.'" <u>Del. Riverkeeper</u> <u>Network v. FERC</u>, 753 F.3d 1304, 1310 (D.C. Cir. 2014) (cleaned up). Here, while the Bureau was not necessarily required to analyze the estimated effects of each specific parcel or forecast a particular reduction in sage grouse populations, it was required to offer some prediction of how this lease sale will likely impact sage grouse populations in light of all available evidence, including the more recent science that has motivated the Bureau to redraft the existing RMPs. Moreover, while the Court does not doubt that the Bureau will have more information about sitespecific factors later on, deferring all review until a later date will not do because the APD stage is "ill-suited for considering the collective impacts of the leases together." <u>Friends of the Earth</u> <u>v. Haaland</u>, 583 F. Supp. 3d 113, 134 (D.D.C. 2022). "[I]t is only at the lease sale stage that the agency can adequately consider cumulative effects of the lease sale on" sage grouse populations because it is the collective interference with habitat that matters most. <u>Id.</u> at 135 (quoting <u>Native</u> <u>Vill. of Point Hope v. Jewell</u>, 740 F.3d 489, 504 (9th Cir. 2014)).

Thus, while the Bureau exhibited significant concern for the sage grouse's welfare when filtering parcels based on the habitat designation and then deferring all parcels located in PHMA, <u>see</u> WY485701–02, the inadequate discussion of how drilling on these parcels will affect sage grouse in light of developments since the Plan Amendments were issued in 2015 preclude the Court from finding that the Bureau performed the hard-look review NEPA requires.

2. Big Game (Mule Deer)

Similar issues plague the assessment of the lease sale's effect on the mule deer and other "big game" species. Though the Bureau at least referenced more recent data in this analysis, at critical junctures, it still tiered its review to a set of RMPs that do not contain the missing links.

As with the sage grouse, the Conservation Groups maintain that the Bureau ignored recent developments suggesting that the RMPs may have overestimated the mule deer's ability to adapt to drilling activities. See Pls' Br. at 29. They fault the Bureau for not considering that the mule deer is significantly undershooting population objectives, with some herds missing their mark by as much as 67%. WY485762-64. While some of this underperformance can be chalked up to abnormal weather in recent years, as BLM acknowledges, a portion is attributable to unforeseen effects of oil and gas development in the region. Id. "Recent data" from the Pinedale Anticline, an area that has undergone "intense oil and gas developments," "suggests that while these initial study results were accurate, to date, mule deer are not habituating even as large parts of the field are being reclaimed." WY485762. At the same time, "new research" has augmented understandings of migration patterns. WY485765. Despite these recent developments, though, the Conservation Groups charge that BLM wrongly concluded that the effects will be similar to those outlined in the RMPs without considering this intervening data. See WY485778 (noting that the "impacts would be similar to those described under each . . . RMP").

While this argument may sound a familiar tune, it is somewhat off key because all this "intervening data" comes from the Wyoming EA itself. The Conservation Groups do not cite any "new" information, beyond what's contained in the pages of the EA, that the Bureau did not consider. That sets this analysis apart from the sage grouse, where the Bureau entirely failed to acknowledge scientific studies that possibly contradict the Plan Amendments' basic assumptions.

Instead, the Conservation Groups' core complaint is that while "the EA includes post-RMP information on sage-grouse and big game populations," it "never uses that information to analyze the impacts on wildlife populations" because the Bureau again insisted that the impact

would be consistent with the RMP projections. Pls' Reply at 13. The crux of the dispute, then, is whether the Bureau actually took a fresh look in the EA—taking account of this new data—or whether it again impermissibly tiered its analysis with the RMPs. A careful reading of the record favors the latter interpretation: Although parts of the EA may appear to assess the effects on the mule deer anew, the Bureau ultimately concluded that the impacts from the lease sale will be akin to those described in the RMPs—even though those RMPs provide no account whatsoever of how leasing these parcels for oil and gas development will impact mule deer or other big game.

In the EA, the Bureau first offered a general overview of the existing data on mull deer populations, explaining where herds are failing to hit population objectives and summarizing the possible reasons for the shortfall, including abnormally harsh winter conditions and drilling. See WY485762–63. It provided a chart of herd-unit populations showing that 24 out of 27 undershot their objectives, some by as much as 67%. WY485763-64. The Bureau proceeded to catalog all parcels under consideration, indicating which are located within a crucial mule deer winter range, migration corridors, high-usage acreage within migration corridors, and migration stopover areas using the most recent data on mule deer herds. WY485764–65. In total, it estimated that around 50,945 of 6,335,000 acres (0.8%) of mule deer winter range in Wyoming could be affected (with just 16,710 acres, or 0.26%, in the option that BLM ultimately selected). WY485764; WY485783. The Bureau then discussed, in broad terms, how development may impact the mule deer. WY485783. To minimize these impacts, it then explained, the Bureau was imposing a suite of lease stipulations. One such stipulation, for example, would attach to all parcels located in a migration corridor, WY485766, while another stipulation would apply to parcels in crucial winter range and require the operator to submit a mitigation plan as part of an

APD demonstrating that "the function and suitability of crucial big game winter ranges will not be impaired," WY485871. So far, so good.

Rather than using this analysis to assess the lease sale's effect, though, the Bureau again turned to the RMPs. "There are over 16.6 million acres of big game crucial winter range (CWR) in the State of Wyoming," it resolved. "Offering 50,944.63 acres of mule deer CWR, 145,977.09 acres of pronghorn CWR, and 42,442.96 acres of Elk CWR is not expected to result in impacts not already considered in BLM's RMPs or programmatic EIS." WY485783. Here, the Bureau was not making a *new* determination of how the development of such a small segment of habitat, which will be mitigated with lease stipulations, will likely impact these species. Rather, it was claiming that the Bureau *already* assessed this sort of impact during the RMP phase. But that is not the case.

The Bureau maintains it "analyzed the impacts of oil and gas leasing on mule deer both in the prior EISs supporting the applicable RMPs and [RMP Amendments]." <u>See</u> BLM Br. at 26. Thumbing through the cited passages, however, the Court is hard-pressed to find anything resembling an estimate of how the lease sale here will impact these species. Instead, the RMP passages contain general descriptions of the species' habitats, discussions of current threats, target population figures, and broad-brush comparisons of the different development plans. <u>See</u>. e.g., WY554933–555561 (Wyoming Greater Sage Grouse EIS). And, once more, they expressly disclaimed any effort to predict the effects of future lease sales. <u>See, e.g.</u>, WY555471 ("Without knowing where disturbing activities are going to occur in the future, making predictions of impacts to various habitats and the species that utilize them would be inaccurate."); <u>see also</u> WY503437–47, WY503863–907 (Bighorn Basin EIS); WY559846–49, 560504–52 (Buffalo EIS). When the EA concludes the proposed lease sales are not "expected to result in impacts not

already considered in BLM's RMPs or programmatic EIS," then, it is hard to discern what the Bureau is referencing, as it is once again tiering its assessment to a review that it did not perform in the first instance. The Bureau cannot hang its hat where it never placed a peg. And, even then, it is hard to understand how the RMPs could have accounted for these effects when those RMPs were prepared years ago and, on BLM's own account, were based on assumptions that may no longer ring true.

The Court accordingly grants the Conservation Groups' motion for summary judgment on this issue. While the Bureau need not predict specific population losses tied to this lease sale, it must use available evidence to reasonably forecast how these lease sales will affect mule deer or other big game. <u>See Del. Riverkeeper</u>, 753 F.3d at 1310 ("Reasonable forecasting . . . is implicit in NEPA."). The Court suspects BLM very well may conclude that the small magnitude of habitat affected, combined with the mitigation measures it imposed, provide assurance that the lease sales will not significantly impact big game. Yet it is the Bureau's, and not the Court's, responsibility to offer this reasoning based on all the information at hand.

C. <u>Alternatives</u>

Beyond the analysis that the Bureau performed, the Conservation Groups also object to the array of alternatives it considered. NEPA does not require agencies to assess all conceivable options, however, and the Court finds that the Wyoming Office selected a reasonable range of alternatives to analyze in its EA—even if other field offices opted to pursue smaller lease sales in June 2022.

NEPA requires agencies to "evaluate reasonable alternatives to the proposed action, and, for alternatives that the agency eliminated from detailed study, briefly discuss the reasons for their elimination." 40 C.F.R. § 1502.14(a). Though this requirement applies regardless of

whether an agency is preparing an EIS or an EA, courts generally have held that "an agency's obligation to consider alternatives under an EA is a lesser one than under an EIS." <u>Native</u> <u>Ecosystems Council v. U.S. Forest Serv.</u>, 428 F.3d 1233, 1246 (9th Cir. 2005); <u>see also W.</u> <u>Watersheds Project v. BLM</u>, 721 F.3d 1264, 1274 ("[The] depth of discussion and analysis required [by NEPA] is different depending on whether the document is an EIS or an EA.").

An alternative is "reasonable," and should be considered, where it is (a) "technically and economically practical or feasible" and (b) "meet[s] the purpose and need of the proposed action." 43 C.F.R. § 46.420(b). In defining an action's "purpose and need," courts will defer to the agency "as long as the agency looks hard at the factors relevant to the definition of purpose." TRCP, 661 F.3d at 73 (cleaned up). Here, the Bureau painted its mission in broad strokes when identifying the purposes of the lease sale as (1) satisfying its duties under the MLA and FLPMA "to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs"; (2) continuing the "sale and issuance of lease parcels in conformance with the approved RMPs [to] allow for [the] continued production of oil and gas from public lands and reserves"; and (3) "respond[ing] to Expressions of Interest, as established by the Federal Onshore Oil & Gas Leasing Reform Act of 1987 (FOOGLRA), MLA, and FLPMA." WY485691; see also WY485959 (echoing these purposes in the FONSI).

Once the project's purpose is defined, the question arises: Just how many alternatives must the agency consider? At a minimum, it must consider a "no action alternative" along with its "preferred alternative." 40 C.F.R. § 1502.14(c)–(d). But beyond that lower bound, there is no fixed threshold an agency must surpass; it is the substance of the alternatives considered, not the sheer number, that matters most. <u>See Native Ecosystems Council</u>, 428 F.3d at 1245. In evaluating the substance of the alternatives considered, a court's role is again limited by the

deference owed to an agency's expertise and policy-making function. City of Alexandria v. Slater, 198 F.3d 862, 867 (D.C. Cir. 1999). Accordingly, the Court reviews an agency's selection of alternatives under a relaxed "rule of reason" standard. Union Neighbors United, Inc. v. Jewell, 831 F.3d 564, 575 (D.C. Cir. 2016). That standard has special purchase where, as here, the range of all possible alternatives is limitless. While it is sometimes said that agencies must consider any reasonable alternative identified by the public as well as all obvious options, that duty "does not extend to situations where the possibilities are so numerous and the goals of the action so complex that the agency cannot possibly consider every significant alternative in a reasonable time period. Rather, in these circumstances, the agency has discretion to choose a manageable number of alternatives to present a reasonable spectrum of policy choices that meet the goals of the action." Oceana, Inc. v. Evans, 384 F. Supp. 2d 203, 241 (D.D.C. 2005); accord Flaherty v. Raimondo, 531 F. Supp. 3d 76, 86 (D.D.C. 2021) ("[A]n agency need not consider every possible alternative that could address an objective."). The Court's role in this context is simply to ensure that the agency provided a coherent answer for why it selected a given set of options to review. See Wildearth II, 457 F. Supp. at 890.

The Wyoming EA analyzed three alternatives: (1) the "Proposed Action" where BLM would offer every parcel nominated through an EOI that was located in an area open for leasing under the relevant RMP, totaling 455 parcels and 530,977.78 acres; (2) a "Modified Proposed Action" where it would offer 195 nominated parcels covering approximately 179,000 acres; and (3) a "No Action Alternative" where it would offer no parcels for sale. WY485700–02. It also explained that BLM had considered auctioning "all nominated parcels as originally submitted through" EOIs, "all nominated parcels subject to standard lease terms and conditions," and "all

available parcels subject to no surface occupancy (NSO) stipulations." WY485702 (capitalization altered).

In the Conservation Groups' view, these three alternatives don't cut it because they bypass all middle-ground options in between leasing no parcels and leasing over 100,000 acres. <u>See</u> Pls' Br. at 34. They further charge that a smaller-scale sale was a reasonable and obvious alternative that other BLM State Offices pursued in June 2022 when offering a combined total of 8,946 acres. By contrast, the smallest sale the Wyoming Office assessed was 20 times larger than that aggregate figure. And even after discretionary deferrals, Wyoming still leased 13 times as much land as the five other field offices added together. <u>See id.</u> at 32–33. Such differential treatment, they say, violates the core principle that agencies must treat "like cases alike." <u>Id.</u> at 37 (quoting <u>Westar Energy, Inc. v. FERC</u>, 473 F.3d 1239, 1241 (D.C. Cir. 2007)). The Court disagrees.

Starting with the set of alternatives the Wyoming EA considered, this case is markedly different from the other cases on which the Conservation Groups rely where courts have faulted the Bureau for not assessing *any* "middle-ground compromise between the absolutism of the outright leasing and no action alternatives." <u>See Wilderness Soc'y v. Wisely</u>, 524 F. Supp. 2d 1285, 1312 (D. Colo. 2007); <u>Rocky Mountain Wild v. Bernhardt</u>, 506 F. Supp. 3d 1169, 1185–99 (D. Utah 2020) (same); <u>W. Watersheds Project</u>, 543 F. Supp. 3d at 981–82 (same). BLM did not adopt such an all-or-nothing approach here. It instead provided a middle-ground option with the Modified Proposed Action, containing less than half the total acreage of the Proposed Action, which took "into account a number of factors, including resource conflicts and development potential" and "whether making certain lands available would meet the purpose and need of the EA." WY481317–18. Specifically, the Modified Proposed Action deferred 260 parcels in sage

grouse PHMA, 61 parcels located in a low development potential area or area not immediately adjacent to existing development, and five parcels that were not listed in its National Fluid Lease Sale System. WY485701–02; WY485925; WY485953. And, even then, the Bureau trimmed a sizeable share of acreage off the proposal through notice-and-comment and use of discretionary deferrals to arrive at 119,564 acres. WY485953–55. Far from limiting its review to a dichotomy of two extremes, then, BLM weighed a broader set of options before proceeding to auction parcels.

Of course, the mere fact that the Bureau considered more than two options does not get it home, as it could have considered additional options within this range. See Native Ecosystems Council, 428 F.3d at 1245. But the infinite number of all possible alternatives to analyze even within the bound set between no action and the full-scale Proposed Action calls to mind Zeno's paradox: Wherever the Bureau set its sights, there would always be ever more options in between that it could have considered. For that reason, courts must be especially deferential to agencies' practical decisions in selecting a reasonable assortment of options to consider in this context. See Oceana, 384 F. Supp. 2d at 241. Here, the Wyoming Office explained that it had considered a number of factors when setting the sale's scope—including "resource conflicts, "developmental potential," "potential resource conflicts," and "whether making certain lands available would meet the purpose and need of the EA." WY481317. Among the latter category was "the policy of the BLM as derived from various laws, MLA and FLPMA to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs." WY485691. It further noted that Wyoming received a large volume of EOIs, partially because it had postponed the March and June 2021 sales and was now working its way through a backlog of pent-up demand. WY486078. Against this backdrop, the

Wyoming Office resolved that its Modified Proposed Action represented a "reasonable 'middle ground'" and opted not to analyze even smaller alternatives. WY481318. The Conservation Groups disagree with that determination and protest that, under the FLPMA "multiple use" framework, the Bureau is not supposed to simply satisfy oil and gas demand but instead must balance development against other interests such as preventing environmental degradation and preserving wildlife habitats. That's true. But it is the Bureau who is tasked with weighing these competing considerations, and it is apparent that the Wyoming Office believed a smaller lease sale along the lines that the Conservation Groups proposed would not strike the right balance. NEPA does not authorize courts to override that expert judgment call. <u>See Strycker's Bay</u> <u>Neighborhood Council, Inc. v. Karlen</u>, 444 U.S. 223, 227–28 (1980). Therefore, applying the appropriately deferential standard of review, the Court cannot find BLM failed to follow a "rule of reason" when selecting alternatives to review. Jewell, 831 F.3d at 575.

That other BLM State Offices opted to offer smaller lease sales in June 2022 does not change the calculus. The Wyoming Office was certainly not required to follow their lead because, contrary to the Conservation Groups' claims, these lease sales spanning different jurisdictions are not all that "alike." Each field office independently decided how many parcels to auction based on a number of factors specific to its region—including the range of parcels authorized for drilling under the relevant RMPs, the number and type of EOIs, the location of the proposed parcels in relation to cultural resources, current environmental conditions in the area, local laws, and so on. In Wyoming, for instance, the Bureau received EOIs for 459 parcels. WY485701. It then scoped those parcels based on factors unique to Wyoming, such as air quality and proximity to sage grouse and mule deer habitat. <u>See</u> WY485703–13; WY485729–62. From there, the Wyoming Office decided to defer more than 300 scoped parcels based on

State-specific considerations. WY485953–54. That analysis would be markedly different in the other jurisdictions. So, while the six lease sales may have proceeded on parallel timelines, they were more cousins than twins.

The Court is also unpersuaded by the Conservation Groups' contention that the Wyoming Office reached a "discordant" result by deploying different criteria when deciding whether to defer particular parcels. <u>See</u> Pls' Br. at 37–39. Consistent with the Interior Department's Report on the Federal Oil and Gas Leasing Program, the Conservation Groups contend that other field offices applied four criteria for selecting which parcels to lease: (1) whether the parcel had low potential for oil and gas development; (2) whether the parcel was far from existing oil and gas leases and development; (3) whether development on the parcel would conflict with important wildlife habitat; or (4) whether development would jeopardize cultural resources. <u>See id.</u> at 38. If one or more criterion was satisfied, they glean, these other offices deferred the parcel. That was purportedly not true in Wyoming, though, where the EA omitted analysis of some of these factors—such as proximity to habitat and conflicts with cultural resources—from the table it used when deciding whether to defer tracts that met one (or more) of these conditions. <u>See id.</u> (citing table appearing on WY485925). Again, the Conservation Groups argue, such differential treatment violates the basic norm that agencies must treat "like cases alike." Pls' Br. at 37.

Once more, the adage is inapt. Nothing required the Bureau to employ these deferral criteria at all, let alone in any particular way. The Report on the Federal Oil and Gas Leasing Program did not direct BLM State Offices to use them, <u>see HQ_4016</u>, and the other State Offices never announced they were using the one-strike-and-you're-out rule that the Conservation Groups infer. Even if they had, the Wyoming Office was free to make a different decision based on Wyoming-specific factors and conclude that it could protect wildlife habitat and mitigate any

harms to cultural resources in other ways. <u>See, e.g.</u>, WY485762, WY485779–82, WY485783– 85 (assessing mule deer habitat); WY485730–61 (assessing sage grouse habitat); WY485697 ("[A] cultural inventory will be required before new surface disturbance and all historic and archaeological sites that are eligible for listing in the National Register of Historic Places would be either avoided by the undertaking, have adverse effects to sites minimized or mitigated, or have the information in the sites extracted through archaeological data recovery.").

Lastly, the Conservation Groups contend that even if Wyoming did not need to consider offering a lease sale on the same scale as other State Offices, its reasoning for not doing so was lacking. During the protest period, environmental groups noted that "BLM's proposed Wyoming lease sale provides a jarring contrast from the agency's approach in every other state" and faulted the Bureau for "offer[ing] no explanation for its sharply different treatment of Wyoming and [failure] to consider the alternative of holding a small lease sale" there. WY484591–92. In response, the Bureau explained:

The number of EOIs the [Wyoming Office] receives is large compared to the number of EOIs other states may receive. The [Wyoming Office] processes all [EOIs] received by a specific date, typically six to nine months prior to the sale month, and creates parcels based upon size and distance requirements from those EOIs. For this sale, the [Wyoming Office] analyzed parcels that were previously identified for the postponed March and June 2021 sales. The public had already received an opportunity to comment on the March 2021 parcels prior to postponing the sale. The June 2021 parcels had not received any comments when the sale was postponed. The combination of these two sales created the large number of parcels to analyze, scope and provide the public an opportunity to comment.

WY486078; WY486093 (same). This explanation does not placate the Conservation Groups. They note that the bottleneck caused by the suspension of prior quarters' lease sales was the same across all field offices and that the volume of EOIs does not set Wyoming apart because the Colorado Office similarly received a high volume of EOIs spanning 141,675 acres but offered only 2,444 acres—or just 1.7%. An equal fraction in Wyoming would have amounted to just 9,026 acres, which is (square) miles away from the nearly 120,000 acres Wyoming auctioned. See Pls' Br. at 37 (citing CO_0119464).

The Conservation Groups' narrow focus on Colorado creates a skewed perspective, however. The Wyoming Office leased around one-fifth of all parcels it scoped. That ratio is lower than that in four of the other field offices: The Nevada Office offered around a quarter of scoped parcels; the Montana-Dakotas Office leased around half; and the Oklahoma and New Mexico Offices offered every single scoped parcel. <u>See supra</u> at 7. That begs the question: Who was the true outlier? And, to the extent the Wyoming Office failed to account for Colorado's different approach in its explanation, it is apparent that the Wyoming Office concluded, based on the volume of EOIs and other State-specific factors, that such a small-scale sale would not suffice in its view. That judgment call is well within the Bureau's bailiwick.

The Court also must consider the context in which the Wyoming Office provided this answer. Although environmental groups consistently urged the Wyoming Office to either defer the lease sale entirely or proceed with a smaller version—say, by deferring all parcels located within sage grouse habitat—not once during the multi-month notice-and-comment processes did these groups contend that the Wyoming Office should align its lease sale with those occurring in other States. That issue was first raised during the protest stage. To be sure, as noted above, the fact that an objection is first aired in a protest does not vitiate the agency's duty to respond in all instances. See supra at 22–23. Here, though, the lengthy delay in voicing this (supposedly obvious) suggestion raises concerns that the groups may have been "sandbagging" the Bureau with late-breaking objections—a disfavored tactic that diminishes the agency's duty to respond to the recommendations of proposed alternatives. In <u>WildEarth Guardians v. Jewell</u>, the D.C. Circuit held that courts "generally apply a deferential 'rule of reason' to govern both *which*

alternatives the agency must discuss, and the *extent* to which it must discuss them," and that "the last-ditch, kitchen-sink nature of [a plaintiff's] suggestions bear on the extent to which BLM [is] required to address them." 738 F.3d at 310 (alterations in original and quotation marks omitted). So too here. Even if the Wyoming Office could have provided a fuller account for its decision to break ways with Colorado (and undoubtedly would have done so had the environmental groups raised this issue earlier and then noted the discrepancy during the protest period), its explanation was reasonably responsive to the last-minute suggestion, and the Wyoming Office was by no means obligated to follow a fellow field office's lead when faced with divergent geologic and regulatory landscapes.

Accordingly, under the "rule of reason" standard, the Court finds the Wyoming Office satisfied its NEPA duty to consider a reasonable range of alternatives and did not act arbitrarily by offering a significantly larger lease sale than did its fellow field offices.

D. <u>Climate Impacts</u>

As their final challenge, the Conservation Groups argue that BLM failed to rationally address the climate impacts of its leasing decision. More specifically, they say the Bureau's analysis of GHG emissions "was arbitrary and capricious, and violated NEPA, because the agency: (1) failed to offer a reasoned explanation for its decision to proceed with an action that it recognized would cause enormous social and environmental damages, (2) failed to consider and address the purported conflict between the lease sale and U.S. climate commitments and national policy, and (3) failed to make a determination as to whether the climate impacts of the sale were significant, thus requiring an EIS." Pls' Br. at 40. The Court already considered and rejected the latter contention in the companion case, so it will not retread old ground here. <u>See Dakota Res.</u> <u>Council</u> at 41–49. Focusing on the novel claims, the Court finds the first convincing: When

authorizing the Wyoming lease sale, the Bureau did not adequately explain how it considered the environmental effects of GHG emissions that, in its own telling, carry a hefty price tag in terms of social costs.

To project the environmental effects of the lease sale's GHG emissions, the Bureau employed a variety of tools including the social cost of greenhouse gases ("SC-GHG"), which is "a method of quantifying the impacts of GHGs that estimates the harm, in dollars, caused by each incremental ton of carbon dioxide emitted into the atmosphere in a given year." <u>350</u> <u>Montana v. Haaland</u>, 50 F.4th 1254, 1270 (9th Cir. 2022) (quotation marks omitted). It began by calculating a range of GHG emissions that would likely result from oil and gas development on the leased parcels, denominated in metric tons. <u>See</u> WY485717. Then, using cost ranges and discount rates recommended by the Interagency Working Group on the Social Cost of Carbon, the Bureau computed the expected social costs from the Wyoming lease sale's GHG emissions—which, for the Modified Proposed Action that it selected, ranged from a low-end evaluation of \$357 million to a high-end estimate of \$4.1 billion. WY485724.

After projecting the emissions and their social costs, though, the Bureau did not explain why it believed that a lease sale of this magnitude was nonetheless worthwhile and consistent with its statutory duties to steward federal lands for the public benefit. Rather, the Bureau appeared to back away from its analysis of GHG emissions when justifying its decision to move forward with the Modified Proposed Action. In response to a trade association's protest that the SC-GHG analysis was one-sided because it did not account for the benefits of the lease sale, the Bureau assured: "The monetized SC-GHGs do not constitute a complete cost-benefit analysis, nor do the SC-GHG numbers present a direct comparison with other impacts analyzed in this document, including socioeconomic impacts, both beneficial and adverse, of oil and gas

development *The SC-GHG numbers are included for context in BLM's analysis and [do] not constitute the basis for our decision-making.*" WY486079 (emphasis added). And in the Record of Decision, when providing its ultimate rationale for selecting the Modified Proposed Action, the Bureau wrote: "The subject EA analyzes emissions and the social cost thereof for informational purposes only, and BLM has not determined to lease individual parcels (or not) based on greenhouse gas emissions." WY485953; WY485954 (repeating this statement later in the Record of Decision). The Bureau then echoed this disclaimer in the FONSI. WY485959.

From these statements, it is hard to discern what role the Wyoming Office's analysis of GHG emissions and their corresponding social costs played in its decision to approve the June 2022 lease sale. Perhaps the Bureau was simply suggesting that its GHG analysis did not impact its scoping and selection of individual parcels because the effects of GHG emissions are global and not dependent on the typology or habitat of the tract from which they emanate. But to the extent that the Bureau was disclaiming any reliance on its prior GHG analysis in its decision to select the Modified Proposed Action, that reasoning runs afoul of NEPA's purpose. NEPA "is a procedural statute intended to ensure Federal agencies consider the environmental impacts of their actions in the decision-making process. . . . [Its] purpose is not to generate paperwork or litigation, but to provide for informed decision making and foster excellent action." 40 C.F.R. § 1500.1(a). Any claim that the analysis of GHG emissions was informational only and did not inform BLM's decision-making is hard to square with that purpose. It is equally at odds with the APA. As noted above, a textbook example of arbitrary and capricious action is when an agency "entirely fail[s] to consider an important aspect of the problem." <u>State Farm</u>, 463 U.S. at 43. If, in fact, the Wyoming Office did not consider GHG emissions when rendering its decision on the

challenged lease sale, it would appear to have overlooked what is widely regarded as the most pressing environmental threat facing the world today.

The Bureau pushes back by noting that NEPA does not require agencies to perform a full cost-benefit analysis to evaluate a proposed action. That is doubtless true. The NEPA regulations clearly state that "agencies need not display the weighing of the merits and drawbacks of the various alternatives in a monetary cost-benefit analysis." 40 C.F.R. § 1502.22; see also Minisink Residents for Env't Pres. & Safety v. FERC, 762 F.3d 97, 112 (D.C. Cir. 2014) (holding that NEPA does not require agencies to weigh the "monetary costs and benefits of the respective proposals . . . , particularly where only an environmental assessment, rather than an environment impact statement, is involved"). In fact, the NEPA regulations expressly counsel against such an approach "when there are important qualitative considerations" that cannot be quantified. 40 C.F.R. § 1502.22. Recent guidance from the Council on Environmental Quality ("CEQ"), the agency tasked with implementing NEPA, reinforces the point. While promoting the methodology, the CEQ made clear that "[u]sing the SC-GHG to provide an estimate of the cost to society from GHG emissions . . . does not necessitate conducting a benefit-cost analysis in NEPA documents." 88 Fed. Reg. 1196, 1211 (Jan. 9, 2023).

Here, the Wyoming Office reasonably explained why a full-blown cost-benefit analysis would be equal parts infeasible and inappropriate. Time and again, the Bureau described why it was not possible to monetize the sale's benefits and compare them to the projected social costs of the proposed leases in a reliable manner. <u>See, e.g.</u>, WY481323 ("Estimating the economic benefits (change in social welfare) associated with oil and gas leasing is not feasible, nor is it required for NEPA. The BLM analyzes the impacts associated with the alternatives using the best available information, which is typically not monetized estimates of benefits or costs.");

WY481333 ("To do so is not feasible for lease sales given the data and analytical requirements for monetizing all nonmarket values, many of which are location and project dependent."); WY481337 ("The BLM evaluates the potential impacts of oil and gas leasing in this EA but does not monetize all impacts. Monetizing all benefits and costs is not feasible."). It also explained why measuring the estimated social costs against the monetized benefits would be an apples-tooranges comparison because the SC-GHG tool measures global impacts whereas many of the benefits (as well as other environmental costs) are localized and "dependent on the specifics of the activity." WY481336; <u>see also</u> WY486072. Therefore, "[e]ven if BLM could accurately monetize the costs and benefits of other impacts, those values would reflect effects to a particular area and, thus, could not be directly compared to SC-GHG estimates without manipulating the numbers in [a] manner that renders the 'more speculative' and less useful to the decisionmaker." <u>See BLM Br. at 40</u>.

That all makes sense, and supports the Bureau's decision not to perform a formal costbenefit analysis for the Wyoming sale. But it does not support a decision to overlook GHGs and their corresponding social costs entirely. The Bureau instead should have done exactly what the NEPA regulations counsel in this context: assess the merits and demerits of the proposed action in qualitative terms and provide a reasoned explanation for the basis of its decision.

The Court recognizes that a comparison of the pros and cons of the proposed action is a complicated task in which the Bureau must be afforded an exceedingly high degree of deference. It is no easy feat to decide, say, whether increased domestic oil production—and the job creation and energy security accompanying it—outweigh the marginal contribution to global climate change. These interests are largely incommensurate, so the "task is like being asked to decide whether a particular line is longer than a particular rock is heavy." <u>Nat'l Pork Producers Council</u>

<u>v. Ross</u>, 598 U.S. 356, 381 (2023) (quotation marks omitted). It is also a tall task to figure out how to weigh the emissions from fossil-fuel usage when, despite progress toward harnessing renewable resources, oil and gas continue to power our industry and daily lives. That's all to say that courts generally are not well-positioned to second-guess the Bureau's reasoned justification for how it struck a balance in this vexing area. But the complexity of the task does not give the Bureau a free pass to avoid making these tough decisions by asserting that GHG emissions did not factor into its decision-making. The Court, after all, "cannot defer to a void." <u>Or. Nat.</u> <u>Desert Ass'n v. BLM</u>, 625 F.3d 1092, 1121 (9th Cir. 2010).

The Bureau accordingly must do more to explain how its GHG analysis informed the decision to select the Modified Proposed Action. It may well be that BLM believes the same methodological shortcomings that prevented it from using the SC-GHG tool to determine the "significance" of the resulting emissions also limit the usefulness of the social-cost estimates in qualitatively comparing the alternatives under review and selecting its preferred option. That's a fine conclusion to reach if the Bureau can justify it. But it must show its work and explain its reasoning.

By contrast, the Court is less persuaded by the Conservation Groups' second contention that BLM's authorization of the lease sale was arbitrary and capricious because it failed to square that decision with recent climate policy directives—such as Executive Orders 13990 and 14008 and Secretarial Order 3399. <u>See</u> 86 Fed. Reg. 7,037 (Jan. 25, 2021) (EO 13990); 86 Fed. Reg. 7,619 (Jan. 27, 2021) (EO 14008); Secretary of the Interior Order No. 3399, 2021 WL 1584759 (Apr. 16, 2021). All three directives state they are "not intended to, and do[] not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any

other person." HQ 31, 46, 54. And it is well-established that "executive orders without specific foundation in congressional action are not judicially enforceable in private civil suits." In re Surface Min. Regul. Litig., 627 F.2d 1346, 1357 (D.C. Cir. 1980). Courts also have rejected efforts to enforce such orders indirectly through the APA. In Air Transport Association of America v. FAA, for example, the D.C. Circuit held that while the "petitioner indicated that it [did] not seek to assert rights under the order but [was] merely referencing it to provide evidence of the arbitrary and capricious nature of the FAA's decision, such an argument [was] nothing more than an indirect—and impermissible—attempt to enforce private rights under the order." 169 F.3d 1, 8–9 (D.C. Cir. 1999). Admittedly, there is some fuzziness in how this doctrine applies in the NEPA context, where the D.C. Circuit has held that agencies' voluntary decision to comply with Executive Orders concerning "environmental justice" analysis can open them up to a NEPA challenge on this score. See Cmtys. Against Runway Expansion, Inc. v. FAA, 355 F.3d 678, 689 (D.C. Cir. 2004); Vecinos para el Bienestar de la Comunidad Costera v. FERC, 6 F.4th 1321, 1330 (D.C. Cir. 2021). In this instance, though, the Conservation Groups are not contesting the analysis BLM performed but rather the justification it offered for its decision. That brings this case more in line with California v. EPA, where the D.C. Circuit rejected petitioners' attempt to "bootstrap private enforcement of executive orders into arbitrary and capricious review." 72 F.4th 308, 318 (D.C. Cir. 2023).

In any event, these executive directives to reassess agency policies and practices with an eye toward mitigating climate change mainly paint in broad strokes, primarily instructing federal agencies to adequately consider the climate-related impacts of their actions. <u>See</u> WY480252. Accordingly, to the extent BLM adequately explains its treatment of GHG emissions in a

subsequent remand, the Court has every confidence that it will bring itself into compliance with these nonbinding policy directives.

IV. Conclusion

For these reasons, it is hereby

ORDERED that [Dkt. No. 27] Plaintiffs' Motion for Summary Judgment is GRANTED

in part and DENIED in part; it is further

ORDERED that [Dkt. No. 29] Defendants' Cross-Motion for Summary Judgment is

GRANTED in part and DENIED in part; it is further

ORDERED that [Dkt. No. 31] Wyoming's Cross-Motion for Summary Judgment is

GRANTED in part and DENIED in part; it is further

ORDERED that the parties submit a proposed schedule for remedy briefing within seven days of this Order.

SO ORDERED.

CHRISTOPHER R. COOPER United States District Judge

Date: March 22, 2024