IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

POWDER RIVER BASIN RESOURCE COUNCIL and WESTERN WATERSHEDS PROJECT, Plaintiffs, v. U.S. DEPARTMENT OF THE INTERIOR and U.S. BUREAU OF LAND MANAGEMENT, Defendants, and STATE OF WYOMING, et al., Defendant-Intervenors.	Case No. 1:22-cv-2696-TSC

PLAINTIFFS' COMBINED REPLY IN SUPPORT OF SUMMARY JUDGMENT MOTION AND RESPONSE TO CROSS-MOTIONS FOR SUMMARY JUDGMENT

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LIST OF ACRONYMS

APA	Administrative Procedure Act
APD	Application for Permit to Drill
BLM	Bureau of Land Management
CEQ	Council on Environmental Quality
DNA	Determination of NEPA Adequacy
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FLPMA	Federal Land Policy and Management Act
gpm	gallons per minute
MLA	Mineral Leasing Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
RMP	Resource Management Plan
ROD	Record of Decision

INTRODUCTION

The Converse County Project decisions challenged in this case approve four decades of oil and gas operations across an entire Wyoming county without safeguards that ordinarily protect air, water, wildlife, land, and the public from such operations. Predictably, this led to significant criticism from federal and state agencies about harms BLM could have avoided. The basis for withholding these environmental protections was, in many instances, BLM's erroneous view of the law—that it lacked authority to slow the pace of project development, lacked authority to impose air quality mitigation measures, or lacked any authority to impose any controls on Fee/Fee/Fed wells. All three legal positions are so unreasonable that not even BLM will defend them now. In other instances, BLM simply acted irrationally—such as by failing to consider its basic statutory duty to "prevent unnecessary or undue degradation." 43 U.S.C. § 1732(b). This does not violate a procedural requirement of Plaintiffs' own making, as BLM and Intervenors respond, but rather the basic "arbitrary and capricious" standard of the APA, which requires agencies to provide a record sufficient for a reviewing court to conclude the agency considered all relevant factors and reasonably. *See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42, 52 (1983).

BLM then failed to properly study or disclose the extent of those environmental harms to the public and agency decisionmakers, violating the National Environmental Policy Act (NEPA). BLM and Intervenors do not seriously defend the EIS's groundwater analysis, resorting instead to pleas for deference and post-hoc rationales that cannot excuse the errors in that modeling. *See id.* at 50 ("agency's action must be upheld, if at all, on the basis articulated by the agency"). As for the faulty cumulative effects analysis, BLM and Intervenors misread the EIS in claiming it included greenhouse gas emissions from future projects. It did not. And in attempting to defend

the EIS's elimination of proposed alternatives, BLM again ignores the irrational explanations it actually gave, instead inventing new ones that also fail. For these and other reasons explained below, Plaintiffs respectfully request that the Court grant them summary judgment.

ARGUMENT

I. PLAINTIFFS HAVE STANDING.

This Court properly found that Plaintiffs have Article III standing to pursue their project-level claims. *See* Mem. Opinion of Nov. 6, 2023, at 15–16 (ECF No. 105). As Plaintiffs' prior briefing and declarations establish, their members live within and regularly visit the Project area; their aesthetic and recreational enjoyment in the area would be lessened by the Project; and vacatur of the challenged decisions would redress those injuries. *See* Pls.' Resp. to Def.-Intvs.' Joint Mot. to Dismiss at 17–30 (ECF No. 81); *see also* ECF Nos. 64-3, 64-4, 64-5, 64-6, 64-7 (standing declarations). These injuries are germane to the conservation-oriented purposes of the Plaintiff groups, and participation of individual members is unnecessary to the claims and relief sought in this case. *See Friends of the Earth, Inc. v. Laidlaw Env't Servs., Inc.*, 528 U.S. 167, 181 (2000). Accordingly, Plaintiffs amply satisfy the elements of associational standing.

Although no other party disputes Plaintiffs' standing, Wyoming spends fourteen pages arguing that Plaintiffs lack standing to challenge the EIS's groundwater analysis because they allege no groundwater-based injury. *See* State of Wyo.'s Combined Mem. ISO Cross-Mot. for S.J. and Resp. to Pls.' Mot. for S.J. at 17–31 (ECF No. 120) (hereinafter "Wyo. Br."). That argument is foreclosed by controlling precedent. The D.C. Circuit has made clear that a plaintiff may challenge inadequacies in an EIS that do not concern "the same environmental issue that causes their injury." *WildEarth Guardians v. Jewell*, 738 F.3d 298, 307 (D.C. Cir. 2013); *see*

also Sierra Club v. FERC, 867 F.3d 1357, 1366 (D.C. Cir. 2017) (deficiencies alleged in an EIS "need not be directly tied to the members' specific injuries").

Equally meritless is Wyoming's contention that Plaintiffs lack prudential standing because their grievances do not fall within NEPA's "zone of interests." *See* Wyo. Br. at 29–31. Plaintiffs are nonprofit environmental organizations whose members seek to protect clean air, water, wildlife, outdoor recreation, and scenic beauty. These are precisely the type of environmental interests NEPA is designed to protect. That one declarant also stands to suffer financially from the Project's environmental damage is immaterial. *See City of Fernley v. Conant*, No. 22-15400, 2023 WL 2549792, at *2 (9th Cir. Mar. 17, 2023) ("economic interest cannot bring a plaintiff within NEPA's zone of interests, but an economic interest does not destroy a statutory cause of action that would otherwise exist").

II. BLM AUTHORITY IN MIXED-OWNERSHIP SCENARIOS

Laced throughout the response briefs are repeated references to BLM's lack of authority over non-federal land. *See, e.g.*, Fed. Defs.' Combined Mem. ISO Mot. for S.J. and Resp. to Pls.' Mot. for S.J. at 11, 45, 53, 54 (ECF No. 118) (hereinafter "Fed. Defs.' Br."). These remarks overstate the issue by ignoring the distinction between split estate and Fee/Fee/Fed wells. They further overstate the issue by suggesting this distinguishes the Converse County Project, when a checkerboard pattern of private, state, and federal ownership is routine for Wyoming oil and gas projects. *See, e.g.*, WY_034998; WY_022815; WY_027891; WY_041782 (noting mixed surface and mineral ownership for other projects). This is like the claim that horizontal drilling makes this Project "unique," when the same is true of 90% percent of all U.S. wells.[1] *See* Private Intvs.'

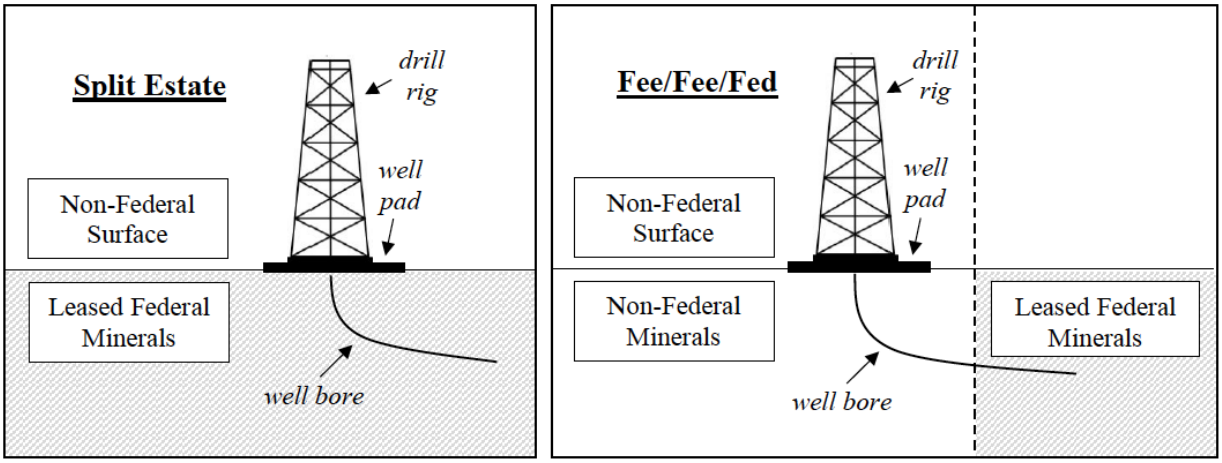
[1] *See* Data on Crude Oil and Natural Gas Exploratory and Development Wells, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/totalenergy/data/browser/index.php?tbl=T05.02.

Combined Mem. ISO Cross-Mot. for S.J. and Resp. to Pls.' Mot. for S.J. at 14 (ECF No. 121) (hereinafter "Private Intvs.' Br."). The legal assertion is also simply wrong. Although it should be irrelevant to Plaintiffs' claims here, BLM injects this scope-of-authority issue as a post-hoc justification for several of its poorly-reasoned decisions to withhold mitigation from this Project. Accordingly, Plaintiffs explain here why it fails as a matter of law.

A. Distinction Between Split-Estate and Fee/Fee/Fed Wells

Federal oil and gas deposits can be developed from private or state lands in either "split estate" or "Fee/Fee/Fed" scenarios as illustrated in Figure 1 below.

Figure 1: Split Estate and Fee/Fee/Fed Development



First is the "split estate" scenario, in which the well pad is located on non-federal surface directly atop the target federal minerals. Second is the "Fee/Fee/Fed" scenario, in which the well pad is located on non-federal surface *not* atop the target federal minerals. The only difference is whether the surface operations directly overlie the mineral lease.

B. BLM Authority Over Split Estate

BLM has long acknowledged that it has essentially the same authority to require mitigation for wells on split-estate as it does for wells on federal surface, and BLM thus regulates them in essentially the same fashion. This position is laid out in the Converse County

EIS itself. WY_012426. It is also clearly stated in BLM rules and guidance. BLM's Onshore Oil and Gas Order 1 states that BLM is required "to regulate exploration, development, and abandonment on Federal leases on split estate lands in essentially the same manner as a lease overlain by Federal surface." 72 Fed. Reg. 10,308 (Mar. 7, 2007). BLM's Oil and Gas Goldbook explains that BLM may apply the "same level of surface protection [to split estate] that the BLM provides on Federal surface." WY_021169. The Casper RMP states the same. *See* WY_021254 ("[I]t is necessary to apply the same standards for environmental protection of split-estate lands as applied to the federal surface").

The basis for BLM's position is that its statutory authority under 30 U.S.C. § 226(g) to "regulate all surface-disturbing activities conducted pursuant to any lease issued under this chapter" does not distinguish between federal and non-federal surface. WY_021254. Similarly, it acknowledges that its FLPMA authority over mineral development does not depend on BLM's ownership of the surface. FLPMA defines "public lands" to include mineral estate, 43 U.S.C. § 1702(e), and requires BLM "to declare how the federal mineral estate will be managed" including to apply "standards for environmental protection." WY_021254.

Accordingly, there should be no dispute that BLM's authority was not limited as to split estate wells even though they are located on non-federal surface.

C. BLM Authority Over Fee/Fee/Fed Wells

Although BLM regulates split-estate wells in essentially the same fashion as wells on federal surface, BLM Permanent Instruction Memorandum ("PIM") 2018-014 claims the agency lacks authority to do the same for Fee/Fee/Fed wells. *See* WY_011709–25. BLM has never publicly articulated any legal basis for that view, in PIM 2018-014 or otherwise. In fact, BLM's prior briefs in this case *abandoned* it, opposing Intervenors' assertion that "BLM is prohibited

from regulating" the surface operations for Fee/Fee/Fed wells. *See* Fed. Defs.' Resp. to Devon/Cont'l Mot. for J. Pleadings at 1–3 (ECF No. 87); Fed. Defs.' Resp. to Pls.' Mot. for Prelim. Inj. at 27–30 (ECF No. 83).

The assertion that BLM cannot attach mitigation requirements to Fee/Fee/Fed well surface operations fails as a matter of statutory construction, for reasons Plaintiffs have explained in detail. *See* Pls.' Mem. ISO Mot. for Prelim. Inj. at 29–37 (ECF No. 64-1); Pls.' Reply ISO Mot. for Prelim. Inj. at 13–20 (ECF No. 91); Pls.' Resp. to Devon/Cont'l Mot. for J. Pleadings at 11–20 (ECF No. 84). To summarize, the MLA provides that the "Secretary of the Interior . . . *shall regulate all surface-disturbing activities conducted pursuant to any lease* issued under this chapter, and *shall determine reclamation and other actions* as *required in the interest of conservation of surface resources*." 30 U.S.C. § 226(g) (emphasis added). Unlike other provisions in this same section, these grants of authority are not limited to the "lease area" or operations "on the lease." *Id.* Intervenors have nonetheless repeatedly argued that such a limitation should be implied, but that would violate both the "meaningful-variation" and "absent-provision" canons of statutory construction. *See Allina Health Servs. v. Price*, 863 F.3d 937, 944 (D.C. Cir. 2017) ("[A] material variation in terms suggests a variation in meaning."); *Rotkiske v. Klemm*, 589 U.S. 8, 14 (2019) (absent provisions should not be inferred, especially where "Congress has shown that it knows how to adopt the omitted language").[2]

The plain text of both clauses of 30 U.S.C. § 226(g) extends to Fee/Fee/Fed wells. The "regulate all surface-disturbing activities conducted pursuant to the lease" clause applies because

[2] Nothing in 30 U.S.C. § 181 constrains BLM's authority on non-federal surface. *See* Wyo. Br. at 39. That provision merely explains which lands are subject to mineral leasing pursuant to the Act and does not purport to define BLM's scope of authority to regulate development of those leased minerals. *See also* Pls.' Resp. to Intvs.' Mot. J. Pleadings at 18 (ECF No. 84).

surface operations on Fee/Fee/Fed wells are conducted "pursuant to" the federal lease. *See Pursuant To, Black's Law Dictionary* (11th ed. 2019) (defining "pursuant to" as, *inter alia*, "[as] authorized by" or "[i]n carrying out"). The surface operations for Fee/Fee/Fed wells are "authorized by" the lease because an operator cannot develop federal minerals, even from private or state lands, absent the lease. Although a surface use agreement is also required, the lease is still an indispensable authorization for those Fee/Fee/Fed facilities to drill for, extract, store, handle, or dispose of federal minerals. The surface operations for Fee/Fee/Fed wells are also conducted in "carrying out" the lease, as they discharge any contractual obligation the leaseholder may have to develop the leased minerals. *See* U.S. Dep't of Interior, Form 3100-11 § 4 (requiring lessee to "exercise reasonable diligence in developing . . . leased resources").[3]

The only argument BLM has ever given for distinguishing the split estate and Fee/Fee/Fed contexts turns on the phrase "pursuant to" in 30 U.S.C. § 226(g). *See* Fed. Defs.' Br. at 51. BLM claims that surface operations for Fee/Fee/Fed wells are not conducted "pursuant to" the lease because the lease does not authorize use of surface lands beyond the lease boundaries. *See id.*[4] The obvious problem with this argument is that the federal lease is still what authorizes the extraction of federal minerals from those surface facilities. Although a surface use agreement is also required in the case of a Fee/Fee/Fed well, the federal lease is still a necessary authorization. BLM also observes that 30 U.S.C. § 226(g) only requires a Surface Use Plan of Operations for work "within the lease area," Fed. Defs.' Br. at 52, but again the omission of this

[3] https://www.blm.gov/sites/blm.gov/files/uploads/Services_National-Operations-Center_Eforms_Fluid-and-Solid-Minerals_3100-011.pdf.

[4] In a split estate scenario, the mineral estate owner has a common law right to use the surface estate to develop the underlying minerals. *See generally* Keith G. Bauerle, *Reaping the Whirlwind: Federal Oil and Gas Development on Private Lands in the Rocky Mountain West*, 83 DENV. U. L. REV. 1083, 1084 (2006). In contrast, because a Fee/Fee/Fed well does not develop minerals directly underlying the surface, a surface use agreement is required.

same clause in the grant of authority over "all surface-disturbing activities" is strong evidence that Congress did *not* intend to restrict that provision to the lease area. *See supra* p. 6.

BLM's argument also entirely ignores the "reclamation and other actions" clause of 30 U.S.C. § 226(g), which applies even if the "surface-disturbing activities" clause does not. This provision authorizes BLM to impose "reclamation" and other environmental mitigation measures "in the interest of conservation of surface resources," without regard for where the operations or surface resources are located. *See Hoyl v. Babbitt*, 129 F.3d 1377, 1380 (10th Cir. 1997); *Copper Valley Mach. Works, Inc. v. Andrus*, 653 F.2d 595, 601 & n.7 (D.C. Cir. 1981) (term "conservation" under the MLA encompasses environmental protection). There is no textual basis for limiting this clause to surface resources on federal land or the lease surface, and BLM has never explained why this clause does not apply to Fee/Fee/Fed surface operations.

BLM also ignores its FLPMA authority to regulate the development of federal minerals. FLPMA directs BLM, through the Secretary of Interior, to "regulate . . . the use, occupancy and development of the public lands." 43 U.S.C. § 1732(b). The term "public lands" includes any interest in land, which includes federal mineral estate. *Id.* § 1702(e). By its plain terms, this provision authorizes BLM to regulate surface operations for Fee/Fee/Fed wells because they "develop[]" federal minerals. *Id.* § 1732(b). BLM's power in both the split-estate and Fee/Fee/Fed contexts flows not from its ownership of the surface lands, but rather its ownership of the minerals. FLPMA further directs that federal minerals be managed for "multiple use and sustained yield," *id.* § 1732(a), which includes environmental conservation, *id.* § 1702(c). Thus, FLPMA further demonstrates that Congress intended for BLM to regulate federal mineral development activities regardless of where they occur, including for environmental protection.

To the extent it was a basis for its decisionmaking, BLM's erroneous view of its authority over Fee/Fee/Fed wells undermines the Project EIS and ROD, requiring reversal.

III. BLM VIOLATED NEPA BY FAILING TO TAKE A HARD LOOK AT GROUNDWATER DRAWDOWNS.

BLM's response brief makes little attempt to defend the accuracy of the EIS's analysis of groundwater drawdowns. The record shows it underestimated drawdowns in no fewer than four ways: by overstating the specific storage values from its own source by a *factor of 10,000*; by accounting for only *half* of Project water use; by assuming well pumping rates *50 percent* lower than average; and by ignoring a *third* of all existing wells already draining these same aquifers. Each error compounded the next, resulting in a gross underestimation of groundwater impacts.

BLM largely concedes these shortcomings but claims they show no violation of NEPA. The truth is that the groundwater model was fundamentally compromised—in ways BLM did not fully apprehend or disclose. Federal and state experts concluded as much and never deviated from that opinion, as BLM insinuates. Those flawed results were incorporated into the EIS and used to claim that the Project will have "negligible" effects to dwindling aquifers, WY_013157, violating NEPA. *See Eagle County v. Surface Transp. Bd.*, 82 F.4th 1152, 1182–84 (D.C. Cir. 2023) (finding EIS inadequate where it underestimated wildfire risks posed by railway); *Env't Def. v. U.S. Army Corps of Eng'rs*, 515 F. Supp. 2d 69, 78–85, 88 (D.D.C. 2007) (finding EIS inadequate due to modeling errors that distorted fish impacts).

A. Unexplained or Unreasonable Model Assumptions Violate the APA.

Intervenors and Defendants both distort the relevant legal standard in their response briefs. Although courts are deferential to agency modeling decisions, the APA's arbitrary and capricious standard still requires an agency to reasonably explain both its choice of model and the inputs and assumptions fed into that model. Courts must reverse if the chosen model "bears

no rational relationship to the reality it purports to represent," or if the agency fails to "provide a full analytical defense" of its methodology when challenged. *See Columbia Falls Aluminum Co. v. EPA*, 139 F.3d 914, 923 (D.C. Cir. 1998) (citation omitted).

"The principal question . . . is whether the agencies' explanation of the model's assumptions and methodology is reasonable." *U.S. Air Tour Ass'n v. FAA*, 298 F.3d 997, 1008 (D.C. Cir. 2002). The absence of a reasoned explanation for a model input renders a decision arbitrary and capricious. *See, e.g., Owner-Operator Indep. Drivers Ass'n v. Fed. Motor Carrier Safety Admin.*, 494 F.3d 188, 205 (D.C. Cir. 2007) ("we cannot uphold a rule based on such a model when an important aspect of its methodology was wholly unexplained"); *Sierra Club v. U.S. EPA*, 167 F.3d 658, 663–64 (D.C. Cir. 1999) (remanding due to inadequate explanation of model assumption about emissions levels of existing waste incinerators); *Gas Appliance Mfrs. Ass'n v. Dep't of Energy*, 998 F.2d 1041, 1046–48 (D.C. Cir. 1993) (explaining that deference "does not authorize us to gloss over the critical steps of DOE's reasoning process" and "failure to answer" critiques of cost assumption rendered decision arbitrary and capricious).

B. BLM Failed to Reasonably Explain Its Specific Storage Value.

BLM now concedes that its specific storage value of .001 "did not match" the specific storage values in the ESI 2014 report from which BLM claimed to derive its figure.[5] Fed. Defs.' Br. at 23. Table 2-2 in ESI 2014 lists specific storage values ranging from .000000078 to .00000012, WY_045334, which confirm BLM was off by a factor of *10,000*.

[5] BLM produced a full copy of ESI 2014 with the supporting tables after Plaintiffs moved for summary judgment. *Compare* WY_029768 *with* WY_045268.

Table 2-2. Values of Specific Storage and Specific Yield in the Model.

Layer	Zone	Sy	Ss
1	1	0.15	9.60E-08
2	2	0.15	1.20E-07
3	3	0.15	7.90E-08
4	4	0.15	7.80E-08
5	5	0.15	9.20E-08

Id. This significant unexplained discrepancy between BLM's specific storage value of .001 and the report from which BLM claimed to pull that value violated its obligation to "provide a full analytical defense" of this key model input. *Columbia Falls Aluminum Co.*, 139 F.3d at 923 (citation omitted).

Private Intervenors claim BLM's irrational explanation for its specific storage value does not matter because it still "bears a rational relationship to the actual data," claiming this is "all that is required." Private Intvs.' Br. at 9. Private Intervenors misstate the standard. The question before the Court is "whether [BLM's] explanation of the model's assumptions and methodology is reasonable." *U.S. Air Tour Ass'n*, 298 F.3d at 1008. The "unless . . . the resulting findings 'bore no rational relationship'" standard of *Alabama v. U.S. Army Corps of Engineers*, No. 15-cv-699 (EGS), 2023 WL 7410054 (D.D.C. Nov. 9, 2023) applies to disputes over the agency's choice of modeling tool. *Id.* at *48 (cleaned up); *see also, e.g.*, *Nat'l Wildlife Fed'n v. EPA*, 286 F.3d 554, 565 (D.C. Cir. 2002) ("We may reject an agency's choice of a scientific model only when the model bears no rational relationship to the characteristics of the data to which it is applied.") (cleaned up). Plaintiffs here do not take issue with BLM's choice to use the MODFLOW itself, and that standard does not supplant the requirement that agencies reasonably explain the inputs and assumptions they feed into a model. *See U.S. Air Tour Ass'n*, 298 F.3d at 1008 (distinguishing between a "challenge [to] the use of the model itself" and a challenge to the

"way in which it was applied" and ensuring agency offered "reasonable explanation" for assumptions); *Owner-Operator Indep. Drivers*, 494 F.3d at 205 ("we cannot uphold a rule based on such a model when an important aspect of its methodology was wholly unexplained").

Private Intervenors' position is also contrary to basic administrative law principles. "It is well established that an agency's action must be upheld, if at all, on the basis articulated by the agency itself." *State Farm*, 463 U.S. at 50. Thus, "in administrative law, we do not sustain a 'right-result, wrong-reason' decision of an agency." *Sprint Nextel Corp. v. FCC*, 508 F.3d 1129, 1132–33 (D.C. Cir. 2007) (citation omitted). It is not the Court's role to parse the data to discern whether BLM could have justified its specific storage value on a different ground, as this would "intrude upon the domain which Congress has exclusively entrusted to an administrative agency." *SEC v. Chenery Corp.* ("*Chenery I*"), 318 U.S. 80, 88 (1943); *see also Env't Def. Fund v. FERC*, 2 F.4th 953, 975 (D.C. Cir. 2021) ("it is not enough that such evidence [to support the agency] may exist within the record; the question is whether the . . . [agency] has sufficiently evaluated that evidence in reaching a reasoned and principled decision") (citing *Chenery I*, 318 U.S. at 87–88, 93–95).

With this standard in mind, the Court must reject Defendants' and Private Intervenors' improper post-hoc rationalizations that other scientific literature supports a value of .001, even if ESI 2014 does not. *See* Fed. Defs.' Br. at 23; Private Intvs.' Br. at 18. BLM never pointed to these studies in explaining its specific storage value, but instead said only that its specific storage value came from ESI 2014. *See* WY_012023; WY_012179.

Even if the court could consider them, these post-hoc studies just confirm BLM was out of the ballpark. BLM cites the 1979 book "Groundwater," by Freeze & Cherry, claiming it reports a specific storage range of .005 to .00005. As an initial matter, that book is extra-record

evidence that cannot properly be considered.[6] However, Plaintiffs located a copy of this book, which reveals that .005 to .00005 is the listed range for *storativity*—an entirely different parameter than *specific storage*. *See* R. Allen Freeze and John A. Cherry, Groundwater 58–60 (1979). Specific storage (Ss) is equivalent to storativity (S) divided by aquifer thickness (b). Dividing Freeze & Cherry's range of storativity values (.005 to .00005) by the aquifer thickness here ("more than 3,900 feet," WY_011997), translates to a specific storage range of .0000013 to .000000013—orders of magnitude lower than BLM's input.

The 2006 Powder River Basin Coal Review Groundwater Model does not support BLM either. Intervenors place great weight on the fact that .001 is within the wide range of "Reported" values for the relevant Wasatch and Fort Union aquifers. Private Intvs.' Br. at 18–19. BLM never said it derived its number from that report, making this an improper post-hoc rationalization. Moreover, given the variability of natural conditions, it makes no sense to use a uniform value at the extreme high end of the reported values, two orders of magnitude above the mean value of 0.000043, particularly where the 2006 model itself assigned values between .0000049 and .00001 to the relevant Wasatch and Fort Union aquifers. WY_018363. The 2006 Report also explains that initial estimates of aquifer properties must be "adjusted" through model calibration "so that the model computes more realistic water level elevations," WY_018355, meaning it

[6] BLM's reliance on this extra-record book is particularly improper given that BLM refused Plaintiffs' request to include it and other references in the record, asserting that "mere mention of a document in an EIS . . . does not demonstrate that the document was considered by the agency." Email from M. Robertson to S. Stellberg et al., July 11, 2023. BLM should be estopped from taking the opposite position now. Moreover, the groundwater report only cites Freeze & Cherry for an unrelated topic, WY_012014, not as a source for its specific storage value, WY_012023. A copy of Freeze & Cherry is available here: https://www.un-igrac.org/sites/default/files/ resources/files/Groundwater book - English.pdf.

would have been inappropriate for BLM to simply plug an uncalibrated figured from the "Reported" column into the model.

BLM next suggests any error in the specific storage value was immaterial because this was "just one of several" model inputs. That ignores the degree of BLM's error and importance of this parameter to groundwater modeling. "Specific storage (Ss) has considerable predictive importance in the modelling of groundwater systems" and a value "representative of the actual sub-surface condition is necessary to obtain a reliable modeling result." Chowdhury et al., *Multifactor analysis of specific storage estimates and implications for transient groundwater modelling*, 30 HYDROGEOL. J. 2183, 2183–85 (2022) (attached hereto as Exhibit 1).[7] As EPA explained, overstating a specific storage value by an order of magnitude (degree of 10) "may result in a substantial underestimation" of drawdowns. WY_004651. BLM was off by *four* orders of magnitude (degree of 10,000). BLM does not dispute EPA's comment.

The Court should also reject BLM's argument that conservative inputs "counterbalance" that error. Fed. Defs.' Br. at 23. BLM itself did not reach this conclusion, as it appeared to be unaware of the error, making this an improper post-hoc rationalization. It is also implausible that the model was so conservative as to outstrip a 10,000-fold error in an input with "considerable predictive importance." *See* Chowdhury et al., *supra* at 2183. The record also refutes BLM's assertion that agency decisionmakers and the public were "well aware" the model might underestimate drawdowns. The EIS described its drawdown model as a "conservative analysis" and "sufficiently rigorous to provide a valid analysis to quantify a range of potential future

[7] This extra-record document is properly admitted to aid the Court in understanding complex scientific issues, specifically the significance of this parameter to groundwater modeling. *See Esch v. Yeutter*, 876 F.2d 976, 991 (D.C. Cir. 1989) (extra-record evidence proper "when a case is so complex that a court needs more evidence to enable it to understand the issues clearly").

groundwater scenarios." *See* WY_013144; WY_013153. The Groundwater Model Report also claimed to provide a "reliable representation of the relative magnitude of effects . . . on the groundwater levels." WY_012069; WY_011993 (again claiming analysis was "conservative"). A decisionmaker or member of the public reading these statements would have no idea that impacts might substantially exceed those reported in the EIS.

BLM briefly raises other arguments about expert agency criticism of its model. First, BLM claims that it "adequately responded to relevant input from EPA—which took no issue with BLM's groundwater analysis and explanations in its comments on the FEIS." Fed. Defs.' Br. at 26. That is wrong on both counts. BLM's response to EPA about the source of its specific storage value was *false*, and thus hardly adequate, and EPA submitted a further letter confirming that "the concerns identified in our March 12, 2018, Draft EIS letter remain." WY_008656. Second, BLM claims a letter from the Wyoming Department of Environmental Quality supports its analysis, Fed. Defs.' Br. at 24, but it concerned groundwater *quality*, not *quantity*. *See* WY_004320 (listing all comments under heading "Water Quality"); Manley Decl. ¶ 8 (ECF No. 120-1) ("Wyoming Department of Environmental Quality regulates water quality"). The Wyoming State Engineer's Office, the state agency with expertise and jurisdiction on this issue, was steadfastly critical of BLM's groundwater model. WY_007490–92; WY_008249.

C. BLM Failed to Even Respond to the Wyoming State Engineer's Office Critique of its Pumping Rate Assumption.

The second error was the groundwater model's pumping rate assumption. The dispersed well scenario—which is all the EIS presented, WY_013153—assumed that Project water supply wells would pump at a rate of 81 to 87 gallons per minute (gpm), WY_012062–63, whereas the more conservative concentrated pumping scenario assumed a pumping rate of 100 gpm,

WY_012047–48. The Wyoming State Engineer's Office noted that today's average is 180 gpm. WY_008249. Higher pumping rates intensify drawdowns. *See id.*; WY_007490–91.

Contrary to Defendants' and Intervenors' suggestion, BLM did not actually respond to this critique in the record, again violating its duty to "provide a full analytical defense" of this assumption. *See Columbia Falls Aluminum Co.*, 139 F.3d at 923 (citation omitted). The EIS merely acknowledged the discrepancy and said it "raise[d] questions," without defending the number. WY_013154. BLM claims there was a proper response in an appendix, where BLM said that the "dispersed well scenario of the model is a reasonable representation of expected conditions whereby water sources would be distributed for maximum efficiency and lowest transportation costs." WY_012307. This is about the spatial distribution of water wells, not their pumping rate, and was only a response to the State Engineer Office's separate concern that multiple wells may be needed at the same drilling site. *Id.*

BLM and Intervenors also incorrectly claim that BLM responded to the pumping rate concern when it commented about drawdowns not being "excessive" even if project consumption were "50 to 100 percent greater than initially proposed." WY_012307. That was a response to the separate problem that Project water demand had *doubled* since the draft EIS. *Id.*; *see also infra* § III.D. It did not address the fact that pumping rates at any given well would also likely be double BLM's estimate. Intervenors further claim this comment means "that [BLM's] model accounted for groundwater consumption up to 100 percent greater than what was initially proposed." Private Intvs.' Br. at 19. That is false. The model assumed the Project would consume 7,000 acre-feet annually, WY_011993, and was not rerun when that figure increased to 14,000 acre-feet. *Compare* WY_003143–234 (version accompanying draft EIS) *with* WY_011983–2074 (identical version accompanying final EIS).

BLM also suggests it was not required to update its model every time new information came to light. That does not excuse its failure to even *respond* to the Wyoming State Engineer's Office. *See Columbia Falls Aluminum Co.*, 139 F.3d at 923 (requiring "full analytical defense" when model is challenged) (citation omitted); *BNSF Ry. Co. v. Surface Transp. Bd.*, 741 F.3d 163, 168 (D.C. Cir. 2014) ("[A]n agency's failure to respond meaningfully to objections raised by a party renders its decision arbitrary and capricious.'") (cleaned up). Moreover, all parties agree that at a minimum, a "substantial change[]" in the project or "significant new information" bearing impacts required reexamination. *See* 40 C.F.R. § 1502.9(c)(1).[8] The combined effect of a doubling of expected pumping rates, doubling of Project water use, and spike in existing groundwater demand would certainly qualify. Although courts defer to agency determinations that new information does not rise to the level of "substantial" or "significant," they nonetheless demand a reasonable explanation from the agency. *See, e.g.*, *Colorado Env't Coal. v. Dombeck*, 185 F.3d 1162, 1178 (10th Cir. 1999) (agency must have "reviewed the proffered supplemental information, evaluated the significance [of it] . . . , and provided an explanation for its decision not to supplement the existing analysis"); *Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 378–85 (1989) (finding burden met when agency consulted experts about new information, gave careful scientific scrutiny to the new information, and explained why the new information did not require further analysis). BLM provided no such explanation here, which dooms this argument.

D. BLM Failed to Reasonably Explain Why Its Groundwater Model Accounted for Only Half of Project Water Consumption.

Plaintiffs do not "attack a straw man" by arguing that BLM assumed the doubling of project water consumption from 7,000 acre-feet to 14,000 acre-feet would not increase

[8] Plaintiffs cite to the 1978 version of the Council on Environmental Quality (CEQ) NEPA regulations, pursuant to which the challenged actions were issued, WY_016736

groundwater demand. That is exactly what BLM said. WY_012179 ("[S]ince the Draft EIS was issued the Operator Group has confirmed an approximate doubling of water use but that this would not increase the use of groundwater as the additional water would be expected to come from water recycling and leasing of existing surface water uses."). BLM offered no rational basis for that significant assumption, again violating its duty to "provide a full analytical defense" of its modeling, *Columbia Falls Aluminum Co.*, 139 F.3d at 923 (citation omitted), and its NEPA duty to justify assumptions about project mitigation, *see Am. Rivers v. FERC*, 895 F.3d 32, 53–54 (D.C. Cir. 2018) (finding NEPA violation where agency "blithely assumed" mitigation would reduce impacts).

BLM suggests the assumption was appropriate because it did not assume "any particular level of recycling," but it *did* assume precisely 7,000 acre-feet of groundwater would be supplied by recycling and surface water combined. WY_012179. Surface water is used on a very "limited" basis for oil and gas activities in the project area, WY_001064, since "it is not economically feasible to truck water over long distances," WY_001073. The Operator Group itself anticipated it would supply just 700 acre-feet from surface sources. *Id.* BLM did not offer any reasoned basis to increase that estimate, much less by any substantial degree. Accordingly, water reuse was necessarily carrying most of the weight in BLM's assumption.

In its response brief, BLM never explains why it was reasonable for BLM to assume that some significant portion of the 7,000 acre-feet would come from recycled water. BLM says it appropriately acknowledged recycling "was constrained by economic considerations," but this proves Plaintiffs' point that it was unreasonable to assume the Operator Group would immediately use substantial recycled water.

Private Intervenors distort the record in claiming that their comments justified this recycling assumption. Private Intvs.' Br. at 21–22. To begin, the Operator Group clearly stated that it would not commit to any "amount or percentage of recycled water." WY_011453. They suggest the example of one operator's "anticipated" use of recycled water for a different field was persuasive because this Project had not started yet, but these same companies have longstanding oil and gas operations in the Project area. WY_000010. Their inability to provide evidence of recycled water use in the Project area was thus telling. Private Intervenors further suggest that Plaintiffs "ignore" a passage about hypothetical recycling use if a pad is served by a permanent water pipeline (20,000 to 30,000 bbls) as compared to water trucks (5,000 bbls and 8,000 bbls). WY_011453. There is no evidence that permanent water pipelines will be prevalent, and even that hypothetical best-case scenario would allow recycled water to supply just 15% of the 203,000 bbls of water needed per well. *See* WY_012451. Private Intervenors also claim BLM performed a secret analysis of APDs in the Project area to justify its recycling assumption. Private Intvs.' Br. at 22. There is no record evidence of this, and the EIS's vague reference to "BLM's recent experience" comes in a discussion about waste water *disposal*, WY_012453, not *use* of recycled water. They are also wrong that the assumption has proven "true." Quite the contrary: of the over 400 APDs challenged in this case, just one lists recycled water as a water source; only three commit to any water reuse; and sixteen state that the operator "may recycle a portion of production water." *See* Stellberg Decl. ¶¶ 8–11 (attached hereto as Exhibit 2). This proves how little recycled water is used.

Finally, BLM points to its explanation that "[e]ven if water consumption for the project may be 50 to 100 percent greater than initially proposed, the model indicates that drawdown would not be excessive." WY_012307. However, BLM had no reasoned basis to dismiss those

drawdowns as "not excessive" because it never re-ran the groundwater model using the higher demand projections. Even if it had, the subjective term "not excessive" does not describe actual effects and is the type of conclusory label that violates NEPA's "hard look" standard. *See Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014) (conclusion that project would not "significantly contribute to" effects was not a hard look because "conclusory statements . . . are not enough to fulfill an agency's duty under NEPA.") (cleaned up); *Or. Nat. Desert Ass'n v. Rose*, 921 F.3d 1185, 1191 (9th Cir. 2019) ("general statements" do not satisfy NEPA's hard look duty); *N.C. Wildlife Fed'n v. N.C. Dep't of Transp.*, 677 F.3d 596, 602 (4th Cir. 2012) ("Conclusory statements" of "minimal" impacts "are insufficient under NEPA").

E. BLM Failed to Reasonably Explain Its Assumptions About Existing Groundwater Withdrawals.

A further flaw was BLM's failure to account for the demand from existing groundwater extraction. BLM's model ignored one third of all existing water wells (249 of 715), *see* Pls.' Op. Br. at 34–35, and for those it considered, assigned an unrealistic pumping rate of 12.6 gpm for existing oil and gas water supply wells, WY_012040–42—far below the average of 180 gpm for recent approvals. WY_008249. The State Engineer's Office thus warned that "the groundwater modeling may have underestimated existing ground water withdrawals." WY_007491.

BLM again claims that it "reasonably determined" that these factors did not warrant any change in its drawdown analysis. Fed. Defs.' Br. at 33. However, it does not identify where in the record that determination supposedly occurred. The fact that BLM performed a "detailed search" of well in 2014, *id.* at 34, is not evidence that it considered the measurable increase after that date. Neither did the inclusion of domestic or stock wells that produce small quantities somehow make the model conservative, when it assigned them only a miniscule pumping rate of 5 gpm. WY_012028. And again, these are post-hoc explanations that BLM did not give.

BLM's *actual* response was to simply acknowledge the discrepancy and explain that this "measurable increase" in other water uses, along with a larger estimate of Project water consumption, "raise questions about water use and availability." WY_013154. BLM's failure to answer those questions violated its obligation to "provide a full analytical defense" of these model inputs, *Columbia Falls Aluminum Co.*, 139 F.3d at 923 (citation omitted), and "deal with [this] newly acquired evidence in some reasonable fashion," *Portland Cement Ass'n v. EPA*, 665 F.3d 177, 187 (D.C. Cir. 2011) (cleaned up).

F. Wyoming State Engineer Office's Discretionary Authority to Intervene Later Does Not Substitute for Proper NEPA Analysis.

At multiple points in its response brief, BLM also claims that the flaws in its groundwater analysis were immaterial because the Wyoming State Engineer's Office has authority to take action if existing water users are affected. *See* Fed. Defs.' Br. at 31–32; *see also* Wyo. Br. at 20.

This argument fails because "the existence of permit requirements overseen by another federal agency or state permitting authority cannot substitute for a proper NEPA analysis." *Sierra Club v. FERC*, 867 F.3d at 1375; *see also Great Basin Res. Watch v. BLM*, 844 F.3d 1095, 1104 (9th Cir. 2016) (flaw in air quality analysis not excused by agency's reference to state permit required later). This is because NEPA's dual purpose is to ensure that federal agencies take a "hard look" at the impacts of their actions and disclose those impacts to the public *before* taking action. *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). Moreover, "[p]iecemeal" analysis of individual water wells later is "no substitute for an overarching examination" of the Project's impacts on regional groundwater supplies. *See State of Idaho By & Through Idaho Pub. Utilities Comm'n v. ICC,* 35 F.3d 585, 596 (D.C. Cir. 1994) (rejecting idea that later scrutiny by other agencies obviated the need for an "overarching examination" of impacts before approval). This is particularly true where that overarching

evaluation might have led BLM to impose measures such as water recycling or groundwater monitoring that are beyond the State Engineer Office's authority.

Even if NEPA allowed agencies to rely on potential future action by a state agency, the argument ignores that the Wyoming State Engineer's Office responds to interference concerns reactively, through its discretion to "order the interfering appropriator to cease or reduce withdrawals of underground water." Wyo. Stat. § 41-3-911(a). Cessation of withdrawals are insufficient to mitigate impacts that have already occurred because recharge after pumping takes decades. *See* WY_012051; WY_013154.

Moreover, this argument addresses just one impact of groundwater drawdowns: interference with other water wells. It is no response to the environmental effects, such as the drying up of groundwater-dependent seeps, springs, and wetlands which are important habitats for fish and wildlife species. *See* WY_004651; WY_012847; WY_012868. The U.S. Fish and Wildlife Service critiqued BLM's assumption that seeps and springs would not be affected. WY_011145. BLM's response was to add a requirement that new water supply wells be located 2,000 feet from existing springs, wetlands, and riparian areas, *id.*, but it later *deleted* that requirement, WY_012135.

G. Inapt Comparisons to Total Groundwater Supplies or Appropriations Do Not Alleviate the Significance of These Drawdown Concerns.

BLM also attempts to downplay this Project's impacts on groundwater with statistics that have no bearing on drawdowns. First, it references the fact that Project water use represents "less than 1%" of the total groundwater in the basin. *See* Fed. Defs.' Br. at 26, 30. Most of that groundwater is too deep to be accessed, however, which is why feet of water table drawdown, not just percent depletion, was the focal point here. *Cf.* WY_013326 (distinguishing between "drawdown" and "depletion"). Second, BLM tells the Court that Project water use is just 5% of

existing "appropriated" uses in the county. Fed. Defs.' Br. at 30. This is immediately after conceding that appropriations "overestimate" actual use. Far more relevant is the comparison to actual use—particularly as it has already caused wells to run dry. *See* WY_004268. That comparison is telling: the Converse County Project alone will use more water each year (14,000 acre-feet) than all existing county users combined (12,900 acre-feet). WY_013327. Accordingly, the Court should let neither figure detract from the significance of BLM's NEPA errors here.

IV. BLM CANNOT EXPLAIN ITS FAILURE TO CONSIDER THE CUMULATIVE GREENHOUSE GAS EMISSIONS FROM FUTURE PROJECTS.

A. BLM Must Include the Cumulative Emissions of Future Projects.

Although BLM appears confused about what is required for a cumulative climate change analysis, Fed. Defs.' Br. at 37–39, governing NEPA regulations and case law in this circuit are clear. A cumulative effects analysis for climate change must account for the emissions from reasonably foreseeable future projects. *See* 40 C.F.R. §§ 1508.7, 1508.8; *WildEarth Guardians v. Bernhardt* ("*WildEarth Guardians II*"), 502 F. Supp. 3d 237, 247 (D.D.C. 2020); *WildEarth Guardians v. Zinke* ("*WildEarth Guardians I*"), 368 F. Supp. 3d 41, 77 (D.D.C. 2019).

CEQ Guidance is not in conflict with these principles. The 2016 Guidance was not in effect when this EIS issued and is not in effect now. *See* 82 Fed. Reg. 16,576 (Apr. 5, 2017). It nonetheless confirms that an EIS must discuss the cumulative effects of "reasonably foreseeable future actions." WY_036450. Its suggestion that BLM can "subsume" that analysis "within the general analysis and discussion of climate change impacts," *id.*, is not an invitation to ignore future projects. To the contrary, the 2016 Guidance explains that agencies should analyze the reasonably foreseeable affected environment, which includes "future scenarios" and "the state of the environment" for the "expected life of the proposed action." WY_036453–54. The 2023 Guidance is also clear: "an agency should consider the proposed action in the context of the

emissions from past, present, *and reasonably foreseeable actions*." 88 Fed. Reg. 1196, 1205–06 (Jan. 9, 2023) (emphasis added).

Case law from this circuit, including *WildEarth Guardians v. Jewell*, 738 F.3d 298 (D.C. Cir. 2013), is also in line with these principles. *Jewell* upheld an EIS for a coal lease, despite BLM's omission of eleven pending lease applications from its climate change analysis, because they were not "reasonably foreseeable" due to their "uncertain futures," where several had not even passed the scoping stage. *Id.* at 310. But *Jewell* did not say that BLM need not analyze foreseeable future actions at all. *See id.*; *but see* Fed. Defs.' Br. at 37; Private Intvs.' Br. at 25. Cases following *Jewell* have confirmed that where future actions are reasonably foreseeable, they must be considered in the climate change analysis. *See, e.g.*, *WildEarth Guardians I*, 368 F. Supp. 3d at 77 (finding BLM must quantify cumulative emissions from other past, present, or reasonably foreseeable lease sales in the "region and nation"); *WildEarth Guardians II* 502 F. Supp. 3d at 250–51 (confirming BLM's obligation to analyze emissions from new drilling in the region, which is unlike the uncertain lease sales in *Jewell*). These standards were applied again this year in *Dakota Resource Council v. U.S. Dep't of Interior*, No. 22-cv-1853, 2024 WL 1239698 (D.D.C. Mar. 22, 2024), which upheld a cumulative climate change analyses because the agency relied on a specialist report, created to address the deficiencies from *WildEarth Guardians I* and *II*, with estimated emissions "from reasonably foreseeable federal fossil fuel development and production," among other detailed analysis. *Id.* at *4, *12.

B. The Cumulative Effects Analysis Omitted Foreseeable Future Projects.

As to the merits, it is BLM and Intervenors, not Plaintiffs, that continue to misread the record. *See* Fed. Defs.' Br. at 42; Private Intvs.' Br. at 25–26. BLM has apparently abandoned its assertion, on which the Court relied in its preliminary injunction ruling, that the analysis of

Alternative A captures all future projects listed in Table 5.2-1. *See* Mem. Opinion of Nov. 6, 2023, at 28 (ECF No. 105). The parties appear to be in agreement that this misreads the EIS. *See* Pls.' Op. Br. at 36–37; Private Intvs.' Br. at 27–28.

Changing their tune, BLM and Private Intervenors now claim it was the local, state, and national emissions inventories that captured foreseeable future projects. They did not. *See* Pls.' Op. Br. at 36 n.8. For local emissions, BLM is correct that it relied on emissions forecasts from a 2015 EIS which accounted for new drilling using a "Reasonably Foreseeable Development Scenario." Fed. Defs.' Br. at 40 (citing WY_012533). However, the annual emissions estimate BLM pulled from this document was for the year 2020.[9] This was the present, not the future, at the time this Project was approved.[10] For state emissions, BLM relied on a 2007 report that included emissions forecasts through 2020. WY_012534; WY_013294 *see also* WY_006023–119. Again, this represented *preset* emissions when the Project was approved. For national emissions, BLM relied on two EPA reports that inventoried past greenhouse gas emissions. The "10 year estimate" that Private Intervenors emphasize, Private Intvs.' Br. at 26, refers to the *past* 10 years, not the future. *See* WY_012535; WY_013294; WY_042238–42 (2017 EPA Emissions Inventory listing emissions estimates only through 2017). Finally, the vague statement in the EIS that national greenhouse gas emissions "will continue to increase," WY_012535, was also insufficient to meet BLM's duty to provide quantified emissions estimates. *See WildEarth*

[9] BLM reported that total direct CO_2e emissions from the Casper Field Office were 0.387 MMT in 2020. WY_012533; WY_013293. This value comes from Table 4–6 in the 2015 Resource Management Plan. WY_031538–39. It is calculated by adding the CO_2e (Metric Tonnes) values for year 2020 from the "Proposed LUP Amendments" rows, WY_031538–39, which are estimates based off total well numbers reported in Table 4–2, WY_031532–33. BLM presumably applied a standard multiplier to calculate indirect emissions from this estimate.

[10] It was a poor estimate at that. As the EIS concedes, this local emissions figure only captured "a subset" of sources, as it excluded all state and private wells, federal wells outside sage-grouse habitat, and all other sources (e.g., coal mining, oil/gas processing facilities). WY_012533.

Guardians II, 502 F. Supp. 3d at 247 (requiring "quantification" of greenhouse gas emissions); *WildEarth Guardians I*, 368 F. Supp. 3d at 77 (requiring BLM to "quantify" future emissions).

BLM also argues "that reasonably foreseeable projects *were* included in Part 5.0 of the FEIS" in the sense that BLM listed them in Table 5.2-1. Fed. Defs.' Br. at 42. The problem is not that BLM failed to *identify* reasonably foreseeable future projects, or delineate them with particular subheadings, but rather that BLM did not include their emissions in its analysis of cumulative climate change effects. *See* WY_013293–95. Neither BLM nor Intervenors can point to where BLM included the cumulative emissions for the projects in Table 5.2-1.

C. Private Intervenors' Remaining Objections are Meritless.

Private Intervenors' remaining responses distort Plaintiffs' arguments and do not save BLM's deficient analysis either. *See* Private Intvs.' Br. at 27–28. Plaintiffs do not insist that BLM had "to provide an itemized list of the project-specific sources of future GHG emissions" or list "each possible future source of GHG emissions by project name or location." *Id.* Plaintiffs only insist that BLM failed to meet its minimum burden: to quantify in some way the emissions of reasonably foreseeable future projects and incorporate those emissions into its cumulative effects analysis. *See WildEarth Guardians II*, 502 F. Supp. 3d at 250–51. The problem is not that BLM relied on aggregate emissions data, but that its aggregate emissions data was *incomplete* because it did not incorporate emissions from future projects, including those in Table 5.2-1. Private Intervenors' citation to *WildEarth Guardians I*, Private Intvs.' Br. at 27–28, supports exactly this principle. *See WildEarth Guardians I*, 368 F. Supp. 3d at 77 (BLM required to *quantify* and *compare* the emissions of past, present, and reasonably foreseeable projects).

Private Intervenors are also wrong that Table 5.2-1 is somehow irrelevant. Private Intvs.' Br. at 28. "Plaintiffs' continued gesturing at Table 5.2-1," *id.*, is because that table lists the

projects BLM itself identified as reasonably foreseeable for purposes of its cumulative impacts analysis—yet then excluded from the cumulative effects analysis for greenhouse gasses, WY_013274–76. Plaintiffs are not asserting some "new layer of NEPA review" requiring BLM to quantify the emissions of those projects "separately." *See* Private Intvs.' Br. at 28. The problem is that they were not included at all.

Finally, contrary to Private Intervenors' claim, Plaintiffs are not arguing that the future projects listed in Table 5.2-1 should have been evaluated as part of Alternative A (no action alternative). *See* Private Intvs.' Br. at 28. They mention Alternative A only to address the Court's mistaken conclusion at the preliminary injunction stage that the emissions from all projects in Table 5.2-1 were accounted for in Table 5.3-7, which simply compared the emissions of Alternatives A and B. WY_013293; *see* Mem. Opinion of Nov. 6, 2023, at 28 (ECF No. 105) (finding "that BLM's comparative cumulative effects analysis in Table 5.3-7 . . . account[ed] for the emissions identified in Table 5.2-1").

In sum, BLM violated NEPA by failing to quantify the greenhouse gas emissions from all foreseeable future projects, including those in Table 5.2-1, in its cumulative effects analysis.

V. BLM VIOLATED NEPA BY FAILING TO CONSIDER ALL REASONABLE ALTERNATIVES.

BLM does not dispute that NEPA requires agencies to "consider any reasonable alternative identified by the public," *Wilderness Soc'y v. U.S. DOI*, No. 22-cv-1871, 2024 WL 1241906, at *19–21 (D.D.C. Mar. 22, 2024), or that agencies can only dismiss a proposed alternative as unreasonable on limited grounds. *See* WY_012490 (listing grounds in EIS); Fed. Defs.' Br. at 43. Instead, BLM claims that it properly explained why the "Reduced Rate of Development Alternative" and "Greenhouse Gas Reduction Alternative" were unreasonable under that standard. However, BLM's response brief makes little effort to defend the illogical

reasons it gave in the record, advancing improper post-hoc ones instead. *See Dep't of Homeland Sec. v. Regents of the Univ. of Cal.*, 591 U.S. 1, 24 (2020) ("An agency must defend its actions based on the reasons it gave when it acted.").

BLM's elimination of these alternatives without establishing that each one was unreasonable violated NEPA. *See* 40 C.F.R. § 1502.14(a); *High Country Conservation Advocs. v. U.S. Forest Serv.*, 951 F.3d 1217, 1224–25 (10th Cir. 2020) ("Where the agency omits an alternative but fails to explain why that alternative is not reasonable, the EIS is inadequate."); *DuBois v. U.S. Dep't of Agric.*, 102 F.3d 1273, 1287 (1st Cir. 1996) ("The existence of a viable but unexamined alternative renders an [EIS] inadequate.'") (cleaned up).

A. BLM's Explanations for Eliminating the "Reduced Rate of Development" Alternative Were Arbitrary and Capricious.

Commenters proposed two different alternatives that would reduce the rate of Project development: a total limit ("Limit Number of Wells Annually") and an operator-specific cap ("Limit Total Number of Wells per Operator"). *See* WY_012492.[11] The EIS gave six total reasons for rejecting these reasonable alternatives, each of them irrational. If the Court finds any one of the excuses improper, it must hold BLM's alternatives analysis unlawful because the record does not show that BLM "would clearly have" rejected a pacing alternative on the other

[11] The Court can easily dispense with Wyoming's argument that pacing would not benefit the local community because officials supported year-round development. *See* Wyo. Br. at 32. Pacing and year-round development are not mutually exclusive, and they advance the same goal: a more consistent rate of development. Wyoming officials voiced serious concerns with the impacts of a boom-bust cycle and support for a more even rate of development. *See* WY_006212 (asking for "development to occur at a more even rate" to eliminate "dramatic fluctuations in housing needs, traffic, utility use and other socioeconomic demands"); WY_010676 (desire to "minimize 'boom and bust' cycles that have a significant impact on communities"); WY_011258 (desire for more "local economic stability"); WY_000412 (smoothing the "peaks and troughs" of boom-bust cycle would "help to optimize the benefits and minimize the social and economic impacts of increased oil and gas activity.").

grounds alone. *See Williams Gas Processing-Gulf Coast Co. v. FERC*, 475 F.3d 319, 330 (D.C. Cir. 2006) ("When an agency relies on multiple grounds for its decision, some of which are invalid, [courts] may only sustain the decision where one is valid and the agency would clearly have acted on that ground even if the other were unavailable.") (cleaned up); *see also Fogo De Chao (Holdings) Inc. v. U.S. Dep't of Homeland Sec.*, 769 F.3d 1127, 1149 (D.C. Cir. 2014) (holding decision based on "multiple independent grounds" unlawful because court could not "confidently say[] that the agency would have resolved the . . . petition in the same manner absent those errors" despite alternative grounds); *Int'l Union, United Mine Workers v. Dep't of Labor*, 358 F.3d 40, 44–45 (D.C. Cir. 2004) (finding decision unlawful although only two of the "three seemingly independent grounds" were improper because court "d[id] not know—nor [was it] free to guess—what the agency would have done had it realized that it could not justify its decision" on the two unlawful grounds).

1. The "Inconsistent with Lease Rights" Rationale

The EIS states that it eliminated the operator-specific cap alternative because BLM "do[es] not have the authority to infringe upon existing lease rights by imposing limits on the pace of development." WY_012492. Conspicuously absent from BLM's brief is any mention of this rationale—perhaps because it is indefensible. Private Intervenors alone claim the lease-infringement assertion was correct, Private Intvs.' Br. at 30, but the plain text, case law, past practice, and BLM's own authoritative interpretation all refute them.

Federal oil and gas leases expressly reserve to BLM the "right to specify rates of development and production in the public interest." *See* Form 3100-11 § 4. Private Intervenors argue Section 4 only authorizes BLM to "set 'rates of development' to facilitate 'diligence in developing and producing' oil-and-gas resources and to avoid 'waste of leased resources.'"

Private Intvs.' Br. at 30. That is not what the text says. The lease sweeps far more broadly, allowing BLM to specify rates "*in the public interest*." The terms "diligence" and "waste" only appear in the prior sentence—as obligations on the leaseholder, not limits on BLM. Section 6 of the lease separately authorizes BLM to impose conditions to "minimize[] adverse impacts to the land, air, [] water . . . , and other resources." Form 3100-11 § 6. Contrary to Private Intervenors' claim that Section 6 doesn't encompass pacing, it explicitly states that such measures may specify the "timing of operations." *Id.*

Private Intervenors also ignore that the MLA allows BLM to entirely suspend operations and production under any lease "in the interest of conservation of natural resources," which encompasses environmental protection. *See* 30 U.S.C. § 209; *Copper Valley*, 653 F.2d at 601 & n.7. In other words, BLM has statutory authority not merely to *slow* but to completely *halt* lease development to avoid environmental harm. It would be absurd to think that BLM could halt development completely but not slow it.

Courts have squarely rejected Private Intervenors' assertion BLM lacks authority to slow lease development to reduce environmental harm—and also held that BLM violated NEPA by not considering this common-sense alternative. *See, e.g.*, *N. Plains Res. Council v. U.S. BLM*, 2005 U.S. Dist. LEXIS 4678, *24–29 (D. Mont. Feb. 25, 2005) (rejecting "erroneous assumption that, having leased the mineral rights, BLM could not control the pace of production" and finding BLM violated NEPA by not considering this alternative); *N. Cheyenne Tribe v. Norton*, 503 F.3d 836, 846 (9th Cir. 2007) ("We all agree that the district court correctly held that the Bureau of Land Management violated NEPA when it . . . did not consider an alternative that would have phased exploration and development on a more gradual basis.") (C.J. Schroeder, dissenting); *Powder River Basin Res. Council*, 120 IBLA 47, 54–55 (1991) (finding "ample

support for the authority of the lessor to regulate the manner and pace of development" and holding that the failure to consider this "obvious and reasonable" alternative violated NEPA).

Private Intervenors also repeatedly reference the leaseholder's obligation to exercise "reasonable diligence" in developing the lease, but that applies to the lessee alone. *See* Form 3100-11 § 4 ("Lessee must exercise reasonable diligence"); *Tempest Expl. Co., LLC*, 196 IBLA 386, 390–91 (2021) (noting *lessee's* duty to exercise "reasonable diligence"). They provide no authority for their position that BLM is under such an obligation. The duty is also reasonable diligence, not haste. A careful pace of development meets that standard, particularly in light of the leaseholder's obligation to "conduct operations in a manner that minimizes adverse impacts to the land, air, and water, . . . and to other land uses or users." Form 3100-11 § 6.

Private Intervenors' position is also irreconcilable with BLM's own authoritative position on this issue. In a final rule published last month, BLM confirmed that it has authority to specify the "rates of development" of federal oil and gas leases "to mitigate adverse impacts to other resource values, land uses or users." *See* Fluid Mineral Leases and Leasing Process, 89 Fed. Reg. 30,916, 30,971 (April 23, 2024) (to be codified at 43 C.F.R. part § 3000 et seq.). This regulation is not a new grant of power, as Private Intervenors claim, but rather an authoritative interpretatio of BLM's existing authority under its standard lease form. *Id.* at 30,927; *see also* 88 Fed. Reg. 47,562, 47,573 (Jul. 24, 2023) (explaining that this provision is intended to clarify BLM's authority). BLM has long held this same position. *See, e.g.*, WY_020275 (listing in 2007 Casper RMP a "[r]educed rate of development" as a mitigation measure available to BLM).

This wall of authority confirms BLM eliminated the pacing alternative based on an erroneous view of its authority. For this reason alone, it violated NEPA. *See Ctr. for Biological Diversity v. U.S. Fish & Wildlife Serv.*, 409 F. Supp. 3d 738, 766 (D. Ariz. 2019), *aff'd*, 33 F.4th

1202 (9th Cir. 2022) (NEPA violated where it based "its choice of alternatives on an erroneous view of the law"); *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1219 (9th Cir. 2008) (NEPA violated where agency rejected alternative setting higher fuel efficiency standards on the basis "that it had no discretion" to adopt them).

2. The "Inconsistent with the Purpose of the Agency Action" Rationale

The EIS also states that it eliminated the operator-specific cap alternative because it would not be "consistent with the purpose of the agency action." WY_012492. As with the prior rationale, BLM refuses to defend it. Private Intervenors claim pacing was inconsistent with BLM's purpose and need because the stated "need" was "to respond to *this proposal*," Private Intvs.' Br. at 32, insinuating that this automatically disqualified alternatives that would alter the Operator Group's proposal. That is wrong because the need was only to "respond to" the proposal, not adopt it. WY_012421. The purpose and need statement made clear that BLM's response could be to "approve, approve with modifications, or disapprove the proposed project or project components based on an evaluation of the expected impacts." *Id*.[12]

Second, Private Intervenors suggest the alternative was inconsistent with the operators' lease rights, and the MLA and FLPMA, in that it would restrict oil and gas development. The lease rights argument fails for the reasons discussed above. *See supra* § V.A.1. The MLA and FLPMA argument fails, first, because pacing would not reduce the overall volume of oil and gas production. Moreover, the MLA requires BLM to ensure lease development protects the public

[12] Private Intervenors say it would be "outright insensible" to pace development given "an impending rise in energy demand," Private Intvs.' Br. at 24, but this post-hoc rationale ignores market realities. The U.S. is producing more oil and gas than any country in history and is a net *exporter*, meaning domestic production already surpasses demand. *See* https://www.eia.gov/todayinenergy/detail.php?id=61545; https://www.eia.gov/energyexplained/us-energy-facts/imports-and-exports.php. Pacing would also result in the same ultimate recovery.

welfare, 30 U.S.C. § 187, and to impose conditions for protection of surface resources, 30 U.S.C. § 226(g). FLPMA also requires BLM to balance mineral development with natural resource conservation. *See* 43 U.S.C. §§ 1702(c), 1701(a)(8), 1732(b). Neither law requires BLM to expedite federal fossil fuel production to the detriment of environmental protection. *See N.M. ex rel. Richardson v. BLM* ("*Richardson*"), 565 F.3d 683, 710 (10th Cir. 2009) ("It is past doubt that [FLPMA's] principle of multiple use does not require BLM to prioritize development over other uses" which "includ[e] conservation to protect environmental values").

Intervenors' cases also do not support them. *Wilderness Society v. DOI*, No. 22-cv-1871 (CRC), 2024 WL 1241906 (D.D.C. Mar. 22, 2024) involved a more lenient standard for alternatives selection due to the "limitless" alternatives for lease sale acreage. *Id.* at *20–21. Although the court found that BLM struck a reasonable balance among "a number of factors" in choosing its middle-ground alternative of 179,000 acres, neither the BLM nor the court found that the small-sale alternative was inconsistent with BLM's purpose of "encourag[ing] development of mineral resources." *Id.* at *21. Unlike the small-sale alternative in *Wilderness Society*, pacing also would not result in less overall mineral extraction. *Sovereign Inupiat for a Living Arctic v. BLM*, No. 3:23-cv-00058-SLG, 2023 WL 7410730 (D. Alaska Nov. 9, 2023), is also inapposite. Unlike the pacing alternative here, the proposed alternative in *Sovereign Inupiat* asked BLM to prohibit ConocoPhillips from ever developing substantial quantities of oil underlying its leases. *Id.* at *5. Additionally, the NPR-A is a special area set aside by Congress as a petroleum reserve, 42 U.S.C. § 6506a, so the special "policy objective of resource extraction in the NPR-A" *id.* at *7, does not apply here. *Theodore Roosevelt Conservation Partnership v. Salazar* ("*TRCP*"), 661 F.3d 66 (D.C. Cir. 2011) is also distinguishable, as the alternative

rejected there would have scaled back the project size and the purpose and need statement there did not include environmental harm reduction. *Id.* at 74.

Far more analogous are *High Country*, 951 F.3d at 1225 and *Richardson*, 565 F.3d at 710–11, which both rejected the idea that federal land management agencies can eliminate NEPA alternatives that constrain fossil fuel development as contrary to their "purpose and need." This is because the goal of mineral production "does not address" the agencies' other statutory objectives of environmental conservation. *See High Country*, 951 F.3d at 1224; *see also Richardson*, 565 F.3d at 710–11 ("the multiple use provision of FLPMA is not a sufficient reason to exclude more protective alternatives from consideration").

Above all, Private Intervenors' position fails as it ignores an essential component of BLM's purpose and need statement here: to "minimize or avoid environmental impacts." WY_012421. A pacing alternative would have furthered this key purpose while still allowing full development of the leased minerals. Accordingly, this "inconsistent with purpose and need" rationale was also unreasonable.

3. The "Would Not Address a Known Resource Conflict" Rationale

The EIS also states that it eliminated the operator-specific cap alternative because it "would not address a known resource conflict." WY_012492. BLM again ignores this rationale. Private Intervenors begin their response with a made-up definition of "resource conflict" they derive from an inapposite regulation that does not even contain that phrase, claiming this proves there was no resource conflict. Private Intvs.' Br. at 34. They are confused. The term "resource conflict" is shorthand for NEPA's requirement that agencies study alternatives for any action involving "unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(H). BLM's NEPA Handbook defines that phrase:

> There are no unresolved conflicts concerning alternative uses of available resources if consensus has been established about the proposed action based on input from interested parties, or there are no reasonable alternatives to the proposed action that would be substantially different in design or effects.

BLM NEPA Handbook H-1790-1 at 79 (2008). Applying this definition here, the Project poses "unresolved conflicts concerning alternative uses of available resources" because there was no consensus about the Project among interested parties, and there were reasonable alternatives—including pacing—that differed substantially from the existing alternatives in design and effect.

Not only is air quality itself a relevant resource, but air pollution can affect other resource uses—such as outdoor recreation and human occupancy. *See* 43 U.S.C. § 1702(l) (defining "outdoor recreation" as a "principal" public land use under FLPMA); *id.* § 1701(a)(8) (public lands should be managed to "provide for outdoor recreation and human occupancy" and "protect the quality of . . . air and atmospheric . . . values"). Accordingly, the Project's impacts on air quality undoubtedly generated a relevant "resource conflict." *See also Bob Marshall All. v. Hodel*, 852 F.2d 1223, 1228–29 (9th Cir. 1988) (holding that impacts of oil and gas development on wilderness constituted unresolved resource conflict under NEPA). The EIS was thus wrong that the operator-specific cap alternative "would not address a known resource conflict."

4. The "Already Considered Reduced Effects" Rationale

The EIS's next reason for eliminating the operator-specific cap alternative was that the "action alternatives already considered reduced effects by limiting the number of well pads in the CCPA." WY_016758. Private Intervenors' only response is a deflection: that agencies need not consider an alternative simply because it is "distinguishable." Private Intvs.' Br. at 34. True, but they must consider alternatives that are "significantly distinguishable." *High Country*, 951 F.3d at 1226. A reduced rate of development alternative was significantly distinguishable from the

existing alternatives, as it would have been the *only* alternative to address the EPA's serious air quality concerns and moderate the socioeconomic impacts of this Project.

Courts have rejected similar attempts to dismiss reasonable alternatives on the ground that other alternatives moderated effects to some lesser degree. *See Union Neighbors United, Inc. v. Jewell*, 831 F.3d 564, 577 (D.C. Cir. 2016) (alternative improperly eliminated on the basis that others "already considered" measures to reduce effects because "the impacts would be different" under the alternative); *High Country*, 951 F.3d at 1226–27 (alternative improperly eliminated as "not significantly distinguishable" because it "would result in significantly different environmental impacts"). Here, the Court should do the same because the operator-specific cap alternative would reduce the type and severity of environmental impacts in significantly different ways than the EIS's action alternatives.

5. The "Inconsistent with Basic Policy Objectives" Rationale

The EIS states that it eliminated the total-limit alternative for pacing because it would be "inconsistent with the basic policy objectives for the management of the area." WY_012492. The EIS did not explain what policy objectives this alternative supposedly contravened. In its response brief, BLM tries, but fails, to identify any inconsistencies. *See* Fed. Defs.' Br. at 45 & n.10 (simply citing a list of applicable laws for the Court to parse without identifying any inconsistency). This type of ipse dixit assertion does not suffice for reasoned analysis under the APA. *See Dickson v. Sec'y of Def.*, 68 F.3d 1396, 1407 (D.C. Cir. 1995) ("conclusory statements . . . do not meet the requirement that 'the agency adequately explain its result'") (cleaned up).

BLM's post-hoc rationalization is also incorrect. Relevant policy objectives for this area are found in the governing land use plan—BLM's Casper Resource Management Plan (RMP). *See* WY_021935 (noting that the Casper RMP establishes BLM's "goals and objectives" for

management of all BLM lands and resources in the planning area); *see also* WY_022182 (noting in BLM NEPA Handbook that the relevant land use plan determines "basic policy objectives for the management of the area"). They include "[m]anage conservation of leasable mineral resources *without compromising the long-term health and diversity of public lands*," "[s]upport the domestic need for energy resources," and "[m]aintain oil and gas leasing, exploration, and development, *while minimizing impacts to other resource values*," and "[i]mplement management actions within the scope of the BLM's land-management responsibilities to improve air quality as practicable." WY_021944, -49.

Paced development is not inconsistent with these policy objectives. To the contrary—it would have *better* served them, by allowing full development of the leased minerals while minimizing impacts to other resource values. The Casper RMP also explicitly lists "Reduced rate of development" as a proposed air quality mitigation measure. WY_020275. It is irrational for BLM to argue that a measure proposed by its own plan is inconsistent with its policy objectives.

The objectives of the MLA and FLPMA buttress this conclusion. The MLA requires BLM to ensure lease development protects the public welfare, 30 U.S.C. § 187, and reflects a policy of environmentally responsible mineral development. *See, e.g.*, 30 U.S.C. § 226(g) (directing BLM to impose "reclamation and other actions as required in the interest of conservation of surface resources"); *see also* 43 C.F.R. § 3161.2 (requiring operations be conducted in a manner "which protects other natural resources and the environmental quality"); *id.* § 3162.1 (same). FLPMA likewise "declares that it is the policy of the United States that . . . the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological

values." 43 U.S.C. § 1701(a)(8). Thus, policy objectives were also not a sufficient reason to reject this alternative from consideration.

6. The "Implementation Is Remote or Speculative" Rationale

The only rationale BLM meaningfully defends is one it gave for eliminating the total-limit alternative: that implementation of this alternative was "remote or speculative." WY_012492. However, BLM improperly attempts to "fill[] in critical gaps" in the EIS's explanation with its own post-hoc assertions. *Point Park Univ. v. NLRB*, 457 F.3d 42, 50 (D.C. Cir. 2006). Even if the Court could consider them, the post-hoc explanations are also simply incorrect.

BLM begins with a red herring about the limits of BLM authority over non-federal surface. Fed. Defs.' Br. at 44–45. That is irrelevant to this alternative. Pacing does not require BLM to dictate how surface operations are conducted. It is a question of if and when the federal minerals may be extracted at all. As the owner of the minerals, the authority over that issue unquestionably rests with the federal government—not the surface owner. Confirming this, BLM acknowledges that it always has authority over "downhole" activities including the actual subsurface drilling, even for wells sited on non-federal lands. *See* Fed. Defs.' Resp. to Pls.' Mot. for Prelim. Inj. at 27–31 (ECF No. 83); WY_011710–22. The EIS itself thus acknowledges that BLM can pace development of the entire federal mineral estate, and only lacks similar authority as to state and private *minerals*. WY_012492. In other words, BLM can control the rate of development of the entire Converse County Project. *See* WY_016736 (confirming Project will only develop "federal oil and gas leases.").

The EIS itself lists three facts supporting its "remote or speculative" conclusion. First, it said "a reduction in the number of wells drilled in a year may not reduce surface disturbance

(i.e., the number of pads may not be reduced)." WY_012492. The EIS does not explain why this makes implementation of the alternative "remote or speculative," and BLM's brief does not either. Surface disturbance is just one of many environmental concerns, and BLM acknowledges the alternative would reduce impacts like air pollution. *Id.*

Second, the EIS stated that "64 percent of the CCPA is underlain by federal fluid mineral estate; therefore, a limit on the number of wells drilled in a year could not be imposed on approximately one-third of the CCPA." WY_012492. The EIS again does not explain why that rendered the alternative unreasonable. The proposal was to set a rate of development *for the Converse County Project*, which will develop only federal minerals. From that bare statement in the EIS, agency counsel now speculates that what BLM really meant was that reducing the rate of Project development would cause state and private mineral development to increase so substantially as to eliminate any benefit from this alternative. Fed. Defs.' Br. at 46. This puts words in BLM's mouth. There is no evidence this is what BLM meant, and the argument is inconsistent with BLM's conclusion that paced development would reduce air quality impacts. WY_012492. The Court should reject this post-hoc rationalization. *See GPA Midstream Ass'n v. U.S. Dep't of Transp.*, 67 F.4th 1188, 1200 (D.C. Cir. 2023) ("Be that as it may, the agency did not make this point in the administrative record so for us to consider it would contradict the foundational principle of administrative law that a court may uphold agency action only on the grounds that the agency invoked when it took the action.") (cleaned up).

Third, BLM claimed that "the complexities of the number of operators, the number of leases, the number of surface owners, and the size of the CCPA, it is not reasonable to limit the pace of development by selecting which operator(s) can or cannot drill." WY_012492. The essential premise—that BLM would have to select which operators can drill—is wrong. Pacing

would merely require BLM to set an annual well limit for each operator based on its proportion of leases; keep a count of wells drilled by each operator; and stop approving an operator's wells after its limit is exhausted. BLM asserts what it really meant is that it "lacked any reliable methodology" for doing this. Fed. Defs.' Br. at 46. That is another improper post-hoc invention of agency counsel and also incorrect. BLM issues a permit for every well drilled into federal minerals, tracking their status in a searchable database.[13] Implementing the pacing alternative would require nothing more than keeping track of the wells drilled by each operator in the Project area. BLM also does not explain why the number of operators, project size, or land ownership pattern matter. The Operator Group consists of just five companies. WY_012420. Additionally, BLM would not have to consider who owns the land surface, or whether the well also penetrates state or private minerals, in order to simply keep track of the number of wells drilled. Every BLM-approved well in the Project area would simply be counted. Accordingly, BLM was not "incapable" of implementing this alternative. Fed. Defs.' Br. at 47.[14]

B. BLM's Explanation for Eliminating the Greenhouse Gas Reduction Alternative Was Unreasonable.

BLM provided just one explanation for eliminating the "Greenhouse Gas Reduction Alternative": that fully eliminating emissions is technically infeasible. *See* WY_012491–92. Defendants claim this explanation was reasonable, Fed. Defs.' Br. at 47–48, but it responds to the wrong alternative. Although one commenter proposed a full "carbon-neutral" alternative that

[13] https://reports.blm.gov/report/AFMSS/81/Approved-APDs-Report-Federal/; *see also* https://reports.blm.gov/reports/MLRS.

[14] It is unclear why BLM cites its rationales for rejecting the phased development alternative, which is not at issue here. Fed. Defs.' Br. at 47. The phased development alternative described in the EIS would have concentrated development to one geographic area at a time but without any limit on the rate of development, whereas paced development would have capped the rate of drilling but without any restrictions on geographic location, WY_012492.

would require operators to fully eliminate or offset greenhouse gas emissions, WY_004864, that same commenter, along with EPA and others, separately proposed an alternative requiring measures to simply *reduce* emissions—such as methane leak detection and repair; tighter controls on pneumatic equipment; limiting avoidable flaring and venting; or vapor recovery units on storage vessels, *id.*; WY_006350; WY_004438; WY_004183, -4202, -4207–08; WY_006219. BLM acknowledged that these were distinct alternatives, WY_000400, yet conflated them in the EIS, addressing only the feasibility of "full carbon-neutral processes," WY_012491–92. The EIS did not dispute the feasibility of merely reducing emissions or otherwise explain why it eliminated that distinct alternative, thus violating NEPA. *See* 40 C.F.R. § 1502.14(a).[15]

Perhaps aware of the weakness in the EIS's only rationale, agency counsel and Intervenors invent new ones. However, the Court may only consider the reasoning "articulated by the agency itself" and not "*post hoc* rationalizations." *State Farm*, 463 U.S. at 50. Because the Converse County EIS does not state that the greenhouse gas reduction alternative was eliminated from detailed study for these additional reasons, the Court cannot affirm on these grounds.

Even if the Court could consider them, these post-hoc rationales would not support the elimination of this alternative. BLM and Private Intervenors first suggest it was unnecessary to consider the greenhouse gas reduction alternative because "measures were included in Alternative B to reduce GHGs emissions." Fed. Defs.' Br. at 48; Private Intvs.' Br. at 35. This stretches the truth. The only examples BLM can muster are items it rejected (*compare* WY_013370–71 *with* WY_012958–59) and the few measures the Operator Group volunteered to modestly reduce other air pollutants (WY_013366; WY_016739–40), which might incidentally

[15] Wyoming is wrong that commenters "moved the target" by asking BLM to consider merely reducing emissions. Wyo Br. at 34. This alternative arose in scoping comments, and BLM was well aware it was distinct from the carbon-neutral alternative. WY_000400.

reduce greenhouse gas emissions to some degree. BLM also references the Operator Group's intent to conduct flaring for only limited periods (WY_012451; WY_012253), but flaring is just one source of greenhouse gasses, and the ROD does not hold the operators to this limit—or apply any flaring "technologies and practices" for that matter. Finally, Private Intervenors perplexingly cite a discussion of efforts by various entities to combat climate change (WY_013295–96), but none are requirements of the EIS alternatives.

In any event, the standard is not whether Alternative B included measures to reduce greenhouse gas measures, but rather whether it was "significantly distinguishable" from the greenhouse gas reduction alternative. *See High Country*, 951 F.3d at 1226. It was. Alternative B included none of the measures commenters proposed to reduce greenhouse gas emissions, which would have substantially reduced the climate-warming pollution from this Project. *See, e.g.*, WY_004449 (providing evidence of "dramatic pollution reduction potential of these controls"); WY_004208–09 (leak detection and repair can "significantly reduce" methane emissions). Accordingly, this post-hoc "substantially similar" excuse also fails.

The second post-hoc rationale is the supposed "realities that made further measures infeasible." Fed. Defs.' Br. at 48. The argument is both entirely unsupported and incorrect. BLM only found it would be infeasible to eliminate *all* emissions and *all* venting and flaring. It never disputed the feasibility of measures to reduce emissions, such as methane leak detection and repair; pneumatic device controls; and limits on avoidable flaring and venting. Indeed, the fact that such measures are already required in other states and under BLM's recent Waste Prevention Rule demonstrates their feasibility. *See Waste Prevention, Production Subject to Royalties, and Resource Conservation*, 89 Fed. Reg. 25,378 (Apr. 10, 2024); *see also* WY_006222; WY_004207–09 (noting state requirements).

The third post-hoc rationalization is BLM's "limited authority" over non-federal lands. Fed. Defs.' Br. at 49; Private Intvs.' Br. at 36. This argument is again a red herring and, as a factual matter, incorrect. As Plaintiffs previously explained, the MLA and FLPMA authorize BLM to regulate federal mineral development activities on non-federal lands. *See supra* § II. Even if the "limited authority" claim were true, however, BLM does not explain why that would render it infeasible to reduce the Project's greenhouse gas emissions. BLM does not dispute that it can impose greenhouse gas reduction measures to wells on federal surface and split estate, which together account for 64% of the Project area. *See* WY_012426; *see also supra* § II.B.[16] The only possible exception to BLM's authority is Fee/Fee/Fed wells. WY_012426. Even if BLM cannot address emissions from Fee/Fee/Fed wells, that is not a reasonable basis for rejecting greenhouse gas measures for all other wells. Just as it did for every other mitigation type, BLM could simply have required these measures for Project wells on federal surface and split estate. Thus, this post-hoc "limited authority" rationale also fails.[17]

In sum, the EIS's only explanation for eliminating the greenhouse gas reduction alternative was irrational, and the post-hoc rationalizations cannot save BLM either. BLM's failure to study this alternative in detail thus violated NEPA.

[16] Confirming this, BLM's Waste Prevention Rule imposes methane flaring and venting limits to wells on both federal surface and split estate. *See* 89 Fed. Reg. 25,378 at 25,426–27, 25,429.
[17] Private Intervenors argue that the greenhouse gas reduction alternative was unreasonable because BLM lacks authority to require "enforceable offsets" of greenhouse gas emissions. But again, carbon offsets were only a feature of the distinct "carbon-neutral" alternative, which would have required operators to fully eliminate or offset their emissions by purchasing carbon credits. *See* WY_000400.

VI. BLM MISCONCEIVED ITS AUTHORITY TO REQUIRE AIR QUALITY MITIGATION MEASURES.

BLM now acknowledges that it had authority to require the requested air quality mitigation measures as to at least some Project wells. *See* Fed. Defs.' Br. at 50. Wyoming is the only party still arguing that BLM lacks authority altogether, Wyo. Br. at 34, and as explained thoroughly in Plaintiffs' opening brief, that position is wrong. Pls.' Op. Br. at 46–53. Up against that wall, BLM insists that it did not mean what it said in the EIS that it "does not have authority to require application of these [air quality] mitigation measures." *See* WY_012951, 012959. Instead, BLM now asks the court to insert a caveat that was not in the EIS: that it lacked authority to impose them only to wells *on non-federal lands*. Fed. Defs.' Br. at 50. That is not what the EIS said.

If the Court rejects that improper post-hoc rationalization, this claim is easily resolved. BLM concedes the full disclaimer is wrong. If the Court accepts the post-hoc rationalization, it must then wade into the legal dispute about the extent of BLM authority to regulate federal mineral development activities on non-federal lands. As Plaintiffs explained above and reiterate here, BLM's position on that issue is also legally erroneous. Accordingly, even if the Court accepts BLM's post-hoc position, BLM misapprehended its legal authority to impose the requested air quality mitigation measures, requiring reversal under the APA. *See Chenery I*, 318 U.S. at 94; *Prill v. NLRB*, 755 F.2d 941, 948 (D.C. Cir. 1985); *Sea-Land Serv., Inc. v. Dep't of Transp.*, 137 F.3d 640, 646 (D.C. Cir. 1998).

A. BLM Did Not Limit Its Disclaimer of Authority to Non-Federal Lands.

"An agency must defend its actions based on the reasons it gave when it acted." *Regents*, 591 U.S. at 24. This rule "instills confidence that the reasons given are not simply 'convenient litigating position[s].'" *Id.* at 23 (quoting *Christopher v. SmithKline Beecham Corp.*, 567 U.S.

142, 155 (2012)). Thus, the Court must base its decision on the legal position BLM expressed in the EIS, not the post-hoc version it advances now to defend its decision from attack.

1. The Court Must Reject BLM's Post-Hoc Rationalization About the Scope of Its Disclaimer In the EIS.

The EIS is unambiguous: BLM made a blanket disclaimer of authority to impose any of the air quality mitigation measures. Before discussing the list of rejected air quality measures, BLM stated that it "does not have authority to require application of these mitigation measures." WY_012951. It further noted that "it is unlikely these measures will be implemented" because "BLM does not have the authority to require the application of these measures" and "no other entity has committed to apply them." WY_012959. BLM did not limit this position to wells on non-federal lands.[18] Thus, the EIS refutes BLM's position now that it was only disclaiming authority to impose air quality mitigation measures *on non-federal lands*.

Context also makes this clear. The mixed surface ownership of the Converse County Project area was a dynamic present for every mitigation measure. Yet for every other resource discussed in the EIS, rather than claim it "does not have authority to impose these measures," BLM explicitly stated that it could impose them only to federal lands and/or split estates. *See, e.g.*, WY_013184 (wildlife mitigation would apply on federal and split-estate lands, but not on state- and privately-owned lands); WY_012978–80 (reclamation for cultural resources impacts would occur only on federal surface); WY_013026 (mitigation to reduce impacts to range resources only on federal surface); WY_013086–87 ("While some socioeconomic mitigation strategies are within the BLM's control, most mitigation strategies would require action by other

[18] BLM's point about the residential setback requirement for gas plants and compressor stations, Fed. Defs.' Br. at 52–53, is irrelevant because that was the only mitigation measure BLM did *not* disclaim authority for in the EIS. *See* WY_012951.

government entities[.]"); WY_013103 (noting which soil mitigation would apply only to "[s]oils on federal surface"); WY_013128–29 (noting which vegetation mitigation would apply only on federal surface and that reclamation on private and state land "would not necessarily be attained"); WY_013206 ("Approximately 36 percent of the CCPA is *not under BLM management authority*" and thus would not be subject to federal wildlife protections); WY_013242 (only federal surface and mineral estate subject to mitigation for special-status wildlife); WY_013261 (measures to reduce impacts to aquatic resources would apply only on federal lands). Thus, if BLM's position on air quality mitigation was truly as it now says it was, it would have logically been accompanied by a more nuanced explanation as was the case for other mitigation measures. Instead, the air quality mitigation was wholly unique in BLM's blanket disclaimer of authority. *See* WY_012951; WY_012959.

Everyone seemed to have clearly understood that for air quality mitigation measures, BLM was disclaiming authority altogether. The Operator Group explained in comments, for example, that it "agrees with BLM's determination that it lacks authority to require application of the air quality mitigation measures" and "[t]herefore, BLM may not adopt them in the ROD." WY_016684–85. In response, BLM did not correct or clarify the Operator Groups' assertion, but merely pointed to the ROD where it rejected the mitigation measures. *Id.* By contrast, with respect to mitigation measures where BLM felt a commenter was confused about the limits of its authority, BLM explained that it revised the EIS to clarify its authority. *See, e.g.*, WY_012143; WY_012157; WY_012163; WY_012174; WY_012187.

BLM's assertion that commenters were urging BLM to impose air quality mitigation across the entire Project area "regardless of the federal or non-federal nature of the surface estate," Fed. Defs.' Br. at 53, runs afoul of the record and plain logic. EPA, the National Park

Service, and other commenters simply asked BLM to require reasonable measures to reduce the Project's excessive emissions and were not advancing an all-or-nothing approach. To the contrary, they acknowledged BLM's authority may be limited over non-federal lands. *See, e.g.*, WY_004233–35 (recommending air quality mitigation but acknowledging "the land ownership pattern within the project area . . . complicates the situation").

There is another very good reason not to accept BLM's post-hoc view of things: the blanket disclaimer of authority to impose air quality measures was consistent with the Trump administration's legal position at that time. In September 2018, BLM issued a rule rescinding most of an Obama-era Methane Waste Prevention Rule, which had required BLM-permitted oil and gas operations to include various controls to reduce methane emissions from flaring, venting, and leaks. *See* Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements, 83 Fed. Reg. 49,184 (Sept. 28, 2018). Some of those same measures, like flaring limits, were among the air quality measures BLM rejected here. *See* WY_012958 (measure listed as AQ-9: "reduce the amount of flaring"). The Trump administration's rationale for the rescission was, in part, that the 2016 Rule had exceeded BLM's authority by attempting to "regulate air quality." *Id.* at 49,185–86. This is further evidence that BLM meant what it said in the EIS.

Accordingly, the Court should reject BLM's "convenient litigating position[]" that conflicts with the plain reading of the EIS. *Regents*, 591 U.S. at 23; *see also Coal. for Common Sense in Gov't Procurement v. United States*, 671 F. Supp. 2d 48, 55–56 (D.D.C. 2009) (rejecting post-hoc rationalization that agency's adoption of rulemaking provisions was merely an exercise of its *discretion* and not mistaken interpretation of its statutory authority because it conflicted with the rule's "quite plain[]" unlawful interpretation).

2. BLM's Additional Explanations in the ROD Do Not Override BLM's Disclaimer in the EIS.

Private Intervenors ask this Court to accept a different post-hoc rationalization that even BLM is not asserting: that BLM changed its legal position by the point of the ROD.[19] Critically, BLM itself does not say this. In BLM's briefing on the preliminary injunction motion and the cross motions for summary judgment, it has repeatedly responded to Plaintiffs by citing to its rationale in the EIS. Fed. Defs.' Br. at 53 (citing to its "reasonabl[e] conclu[sion]" in the EIS disclaiming authority); *id.* at 54 (referencing "BLM's position as expressed through the Converse County FEIS *and* ROD") (emphasis added); Fed. Defs.' Resp. to Pls.' Mot. for Prelim Inj. at 31–34 (ECF No. 83) (no citation to the ROD). In neither the ROD itself nor briefing here has BLM claimed to have abandoned the legal position staked out in the EIS.

This is also apparent from BLM's response to comments. In response to the Operator Group's comment that it "agrees with BLM's determination that it lacks authority to require application of the air quality mitigation measures," WY_016684–85, BLM did not correct the Operator Group but merely pointed it to its additional explanations in the ROD. *Id.* Intervenors' characterization that BLM "did not agree with the Operator Group" in its response to these comments twists the record. *See* Private Intvs.' Br. at 37–38. Again, BLM made a consistent point to clarify the extent of its authority when necessary to respond to comments, so the absence of a statement correcting the Operator Group's comment is telling. *See supra* p. 46.

The ROD also does not contain any language abandoning or altering the legal position BLM staked out in the EIS. *See* WY_016752–54. That BLM provided *additional* explanations in

[19] Private Intervenors' argument that "Plaintiffs disregard applicant-committed measures to protect air quality," Private Intvs.' Br. at 37, misses the point. The issue here is BLM's legal position on mitigation that was not volunteered by the Operator Group.

the ROD as to the air quality measures not carried forward does not excuse its legal error. If an agency decision "is based on an incorrect view of applicable law," it cannot stand unless the "mistake of the administrative body is one that clearly had no bearing on the procedure used or the substance of decision reached." *Prill*, 755 F.2d at 948 (quoting *Mass. Trustees v. United States*, 377 U.S. 235, 248 (1964)). This is consistent with the general rule that a decision based on multiple grounds, at least one of which is invalid, may be upheld only if the record establishes that "the agency would clearly have acted on that ground even if the other were unavailable." *Fogo De Chao (Holdings) Inc.*, 769 F.3d at 1149; *see also Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1331 (D.C. Cir. 2021) ("Where the [agency] rests a decision, at least in part, on an infirm ground," the court must "find the decision arbitrary and capricious.").

For example, in *International Union, United Mine Workers v. U.S. Department of Labor*, 358 F.3d 40 (D.C. Cir. 2004), the court declined to uphold a decision supported by "three seemingly independent grounds," only two of which were improper, because the court "d[id] not know—nor [was it] free to guess—what the agency would have done had it realized that it could not justify its decision" on the unlawful grounds. *Id.* at 44–45; *see also Fogo De Chao (Holdings) Inc.*, 769 F.3d at 1149 (decision unlawful when court could not "confidently say[] that the agency would have resolved the . . . petition in the same manner absent those errors"); *Williston Basin Interstate Pipeline Co. v. FERC*, 519 F.3d 497, 504 (D.C. Cir. 2008) (court must be "quite sure" the unsound reason had no bearing on decision).

Here, the Court cannot be certain that BLM's misapprehension of its authority had no bearing on its decision to reject the air quality mitigation measures. In the EIS, BLM relied on a sweeping statement about its lack of authority as its *sole* rationale for rejecting them.

WY_012951, 012959. Although the ROD provided additional rationales, including that it would rely on the State of Wyoming's authority under the Clean Air Act, WY_016752–54, BLM offered those further explanations while operating under the assumption that it had no authority to impose the rejected air quality measures. Accordingly, this is not a case where the Court can "confidently say" that "the agency would clearly have acted on that ground even if the other were unavailable," *Fogo De Chao*, 769 F.3d at 1149, or that the error "had no bearing . . . on the substance of decision reached," *Mass. Trustees*, 377 U.S. at 248.

The Court must thus reject both post-hoc rationalizations: BLM did not limit its disclaimer to non-federal lands, and BLM did not abandon its erroneous view of its legal authority by the point of the ROD. BLM meant what it said in the EIS.

B. BLM Was Wrong That It Lacked Authority.

Even if the Court accepts BLM's post-hoc position, BLM misinterpreted its legal authority when it rejected the air quality mitigation measures. This legal error requires reversal even if BLM was not *required* to impose the air quality measures because "discretion must be exercised through the eyes of one who realizes she possesses it." *Transitional Hosps. Corp. v. Shalala*, 222 F.3d 1019, 1021, 1029 (D.C. Cir. 2000); *Mass. Trustees*, 377 U.S. at 248 (agency's incorrect view of applicable law requires reversal unless "clearly had no bearing on the procedure used or the substance of decision reached"); *see also Sea-Land Serv.*, 137 F.3d at 646; *Prill*, 755 F.2d at 947.

1. <u>BLM Had Authority to Impose the Rejected Air Quality Measures.</u>

If the Court agrees that BLM meant what it said in the EIS—that it lacked any authority to require the requested air quality mitigation measures—then this claim is easily resolved. BLM admits that is wrong. *See* Fed. Defs.' Br. at 50 ("BLM does not dispute that it has authority to

impose air quality mitigation measures"); Fed. Defs.' Resp. to Pls.' Mot. for Prelim. Inj. at 33 (ECF No. 83) ("BLM has broad authority to impose mitigation measures . . . that would mitigate impacts to air resources"); *id.* ("BLM can and does impose dust abatement" and mitigation to address "mobile emissions from truck traffic"); *see also* 89 Fed. Reg. at 25,426–32 (BLM rule imposing flaring limits); WY_021610–14 (Appendix to the Casper RMP listing air quality mitigations available to BLM, including dust control measures, electric compressors, centralization of facilities, and traffic reductions). Private Intervenors agree. *See* Private Intvs.' Br. at 36 n.7. The past projects cited in Plaintiffs' opening brief also confirm BLM had authority to impose the measures requested here. *See* Pls.' Op. Br. at 49–50.

Wyoming is the only party that agrees with BLM's wholesale disclaimer of authority in the EIS. Wyo. Br. at 34. As previously explained, this position conflicts with BLM's statutory role under the MLA and FLPMA to address the air quality impacts of projects it approves. *See* Pls.' Op. Br. at 46–48, 53. Wyoming's novel argument would eviscerate BLM's entire air resources program. *See generally* https://www.blm.gov/programs/air-resources.

Wyoming is also wrong that the measures requested here would impermissibly intrude on EPA or state authority under the Clean Air Act.[20] The Clean Air Act itself states that it "shall not be construed as superseding or limiting the authorities . . . [of] any other Federal officer, department, or agency."). 42 U.S.C. § 7610(a). In the several pages Wyoming devotes to the

[20] Wyoming cites *Wyoming v. U.S. Dep't of the Interior*, 493 F. Supp. 3d 1046 (D. Wyo. 2020), a district court case that held BLM's 2016 Methane Waste Rule unlawful, but that case addressed Clean Air Act overlap as to the specific contours of that 2016 Rule, which are not at issue here. The Court also confirmed that BLM's authority to prevent waste under the MLA allowed it "to promulgate and impose regulations which may have ancillary air quality benefits and even overlap with [Clean Air Act] regulations." *Id.* at 1067 (D. Wyo. 2020); *see also California v. Bernhardt*, 472 F. Supp. 3d 573, 616 (N.D. Cal. 2020) (finding the Trump administration's rescission of that 2016 Methane Waste Rule unlawful and noting that MLA's "safeguard[] the public welfare" provision supports BLM authority to impose air quality measures).

argument that Plaintiffs ask to "uproot" the Clean Air Act, Wyoming never cites this provision. *See* Wyo. Br. at 36. Additionally, attempting to define the extent of BLM's authority based on EPA's authority conflicts with the Supreme Court's clear direction in *Massachusetts v. EPA*, 549 U.S. 497, 532 (2007), that agencies may exercise their independent statutory roles even where overlap occurs. Wyoming also does not explain why the specific pollutants being reduced—NOx and PM—matter to BLM's authority under the MLA and FLPMA. Even BLM does not argue that its authority turns on the pollutant a measure reduces. The measures requested here—such as centralization of facilities, reduced tanker traffic, dust abatement, and flaring limits, WY_012951–59—are simply project design changes and would not set criteria pollutant emissions standards in conflict with EPA or state authority under the Clean Air Act.

Wyoming finds no support for its position in *WildEarth Guardians v. BLM*, 8 F. Supp. 3d 17 (D.D.C. 2014) and *WildEarth Guardians v. Salazar*, 880 F. Supp. 2d 77 (D.D.C. 2012). *See* Wyo. Br. at 39. As Plaintiffs' have already explained, Pls.' Reply ISO Mot. for Prelim. Inj. at 23 (ECF No. 91), these cases only held that BLM could satisfy its duty to impose "terms and conditions which . . . [r]equire compliance with air and water quality standards," 43 C.F.R. § 2920.7(b)(3), with a boilerplate clause requiring compliance with those standards. *See WildEarth Guardians*, 8 F. Supp. 3d at 37–38; *WildEarth Guardians*, 880 F. Supp. 2d at 94. Neither case held that BLM lacked authority to go further.

The Court may easily reject Wyoming's remaining points. First, the language "as the Secretary deems appropriate" in Section 1732(b) of FLPMA is irrelevant because the question is not whether BLM was *required* to impose these measures but whether it had *authority* to do so. Wyo. Br. at 37–38. Second, Plaintiffs do not rest their argument on the "thin reed" of a Congressional declaration of policy in 43 U.S.C. § 1701. Wyo. Br. at 38. They offer Congress's

stated purpose of safeguarding "air and atmospheric values" as further confirmation that the broad grant of authority in 43 U.S.C. § 1732 encompasses these concerns. *See Cigar Ass'n of Am. v. U.S. FDA*, 964 F.3d 56, 62 (D.C. Cir. 2020) (considering congressional purpose in statutory construction). Third, Wyoming's narrow interpretation of the term "conservation of surface resources" in the second clause of 30 U.S.C. § 226(g) cannot be squared with *Copper Valley*, 653 F.2d at 601 & n.7, and *Natural Resources Defense Council, Inc. v. Berklund*, 458 F. Supp. 925, 936 n.17 (D.D.C. 1978). Finally, for the same reasons articulated during prior briefing, the presumption against preemption is inapplicable. *See* Pls.' Reply ISO Mot. Prelim. Inj. at 18–20 (ECF No. 91); Pls.' Resp. to Intvs.' Mot. J. Pleadings at 24–26 (ECF No. 84).

Accordingly, because BLM claimed that it lacked authority to impose the requested air quality measures, and now admits that is legally wrong, its decision cannot stand. *See Chenery I*, 318 U.S. at 94 (agency decision "may not stand if the agency has misconceived the law"); *Sea-Land Serv.*, 137 F.3d at 646 ("An agency action, however permissible as an exercise of discretion, cannot be sustained 'where it is based not on the agency's own judgment but on an erroneous view of the law.'") (quoting *Prill*, 755 F.2d at 947).

2. Even If the Court Accepts the Post-Hoc Rationalization, BLM's View of its Authority on Non-Federal Lands Was Still Erroneous.

Even if the Court accepts BLM's assertion that its disclaimer of authority was limited to non-federal lands, it is still unlawful.

At the very least, this legal position fails because BLM acknowledges it can regulate split-estate wells in essentially the same manner as wells on federal surface. *See supra* § II.B; *see also* Pls.' Op. Br. at 49–50. BLM's assertion that it lacks similar authority as to Fee/Fee/Fed wells is also wrong, for reasons Plaintiffs previously explained. *See supra* § II.C. Moreover, even BLM acknowledges that its authority over Fee/Fee/Fed wells extended to at least one of the air

quality measures proposed here: flaring limits. WY_012958 (proposed measure AQ-9). In prior briefing, BLM conceded that it has authority to impose conditions on Fee/Fee/Fed surface operations to "prevent waste or loss of federal oil and gas." Fed. Defs.' Resp. to Pls.' Mot. for Prelim. Inj. at 27; *see also* Fed. Defs.' Br. at 51–52 (citing BLM's waste-prevention authority under the MLA, 30 U.S.C § 187, and Federal Oil and Gas Royalty Management Act, 30 U.S.C § 1756). In addition to improving air quality, flaring limits are a waste prevention measure as they reduce waste of the natural gas product caused by flaring. *See* 89 Fed. Reg. at 25,379; *California v. Bernhardt*, 472 F. Supp. 3d at 584 (flaring limits reduce methane, the primary component of natural gas, as well as volatile organic compounds, nitrogen oxides, and particulate matter). PIM 2018-014 also makes clear that BLM can impose waste prevention measures on Fee/Fee/Fed wells. WY_011710. Thus, even for Fee/Fee/Fed wells BLM must admit that it was wrong to reject every proposed air quality measure on the "no authority" rationale.

In sum, BLM's disclaimer of authority over air quality measures was unlawful either way the court looks at it: as applicable to all lands or just non-federal lands. That legal error requires reversal of the ROD. *See Chenery I*, 318 U.S. at 94; *Prill*, 755 F.2d at 948.

C. The Unexplained Reversal Concerns Only the Change in BLM's Legal Position.

Finally, BLM's disclaimer of authority over air quality mitigation measures was unlawful for an additional reason: it was an unexplained reversal of BLM's interpretation of authority. *See Encino Motorcars, LLC v. Navarro*, 579 U.S. 211, 218, 222 (2016) (finding agency interpretation that conflicted with decades-old practice to be arbitrary and capricious when agency gave "little explanation" for the change). The argument is that BLM changed its longstanding legal position on its authority to require air quality mitigation. *See* Pls.' Op. Br. at 49–51. The past projects are simply evidence of BLM's prior legal position. *Id.* It is irrelevant

that BLM has on other occasions simply relied on state Clean Air Act enforcement to protect air quality, Private Intvs.' Br. at 38, because the issue is only whether BLM's *legal position* has shifted. Additionally, past agency planning, guidance, and rulemaking documents dating back to at least 2007 also demonstrate BLM's longstanding position that it has authority to impose air quality mitigation measures to projects it approves. Pls.' Op. Br. at 50–51. This is sufficient to find that BLM's disclaimer of authority here was in conflict with its prior interpretation. *See Encino Motorcars*, 579 U.S. at 222. The Court can thus easily dispense with BLM's and Intervenors' arguments. Fed. Defs.' Br. at 54–55; Private Intvs.' Br. at 38.

VII. BLM FAILED TO CONSIDER OR ADHERE TO ITS FLPMA DUTY TO AVOID UNNECESSARY OR UNDUE DEGRADATION.

One of BLM's most essential statutory mandates is its FLPMA duty to "take any action necessary to prevent unnecessary or undue degradation of the [public] lands." 43 U.S.C. § 1732(b). That "UUD" standard prohibits BLM from taking action that will result in either unnecessary degradation or in undue degradation. *See Mineral Policy Ctr. v. Norton*, 292 F. Supp. 2d 30, 43 (D.D.C. 2003). It is the "heart of FLPMA." *Id.* at 33. Yet in approving the RMP amendment here, granting the Project a controversial exemption from a longstanding protection for nesting raptors, BLM did not even *consider* this UUD standard, much less reasonably explain why it was satisfied. That violated its basic APA obligation to demonstrate that it "considered the relevant factors" with "a discernable path to which the court may defer." *Am. Radio Relay League, Inc. v. FCC*, 524 F.3d 227, 241 (D.C. Cir. 2008) (citing *State Farm*, 463 U.S. at 42–43). For this reason alone, the RMP amendment must be set aside under the APA.

As to the substantive question of whether the RMP amendment will result in UUD, the Court is limited to the explanations BLM itself gave as to why this additional harm to raptors is not "undue" or "unnecessary." *See State Farm*, 463 U.S. at 50. There are no such explanations

here, and this Court "cannot uphold silence." *Lemoyne-Owen College v. NLRB*, 357 F.3d 55, 61 (D.C. Cir. 2004). The post-hoc rationalizations in briefing just underscore the absence of such reasoning in the record—and fail to refute that the degree of harm from this RMP amendment was both unnecessary to the full development of Converse County oil and gas deposits and "something more than the usual effects anticipated from appropriately mitigated development." *TRCP*, 661 F.3d at 76. For both reasons, the RMP Amendment must be set aside.

A. BLM Failed to Consider or Reasonably Explain Why the RMP Amendment Would Not Result in UUD.

Plaintiffs do not ask the Court to "turn FLPMA's substantive requirement to prevent [UUD] into a procedural one." Fed. Defs.' Br. at 61; Wyo. Br. at 45–46. Private Intvs.' Br. at 51–52. They assert only that BLM violated bedrock APA principles by failing to consider an important factor—its duty to prevent UUD—and reasonably explain why it was satisfied.

For every agency action, Section 706 of the APA requires an agency to "articulate a satisfactory explanation for its action" that is "sufficient to enable [the court] to conclude that the [action] was the product of reasoned decisionmaking." *State Farm*, 463 U.S. at 43, 52; *see also FCC v. Prometheus Radio Project*, 592 U.S. 414, 423 (2021) ("The APA's arbitrary-and-capricious standard requires that agency action be reasonable and reasonably explained."). Reasoned decisionmaking requires an agency to consider every "important aspect of the problem," *State Farm*, 463 U.S. at 43, which includes an agency's statutory obligations, *Mozilla Corp v. FCC*, 940 F.3d 1, 60 (D.C. Cir. 2019) (per curiam). When the record fails to demonstrate that the agency considered an important factor, or fails to explain the agency's reasoning for a court's review, it must be set aside under the APA. *See Am. Radio Relay*, 524 F.3d at 241 (record must provide "assurance that [the agency] considered the relevant factors" and "a discernable path to which the court may defer"); *Transactive Corp. v. United States*, 91 F.3d 232, 236 (D.C.

Cir. 1996) ("In order to ensure that an agency's decision has not been arbitrary, we require the agency to have identified and explained the reasoned basis for its decisions."); *Pub. Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1216 (D.C. Cir. 2004) ("[T]he complete absence of any discussion of a statutorily mandated factor leaves us with no alternative but to conclude that the agency failed to take account of this statutory limit on its authority, making the agency's reasoning arbitrary and capricious.") (cleaned up).[21]

In short, the APA itself required BLM to take explicit account of its UUD duty when amending the Casper RMP and reasonably explain why it satisfied that statutory duty. BLM failed to do so. In an administrative record spanning over 46,000 pages, the only place the UUD standard is ever mentioned is public comments, *e.g.*, WY_006350; WY_012283; WY_012190; a BLM document summarizing those comments without response, WY_000431; and a comment response from BLM confirming that it did not discuss the standard, WY_012337. "It is difficult . . . to comprehend how [BLM] could have—as it now insists—exercised its judgment with respect to a [legal duty] that it never mentions." *Anacostia Riverkeeper, Inc. v. Jackson*, 798 F. Supp. 2d 210, 239 (D.D.C. 2011).

BLM asserts that it was nonetheless "clearly aware" of the UUD standard. Fed. Defs.' Br. at 61. However, there is no evidence in the administrative record that BLM *considered* that UUD standard when amending the RMP, much less a *reasonable explanation* from BLM as to why no

[21] Wyoming is wrong that this basic APA standard only applies to formal rulemaking or statutes demanding formal findings. Wyo. Br. at 46–47; *see, e.g.*, *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416–20 (1971) (holding that agency failed to provide sufficient explanation that highway approval complied with statutory obligation to "minimize harm," even though it was an informal decision and the statute did not require "formal findings"); *Getty v. Federal Sav. and Loan Ins. Corp.*, 805 F.2d 1050, 1055 (D.C. Cir. 1986) (finding conclusory reference to standard insufficient to show that agency considered statutory mandate, even though statute did not require "formal findings," because an agency must always "provide the court an explanation sufficient to allow [it] to properly carry out [its] review").

UUD would result. Although BLM did not even go this far, "[m]erely referencing a requirement is not the same as complying with that requirement. And stating that a factor was considered—or found—is not a substitute for considering or finding it." *Cigar Ass'n*, 964 F.3d at 61 (quoting *Gerber v. Norton*, 294 F.3d 173, 185 (D.C. Cir. 2002)); *see also Dickson*, 68 F.3d at 1405 ("When an agency merely parrots the language of a statute without providing an account of how it reached its results, it has not adequately explained the basis for its decision"); *Getty*, 805 F.2d at 1055 (finding conclusory reference to standard insufficient to show that agency gave it consideration or an "explanation sufficient to allow [it] to properly carry out [its] review").

Aside from confusing the basic APA standard for a "fictional legal standard," Wyo. Br. at 46, BLM and Intervenors have no response. They do not dispute that the UUD standard was an important factor or point to record evidence that BLM considered it.

The cases they cite are also inapposite, as none dealt with a scenario in which BLM failed to consider its UUD duty or explain why it was satisfied. *See* Fed. Defs.' Br. at 61; Private Intvs.' Br. at 51–52; Wyo. Br. at 45–47. In *Wyoming Outdoor Council*, 176 IBLA 15 (Sept. 11, 2008), the Interior Board of Land Appeals, which does not apply APA standards, found only that BLM did not have "a procedural obligation under NEPA" to use the EIS to identify "a threshold beyond which any impacts would be considered unnecessary or undue." *Id.* at 46. It agreed FLPMA imposes a substantive obligation but found BLM "was cognizant of" it and reasonably determined no UUD would result. *Id.* at 46. Then, in *Biodiversity Conservation Alliance v. BLM*, No. 9-cv-08, 2010 WL 3209444 (D. Wyo. June 10, 2010), the court affirmed the Board's findings based on "abundant evidence in the record that BLM carefully considered UUD and determined no UUD would result." *Id.* at *13. Similarly, *Board of County Commissioners of County of San Miguel v. U.S. BLM*, No. 18-cv-01643, 2022 WL 472992 (D. Colo. Feb. 9, 2022),

is inapposite as BLM there expressly "considered its obligation" to avoid UUD and *explained* why no UUD would result. *Id.* at *24. In contrast, BLM here failed to demonstrate that it considered the UUD standard or reasonably explain why no UUD would result.

In short, "[t]he complete absence of any discussion of [this] statutorily mandated factor leaves [the Court] with no alternative but to conclude that the agency failed to take account of this statutory limit on its authority, making the agency's reasoning arbitrary and capricious." *Pub. Citizen*, 374 F.3d at 1216. For this reason alone, the Court must set aside the RMP amendment.

B. By Approving the RMP Amendment, BLM Failed to Prevent UUD.

In their response briefs, BLM and Intervenors argue strenuously that the RMP amendment does not violate BLM's duty under 43 U.S.C. § 1732(b) to prevent UUD. The Court cannot entertain any of these arguments as they are all post-hoc rationalizations. *State Farm*, 463 U.S. at 43, 50. BLM itself never reached any conclusions about why the Operator-friendly terms of this blanket exemption from the raptor nest protection were "necessary" to the Project or why the resulting harms were not "undue." Even if the Court could consider the post-hoc rationales, they fail to refute that the degree of harm from this RMP amendment was both unnecessary and "something more than the usual effects anticipated from appropriately mitigated development," *TRCP*, 661 F.3d at 76 (cleaned up), violating BLM's duty to prevent UUD.[22]

1. <u>The RMP Amendment Will Cause Greater Than Usual Effects from Appropriately Mitigated Development.</u>

Abundant science shows that raptors are highly sensitive to oil and gas activity near their nests during the breeding season. *See* Pls.' Op. Br. at 17–18. Among other concerns (like

[22] BLM's new "Public Lands Rule" includes a definition of UUD that is consistent with the definitions cited in Plaintiffs' opening brief. *See* 89 Fed. Reg. 40,308 (effective June 10, 2024).

trampling), noise and human activity can cause birds to abandon the nest, harming or killing the unattended eggs or nestlings. *Id.* To protect raptors, their young, eggs, and nests from unlawful "take" under the Migratory Bird Treaty Act, 16 U.S.C. § 703(a), the Casper RMP has for decades included "Timing Limit Stipulations" prohibiting surface disturbance or occupancy near raptor nests from February 1 to July 31, or until young birds have fledged. WY_021960; *see also* WY_020901. This is not a "blunt" tool, Private Intvs.' Br. at 40, but an incredibly effective one. Timing limits were already subject to a well-established exception process allowing BLM, in consultation with the Wyoming Game and Fish Department, to lift the requirement if it "would not jeopardize the wildlife population being protected." *See* WY_020221–22.

At the request of the Operator Group, BLM traded this blanket protection for a blanket exemption. Rather than a case-by-case exemption process overseen by wildlife biologists, BLM simply waived the requirement for non-eagle raptor nests in the Project area under one key condition: the operator begin operations before the timing limit period and operate continuously until completion. WY_016730. The hypothesis—a completely untested hypothesis unsupported by evidence in the EIS—was that raptors would not use the nest or would acclimate to the activity. WY_008454–55.

The Court need not look far to determine whether this RMP amendment will result in "something more than the usual effects anticipated from appropriately mitigated development." *TRCP*, 661 F.3d at 76. The EIS acknowledges as much. WY_012502. "[A]ppropriately mitigated development" in this context is the longstanding status quo of Timing Limitation Stipulations to protect raptor nests, which the RMP amendment removes. The EIS concedes that the RMP amendment eliminating those protections will increase harm to raptors, WY_012502; WY_013196; WY_013198; WY_013206–07, and "could increase the likelihood of a take,"

WY_013198. This in turn could result in "[l]ong-term changes in migratory bird species occurrence and diversity." *Id.* Although operators claimed that year-round drilling near these nests would have the ancillary environmental benefit of reduced emissions, a claim they recycle here, Private Intvs.' Br. at 42, BLM was clear that it "does not agree that drilling during timing stipulations results in an overall environmental benefit." WY_012133.

In their response briefs, BLM and Intervenors offer three reasons why this does not constitute "something more than the usual effects anticipated from appropriately mitigated development." *TRCP*, 661 F.3d at 76. First, they assert that BLM enjoys broad discretion under FLPMA's "multiple use" and "sustained yield" mandate. Private Intvs.' Br. at 46; Fed. Defs.' Br. at 56. However, FLPMA's UUD mandate limits that discretion. Moreover, even the multiple-use standard requires "harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment . . . and not necessarily [] the combination of uses that will give the greatest economic return or the greatest unit output." 43 U.S.C. § 1702(c). It is thus "past doubt that the principle of multiple use does not require BLM to prioritize development over other uses." *Richardson*, 565 F.3d at 710.

Second, Private Intervenors paradoxically claim that eliminating a decades-old requirement for oil and gas development across Wyoming did not change "standard practice." Private Intvs.' Br. at 47. That other buffer *sizes* have been applied in other contexts (for instance, on Forest Service land) misses the point. *See id*. The utter elimination of the buffer was "unprecedented in Wyoming," WY_014372, and "a significant shift in policy." WY_008314.

Third, they suggest that the mitigation package under Option 6 somehow compensated for the loss of the seasonal buffer. *See* Fed. Defs.' Br. at 59–60; Wyo. Br. at 48–49; Private Intvs.' Br. at 47–48. This contradicts BLM's conclusion that Option 6 would increase harm to

raptors, WY_012502; WY_013196; WY_013198; WY_013206–07, and record evidence about the ineffectiveness of these replacement measures. As for the continuous drilling requirement, the Wyoming Game and Fish Department "disagree[d] with the broad assumption that a nesting raptor is tolerant of development activity, if the nest site is chosen while development is occurring," WY_008359, and explained that "continuous operations . . . is untested in terms of being an appropriate measure to avoid or minimize impacts to nesting raptors," WY_008358. BLM agreed that "there was some uncertainty in this approach and that some birds may still be stressed even by on-going activity." Fed. Defs.' Br. at 59; WY_013201 (same).[23]

BLM and Intervenors also reference the short list of other mitigation requirements like pit covers, but this does not help them either. That list just repackages measures already required regardless of TLS relief. In the words of the Wyoming Game and Fish Department, they "amount[] to a few best management practices, which should be implemented in any development scenario." WY_008358; *compare* WY_016730 *with* WY_016741; WY_016752 (already requiring pit covers and fences to exclude wildlife; wildlife exclosures on secondary containment systems; and covers on stacks, trenches, and other open structures to exclude wildlife); WY_023455–78 (already requiring pit covers to exclude wildlife, requiring pits to be kept free of oil, and requiring secondary containment storage around all tanks to avoid contamination); Onshore Order 7, 58 Fed. Reg. 47,354, 47,364 (Sept. 8, 1993) (already requiring pit covers to deter bird entry); WY_000925 (already requiring perching deterrents on flare

[23] Private Intervenors' point about the 2024 eagle permit rule is irrelevant, Private Intvs.' Br. at 49 n.15, as this is post-decisional and involves entirely different species, which among other differences have "demonstrate[d] increased tolerance to human activities." 89 Fed. Reg. 9920, 9937 (Feb. 12, 2024). No such findings were "demonstrated" here. *See* WY_013200–01; *see also* WY_018443–44 ("Raptor tolerance levels to disturbance can be species-specific.").

stacks); WY_000919 (existing requirements for handling and disposing of hazardous wastes and refuse).

BLM and Intervenors also tout the adaptive management plan and nest surveys, but these do not reduce impacts. The purpose of the pre-development nest survey is to *disqualify* nests from timing limit protection, WY_016729, and the 2007 Casper RMP already requires operators to be aware of their project's proximity to raptor nests. The adaptive management plan merely requires nest monitoring to document observed impacts, so as to inform *future* management after all 98 instances of timing relief approved in the ROD are used. *See* WY_016731; WY_016739. Because BLM only expects 98 Project well pads to ever be subject to the timing limit stipulation, WY_013199, this means the entire Project is likely to be developed before BLM possibly shifts course under its adaptive management plan.

2. The RMP Amendment Is Likely to Cause MBTA Violations.

BLM and Intervenors cannot dispel the EIS's predictions that development near raptor nests could result in incidental "take" in violation of the MBTA. *See* 16 U.S.C. § 703(a) (prohibiting "take" of "any migratory bird, . . . nest, or egg"); WY_012884; WY_018443–44; WY_018437; WY_018443; WY_018455–56 (potential take could include nest abandonment, nest destruction, killing or wounding of fledging offspring and foraging birds). BLM insists the MBTA's take prohibition is irrelevant because the government cannot be held liable for take in its regulatory capacity. Fed. Defs.' Br. at 61. However, it does not matter whether BLM itself would be liable; what matters is that unlawful take is predicted to occur at all.

Intervenors' insistence that the EIS's incidental take prediction "does not account for the management measures included in Option 6" is also false. Private Intvs.' Br. at 48–49. The EIS's statement that "exceptions to timing limit stipulations could adversely impact or increase the

likelihood of a take" was common to all options for timing limit relief evaluated under Alternative B. *See* WY_013196 (making this statement immediately after introducing the six options for timing relief). Confirming this, the EIS states that even accounting for mitigation, the residual impacts of "[a]ll non-eagle raptor amendment options with the exception of Option 1" include nest abandonment and vehicle collisions. WY_013207. And while the EIS predicted a likelihood of take for all timing limit relief, it predicted greater impacts under Options 3 and 6. WY_008420; WY_013200–01. Concerns about MBTA violations from U.S. Fish and Wildlife Service and BLM staff further highlight the likelihood of unlawful take. *See* WY_000112–13 (warning of MBTA violations); WY_007812 ("[t]his is why [the timing limit stipulation] is used in the first place, to avoid unintentional take of migratory birds.").[24] This further demonstrates that the amendment will result in "undue degradation." *See Colorado Env't Coal.*, 165 IBLA 221, 229 (2005) (UUD is conduct "that does not comply with applicable law or regulations").

3. These Raptor Harms Are Unnecessary to the Project.

The degradation from the RMP amendment was also "unnecessary" to the Project. Plaintiffs do not argue that BLM must always accept the "least impactful alternative," Private Intvs.' Br. at 50; Wyo. Br. at 50, but it must prohibit harm that is "unnecessary." 43 U.S.C. § 1732(b). In the oil and gas context, "unnecessary degradation" means degradation that is "unnecessary to . . . the development [of] the [oil and gas] permits." *See TRCP*, 661 F.3d at 76.

Here, the harm authorized by the RMP amendment was not necessary to development of oil and gas in the Project area—or even year-round drilling. Private Intervenors claim relief from

[24] The decision also contravenes Executive Order 13,186. *See* Pls.' Op. Br. at 61. BLM's conclusion that it complied with Executive Order 13,186 by "reduc[ing] incidental take of migratory birds to the greatest extent practicable while still meeting the purpose and need of the Final EIS and the agency mission," WY_016654, is not supported by the record as there were feasible options to timing relief with fewer raptor impacts. *See infra* § VII.B.3.

the timing limits was a "hallmark" feature of this Project because the limits impacted a "vast portion of the Project area" and supposedly created a "serious obstacle to efficient development of the Project." Private Intvs.' Br. at 40–41. However, BLM found only 98 of the 1,500 well pads would ever be subject to the timing limits, WY_013199, so Private Intervenors' claim about their "vast" impact and "serious obstacle" is just wrong. Private Intervenors also fail to support their claim, with evidence from the record, that the "inefficiencies" of staggering development around the raptor breeding season rendered the wholesale removal of this protection *necessary* to developing these oil and gas reserves.

Even accepting the dubious premise, neither Intervenors nor BLM have refuted that there were other less harmful ways to accomplish their goal. They do not dispute that BLM has permitted year-round drilling for other Projects through the established process for case-by-case exceptions "without . . . a land use plan amendment." WY_012341; WY_012321; *see also* Fed. Defs.' Br. at 57; WY_020221–22; WY_016738. BLM found this existing process would have the "[l]owest impact" to raptors. WY_012502. They also do not dispute that Options 4 and 5 were less-degrading options that would have streamlined the process for timing relief but with greater oversight of wildlife biologists, as opposed to an automatic exemption. *See* WY_013201.

Private Intervenors' vague contention that BLM "could not determine" that those options "would provide a greater level of protection" does not tell the whole story. *See* Private Intvs.' Br. at 51. As previously explained, Pls.' Op. Br. at 20, Option 6 was added after BLM circulated the Supplemental EIS but was nearly identical to the Operator Group's proposed Option 3.[25]

[25] Option 6 differs in only a few insignificant ways, including a new cap of 98 instances of timing relief (meaningless because 98 is the total number anticipated, WY_013199), and a new requirement for an operator-submitted "wildlife report" to assist BLM in determining nests for which timing limit relief would be *unnecessary*. *Compare* WY_012107–09 *with* WY_016729.

WY_016737; WY_012478 (Options 3 and 6 are "similar"); WY_016649 (differences between Option 3 and 6 not "relevant to environmental concerns"). Both grant automatic relief from timing limits without prior approval from BLM if the operator follows certain conditions and both allow development to continue even if a nest becomes active. WY_012107–09; WY_016729–31. Wildlife experts critiqued Option 3 as inadequately protecting raptors. *See, e.g.*, WY_008358–59 (Wyoming Game and Fish Department opinion that "[Option 3] is a far lesser commitment on the part of the OG than the implementation of their MBCP, and . . . , would undermine the BLM's ability to meet conservation obligations . . . for these species."); WY_008329 ("the options proposed by the operator group do not provide sufficient mitigation to protect raptors, and offer weaker protections than the Migratory Bird Conservation Plan"); WY_008733 (U.S. Fish and Wildlife Service agreement that "impacts from Option 3 on long-term conservation of raptor populations ranges from moderate to major"). In the Final EIS, BLM only concluded that Option 6 would provide greater certainty than Option 3 "regarding the collection of data" and "how many" nests could be impacted, WY_013201–02, but again concluded these differences were not "relevant to environmental concerns," WY_016649.

By contrast, Options 4 and 5 would have included detailed wildlife management plans, increased BLM oversight, and required re-evaluation of activities if a nest became active during development. *See* WY_012114–18, 012122–24; WY_040450–53. Wildlife experts advocated for these options due to their increased raptor protections. *See* WY_008733 (U.S. Fish and Wildlife Service agreement "that both Options 4 and 5 would provide for the conservation of migratory birds"); WY_009424–25; WY_008313–14; WY_008359–60; WY_011198–202. In particular, Option 5 would have required a Migratory Bird Conservation Plan and was Fish and Wildlife Service's preferred alternative since it "could promote bird conservation *and* allow greater

flexibility for oil and gas activities year-round." *See* WY_004642 (emphasis added). Wyoming Department of Game and Fish also advocated for this option because "the impacts would be less than Option 2 or Option 3." WY_008360 (noting the many "benefits of such a comprehensive plan" including its coverage of "the entire [Project area] regardless of surface ownership."). The Final EIS provided that "[t]here is a potential that [Options 4 and 5] could provide a greater level of protection than Option 3 but this would not be known until development of [the plans]." WY_013201. The EIS also concluded that the plans associated with Options 4 and 5 would "avoid and minimize impacts to migratory birds." WY_013201; *see also* WY_008419 (same).[26] Private Intervenors' assertion that these plans had not been developed, Private Intvs.' Br. at 51, overlooks the multi-year efforts put into their development, particularly the Migratory Bird Conservation Plan which was near completion when the EIS was issued. *See* WY_007807–48 (draft plan); WY_008002–45; (revised draft); WY_008117 (timeline for plan development).

In short, while the Operator Group may have preferred timing limit relief without the oversight or requirements of Options 1, 4 and 5, the automatic exemption approach of Option 6 was certainly not necessary to the Project. *See* WY_007814 (opinion of BLM staff that amendment was unnecessary because "[b]etter planning is all that is needed from the operators"); WY_007807–48 (opinion of BLM staff that "[a]llowing the operators to make final decisions on development during nesting periods is a conflict of interest."); WY_012324 (BLM comment rejecting as "blatantly wrong" the assertion that "Option 4 does not provide certainty").

[26] Again, *TRCP* does not support BLM. *See* Pls. Op. Br. at 62–63. In *TRCP*, the court found no UUD violation because seasonal restrictions around wildlife sites were replaced with "significantly better" protections and there was no "other solution that still would permit significant recovery of natural gas" in the Project area. 661 F.3d at 71, 78. Here, by contrast, the RMP amendment worsened raptor protections while disregarding less harmful options.

C. The UUD Issue Was Exhausted.

Finally, Private Intervenors alone attempt to dodge review of this claim by asserting Plaintiffs failed to exhaust the UUD issue. Private Intvs.' Br. at 52. They are wrong. "To preserve a legal or factual argument, [courts] require its proponent to have given the agency a 'fair opportunity' to entertain it in the administrative forum before raising it in the judicial one." *Nuclear Energy Inst., Inc. v. EPA*, 373 F.3d 1251, 1290–91 (D.C. Cir. 2004) (quoting *Wash. Ass'n for Television & Children v. FCC*, 712 F.2d 677, 681 (D.C. Cir. 1983)). To sufficiently exhaust an issue, "a claimant need not raise an issue using precise legal formulations, as long as enough clarity is provided that the decision maker understands the issue raised." *Lands Council v. McNair*, 629 F.3d 1070, 1076 (9th Cir. 2010). "Accordingly, alerting the agency in general terms will be enough if the agency has been given 'a chance to bring its expertise to bear to resolve [the] claim.'" *Id.* (quoting *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 899 (9th Cir. 2002)) (alterations in original).

Notably, BLM refutes this argument by asserting that it was "clearly aware" the RMP amendment had to satisfy its UUD obligation even though it "did not explicitly discuss" it. Defs.' Br. at 61. Confirming this, Plaintiff Powder River Basin Resource Council submitted comments during scoping arguing that eliminating the timing limits would result in UUD. WY_006350 ("Year-round drilling creates unacceptable impacts to sensitive wildlife populations . . . which BLM has an obligation to protect as part of its duties to prevent [UUD] under FLPMA."); *see also* WY_000431 (BLM acknowledgment of UUD comment). It submitted similar comments on the Supplemental EIS. WY_008790; WY_008784. An industry group also raised UUD. *See* WY_009759 (arguing year-round development near raptor nests would *not* cause UUD). BLM thus had a "fair opportunity" to determine whether the RMP amendment

would result in UUD, which is all that is required. *See Nuclear Energy Inst.*, 373 F.3d at 1290. To the extent Intervenors mean Plaintiffs were required to raise the issue at a different stage, they are wrong. *See id*. at 1290–91 (issue not waived even when party failed to raise it during comment period because discussion at public meeting put agency on notice).

VIII. VACATUR IS THE APPROPRIATE REMEDY.

Vacatur is statutorily required in a successful APA challenge and the appropriate remedy here. 5 U.S.C. § 706(2) (courts "*shall* . . . hold unlawful and set aside agency action" that is "arbitrary, capricious . . . or otherwise not in accordance with law") (emphasis added). BLM and Intervenors request the opportunity for more briefing on that issue. However, the parties did not agree to a case schedule that bifurcated remedies issues so such arguments should have been included in their response briefs. Because the Court has all it needs to award the presumptive remedy, and to avoid prejudicial delay, the Court should proceed to order vacatur. *See California v. DOI*, 381 F. Supp. 3d 1153, 1179 (N.D. Cal. 2019); *Nat. Res. Def. Council v. U.S. DOI*, No. 18-cv-4596, 2020 WL 4605235, at *14 (S.D.N.Y. Aug. 11, 2020) (rejecting similar requests).[27]

If the Court desires more remedies briefing, Plaintiffs respectfully request that it meanwhile enjoin BLM from approving any further APDs based on the deficient EIS, ROD, and RMP amendment to preserve the status quo until it determines the appropriate final remedy. *See Diné Citizens Against Ruining Our Env't v. Haaland*, 59 F.4th 1016, 1050 (10th Cir. 2023) ("We enjoin any APD approvals based on the deficient EAs and EA Addendum until the district court determines the appropriate remedy on remand.").

[27] Private Intervenors are wrong that the Court needs further briefing about the "development" of Justice Gorsuch's June 2023 concurrence in *United States v. Texas*, 599 U.S. 670 (2023). That did not garner a majority, and it has not prompted any change in the binding standard. *See, e.g.*, *Eagle County*, 82 F.4th at 1196; *Hikvision USA, Inc. v. FCC*, 97 F.4th 938, 950 (D.C. Cir. 2024).

A. Seriousness of the Deficiencies

"Because vacatur is the default remedy . . . defendants bear the burden to prove that vacatur is unnecessary." *Am. Hosp. Ass'n v. Becerra*, No. 18-cv-2084 (RC), 2023 WL 143337, at *4 (D.D.C. Jan. 10, 2023) (quoting *Friends of the Earth v. Haaland*, 583 F. Supp. 3d 113, 156 n.29 (D.D.C. 2022)). Private Intervenors' brief confirms there is no compelling case against vacatur here.

As for the seriousness prong, they ignore case law instructing that where a NEPA analysis is incomplete in some nontrivial way, as it is here, courts must "harbor substantial doubt that . . . the agency chose correctly" because the core purpose of NEPA is to alter the agency's ultimate decision. *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 985 F.3d 1032, 1052 (D.C. Cir. 2021) (cleaned up). The Supreme Court has instructed that NEPA compliance is "almost certain to affect the agency's substantive decision." *Robertson*, 490 U.S. at 350. Accordingly, "NEPA violations are serious notwithstanding an agency's argument that it might ultimately be able to justify the challenged action." *Standing Rock*, 985 F.3d at 1053. This is particularly true given NEPA's core purpose: that federal agencies study and disclose the effects of their actions *before* they occur. *See Robertson*, 490 U.S. at 349 ("NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast."). Allowing further permit approvals based on these unlawful decisions before BLM has remedied its violations would subvert NEPA.

On remand, if further analysis shows that impacts are more significant than previously disclosed, and after consideration of new alternatives, BLM "may well approve another alternative" or take steps to address the harm. *See Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 740 (9th Cir. 2020). "NEPA is not a paper exercise, and new analyses may point in

new directions." *Or. Nat. Desert Ass'n v. BLM*, 625 F.3d 1092, 1124 (9th Cir. 2010). The NEPA violations here were particularly serious as they led BLM to reject measures that would have substantially reduced the Project's environmental impacts. These NEPA shortcomings alone thus raise substantial doubt that BLM chose correctly, favoring vacatur. *See, e.g.*, *Sierra Club v. FERC*, 867 F.3d at 1373–75, 1379 (vacating pipeline approvals due to inadequate EIS analysis of greenhouse gas emissions); *Pub. Emps. for Env't Resp. v. Hopper*, 827 F.3d 1077 (D.C. Cir. 2016) (vacating EIS lacking "hard look" at Cape Wind Project's impacts and requiring agency to fix errors "before Cape Wind may begin construction"); *High Country Conservation Advocs.*, 951 F.3d at 1230 (10th Cir. 2020) (vacating EIS and decision due to agency's failure to consider reasonable alternative).

The two remaining violations were equally serious. BLM's adoption of the Casper RMP amendment without considering or complying with its statutory duty to "prevent unnecessary or undue degradation" alone warrants vacatur. *See Humane Soc'y of U.S. v. Zinke*, 865 F.3d 585, 606, 614–15 (D.C. Cir. 2017) (deeming the "failure to address an important aspect of the problem" a "major shortcoming[]" that casts "substantial doubt whether the Service chose correctly") (cleaned up); *Stewart v. Azar*, 366 F. Supp. 3d 125, 155 (D.D.C. 2019) ("Failure to consider an important aspect of the problem is a "'major shortcoming[ ]' generally warranting vacatur.") (quoting *Humane Soc'y*, 865 F.3d at 614–15). On remand, once BLM properly considers that statutory limit on its authority, it is unlikely that it could or would reaffirm the RMP amendment, given the likelihood of unlawful "take" of raptors and rescission of the Trump administration's policy on incidental take under the Migratory Bird Treaty Act, *see* 86 Fed. Reg. 54,642 (Oct. 4, 2021); *see also* Pls.' Op. Br. at 21–22 (providing background on unlawful policy that undergirded RMP amendment).

BLM's misapprehension of its authority to impose air quality mitigation measures likewise raises substantial doubt that BLM chose correctly. *See Sea-Land Serv.*, 137 F.3d at 646–47 (vacating decision because agency misunderstood scope of its authority). Once that error is corrected, it is foreseeable that BLM would require measures to avoid ambient air quality violations. The projected NAAQS violations; serious concerns EPA and others voiced about them; and fact that BLM regularly attaches air quality mitigation measures to other projects are strong evidence it would do so here. *See* Pls.' Op. Br. at 49–50 (noting four similar Wyoming oil and gas projects on which BLM imposed the air quality measures like those rejected here).

In short, the violations here raise substantial doubt that BLM chose correctly, and BLM's "path on remand is not so obvious . . . that it warrants remand without vacatur absent a meaningful possibility of disruption." *Anderson v. U.S. Dep't of Hous. & Urb. Dev.*, No. 23-cv-1259 (DLF), 2024 WL 1701641, at *17–18 (D.D.C. Apr. 19, 2024) (vacating although agency "may be able readily to cure" its deficiencies because Defendants have "not shown a 'substantial likelihood of disruptive effect' after vacatur") (cleaned up); *see also Env't Def. Fund v. FERC*, 2 F.4th at 976 (vacating because it was "far from certain" agency "'chose correctly'") (quoting *Allied-Signal v. Nuclear Regul. Comm'n*, 988 F.2d 146, 150 (D.C. Cir. 1993)).

B. Disruptive Consequences

Neither BLM nor Intervenors identify any unusually disruptive impacts of vacatur here that would be sufficient to depart from the presumptive remedy of vacatur. Although making conclusory allegations of economic disruption, Private Intervenors base those claims entirely on declarations submitted at the preliminary injunction stage, failing to apprehend the significant difference between the two remedies. Unlike the requested preliminary injunction—which would have halted project development—vacating the ROD and EIS would not enjoin development of

existing permits or even prohibit BLM from approving new ones, after proper NEPA study. Vacating the RMP amendment will also simply reinstate the prior status quo of case-by-case exceptions to raptor Timing Limit Stipulations.

It is therefore no surprise that Private Intervenors—who are best suited to provide it—fail to offer any concrete evidence or even well-articulated claims of harm. For example, they vaguely assert that companies have made "myriad investments and contractual commitments," but provide no evidence of those contracts or how vacatur will disrupt them. Private Intvs.' Br. at 57–58. The declarations from the preliminary injunction stage are inapposite as they describe the consequences of *enjoining drilling* of *existing permits* on which companies had executed vendor contracts. *See, e.g.*, 80-2 ¶ 14. The conclusory assertion that "these harms would occur" from vacatur, despite the vast differences in that remedy, does not satisfy their burden. *See Pub. Emps. for Env't Resp. v. U.S. Fish & Wildlife Serv.*, 189 F. Supp. 3d 1, 3 (D.D.C. 2016) (claims of "significant consequences" to industry were too "imprecise or speculative" to withhold vacatur); *Diné Citizens Against Ruining Our Env't v. U.S. Off. Of Surface Mining Reclamation & Enf't*, No. 12-cv-01275, 2015 WL 1593995, at *3 (D. Colo. Apr. 6, 2015) (rejecting "conclusory statements" of economic harm as insufficient to overcome presumption in favor of vacatur).

The possible delay of new permit issuance while BLM corrects its deficiencies is also insufficient to withhold vacatur because that is the ordinary consequence of NEPA compliance. "If this argument were enough to carry the day, then it seems vacatur would never be appropriate." *Pub. Emps. for Env't Resp.*, 189 F. Supp. 3d at 4; *see also Park Cnty. Res. Council v. U.S. Dep't of Agric.*, 817 F.2d 609, 618 (10th Cir. 1987), *overruled on other grounds by Vill. of Los Ranchos De Albuquerque v. Marsh*, 956 F.2d 970 (10th Cir. 1992) ("Any increased costs from delay in drilling while an EIS is being prepared . . . is not sufficient to establish prejudice,

because NEPA contemplates just such a delay."). Although Intervenors identify no "settled transactions" made in anticipation of future permit approvals, those would not favor vacatur either. *See Nat. Res. Def. Council v. EPA*, 676 F. Supp. 2d 307, 316–17 (S.D.N.Y. 2009) (pre-approval expenditures did not warrant remand without vacatur because company "made its investment before making its … application [to the agency], and without any guarantee of [agency] approval").

Private Intervenors claim vacating the RMP amendment could *cause* environmental harm by forcing drilling near a raptor nest to stop and resume later, causing additional traffic. Private Intvs.' Br. at 57. This is only possibly a concern if the Court issues its ruling when the timing limit is in effect (February 1 to July 31). Moreover, BLM was clear that it "does not agree that drilling during timing stipulations results in an overall environmental benefit." WY_012133. If BLM disagreed, it could still allow drilling to continue after vacatur through a case-by-case exemption. *See* WY_016738.

Finally, the Court must also consider the environmental harm vacatur will avoid. *See Pollinator Stewardship Council v. U.S. EPA*, 806 F.3d 520, 532 (9th Cir. 2015) (asking whether leaving decision in place risks more environmental harm than vacating). Just since the Court denied Plaintiffs' Motion for Preliminary Injunction, operators have drilled 47 new wells under these unlawful decisions, and BLM has approved another 138 new drilling permits. *See* Stellberg Decl. ¶ 4. Allowing yet more to be approved under these illegal decisions would risk irreversible damage to the air, water, and wildlife resources BLM failed to properly consider; would diminish options to modify the Project; and would undermine the "substantial public interest in having governmental agencies abide by the federal laws that govern their existence." *League of Women Voters of the U.S. v. Newby*, 838 F.3d 1, 12 (D.C. Cir. 2016) (cleaned up); *see also Wilderness*

Soc'y v. Morton, 479 F.2d 842, 892–93 (D.C. Cir. 1973) ("scrupulous vindication of [federal law] . . . looms more important . . . than the embarkation on any immediate or specific project").

In sum, Defendants and Intervenors have not carried their burden to "show[] that vacatur would be so disruptive as to justify a departure from [the] normal course." *Cboe Futures Exch., LLC v. SEC*, 77 F.4th 971, 982 (D.C. Cir. 2023) (vacating without discussion of seriousness factor because of poor showing on disruptive consequences).

CONCLUSION

For these reasons, Plaintiffs respectfully request that this Court grant their Motion for Summary Judgment (ECF No. 116) and vacate the unlawful decisions.

Respectfully submitted this 16th day of May 2024.

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