# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLORADO Lewis T. Babcock, Judge

Civil Action No. 1:16-cv-01822-LTB

WILDERNESS WORKSHOP,

WESTERN COLORADO CONGRESS,

NATURAL RESOURCES DEFENSE COUNCIL, and

SIERRA CLUB,

Plaintiffs,

v.

UNITED STATES BUREAU OF LAND MANAGEMENT, an agency of the U.S. Department of the Interior,

RYAN ZINKE, in his official capacity as Secretary of the U.S. Department of the Interior,

BRIAN STEED, in his official capacity as Deputy Director of the U.S. Bureau of Land Management,

GREG SHOOP, in his official capacity as Acting Colorado State Director of the U.S. Bureau of Land Management, and

GLORIA TIBBETTS, in her official capacity as Acting Field Manager of the Colorado River Valley Field Office of the U.S. Bureau of Land Management,

Defendants.

Memorandum Opinion and Order

Babcock, J.

This matter is before me on Plaintiffs' Petition for Review of Agency Action.

Plaintiffs seek judicial review of defendant Bureau of Land Management's (referred

to as "Defendants" or "BLM") Resource Management Plan concerning land managed under BLM's Colorado River Valley Field Office (see Addendum for a list of acronyms used in this Opinion). The public officers named as defendants in this case have been updated pursuant to Fed. R. Civ. P. 25(d). The matter has been fully briefed (ECF Nos. 24, 27, 28). After carefully analyzing the briefs and the relevant portions of the record, I GRANT in part and DEFER final ruling pending further briefing on remedies in accordance with this Order.

### I. BACKGROUND

#### A. Statutory and regulatory background

# 1. The National Environmental Policy Act ("NEPA")

NEPA is the "basic national charter for protection of the environment" and its "procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. § 1500.1. Congress enacted NEPA to ensure that all federal agencies consider the environmental impacts of their actions to prevent or eliminate damage to the environment. *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989); *see* 42 U.S.C. § 4321.

Under NEPA, federal agencies must "include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on," in relevant part, the environmental impact of the proposed action and alternatives to the proposed action. 42 U.S.C. § 4332(C)(i), (iii). An agency can choose to perform an Environmental Assessment, or may proceed directly to preparing an Environmental Impact Statement ("EIS"). *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 703 n.23 (10th Cir. 2009) ("*New Mexico*").

The requirement to complete an EIS aims to ensure "that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts" and guarantees "that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

### 2. The Administrative Procedure Act ("APA")

NEPA provides no private cause of action and thus Plaintiffs' claims arise under the APA. Pls.' Compl., ECF No. 1 at 14; *see New Mexico*, 565 F.3d at 704. Under the APA, a person who is suffering a "legal wrong because of agency action" is entitled to judicial review. 5 U.S.C. § 702.

An agency's NEPA compliance is reviewed to see whether it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *New Mexico*, 565 F.3d at 704 (quoting 5 U.S.C. § 706(2)(a)). The agency action is arbitrary and capricious if the agency

(1) entirely failed to consider an important aspect of the problem, (2) offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise, (3) failed to base

its decision on consideration of the relevant factors, or (4) made a clear error of judgment.

Id. (quoting Utah Envtl. Cong. v. Troyer, 479 F.3d 1269, 1280 (10th Cir. 2007)) (quotations omitted).

When reviewing factual determinations made by agencies under NEPA, short of a "clear error of judgment," an agency is required to take "hard look" at information relevant to a decision. *Id.* A court considers only the agency's reasoning at the time it made its decision, "excluding post-hoc rationalization concocted by counsel in briefs or argument." *Id.* (citing *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1165 (10th Cir. 2002)); see 3 Charles H. Koch, Jr. and Richard Murphy, *Admin. L. & Prac.* § 9:26 (3d ed. 2018) ("Without engaging in review of the actual resolution of factual questions of this variety, courts by using the hard look standard assure that the agency did a careful job at fact gathering and otherwise supporting its position.").

"Deficiencies in an EIS that are mere 'flyspecks' and do not defeat NEPA's goals of informed decisionmaking and informed public comment will not lead to reversal." *Id.* (citing cases). As such, the agency action is presumed valid and the burden of proof rests upon those challenging the agency action. *Id.* (citing *Citizens' Comm. to Save Our Canyons v. Krueger*, 513 F.3d 1169, 1176 (10th Cir. 2008)). "So long as the record demonstrates that the agencies in question followed the NEPA procedures . . . the court will not second-guess the wisdom of the ultimate decision."

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Utahns for Better Transp. v. U.S. Dep't of Transp., 305 F.3d at 1163 (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. at 350).

#### 3. The Federal Land Policy and Management Act ("FLPMA")

In enacting the FLPMA, Congress aimed to empower the Secretary of the Interior to manage the United States' public lands. 43 U.S.C. § 1701. The Secretary, through BLM, "shall manage the public lands under principles of multiple use and sustained yield." 43 U.S.C. § 1732(a). "Multiple use" means "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values . . . ."43 U.S.C. § 1702(c).

In managing public lands, BLM must develop resource management plans ("RMPs"). *BioDiversity Conservation All. v. Bureau of Land Mgmt.*, 608 F.3d 709, 712 (10th Cir. 2010) (citing 43 U.S.C. § 1712; 43 C.F.R. § 1601.0–5(n)). An RMP is "designed to guide and control future management actions and the development of subsequent, more detailed and limited scope plans for resources and uses." 43 C.F.R. § 1601.0–2; *see Norton v. S. Utah Wilderness All.*, 542 U.S. 55, 59 (2004) ("Generally, a land use plan describes, for a particular area, allowable uses, goals for future condition of the land, and specific next steps."). The approval of an RMP "is considered a major Federal action significantly affecting the quality of the human environment" and thus requires an EIS. 43 C.F.R. § 1601.0–6.

#### a. Oil and gas development under the FLPMA

On public lands, the FLPMA entrusts BLM with the "orderly and efficient exploration, development and production of oil and gas." 43 C.F.R. § 3160.0-4; 43 U.S.C. § 1732(b); *see* 43 C.F.R. § 3100.0-3. This is done by using a "three-phase decision-making process." *W. Energy All. v. Zinke*, 877 F.3d 1157, 1161 (10th Cir. 2017) (quoting *Pennaco Energy, Inc. v. U.S. Dep't of Interior*, 377 F.3d 1147, 1151 (10th Cir. 2004)).

In the first phase, BLM creates RMPs. *Id.* Part of an RMP indicates the lands open or closed to the development of oil and gas, and subsequent development must abide by the terms of the RMP. *Id.* 

In the second phase, through state offices, BLM identifies parcels that it will offer for lease, responds to potential protests of the suggested parcels, and conducts "a competitive lease sale auction." *Id.* at 1162 (citing 43 C.F.R. Subpart 3120). During the identification of parcels available for leasing, a 2010 Department of Interior policy mandates additional review, including: (1) an interdisciplinary team reviewing the parcels proposed for leasing and conducting site visits; (2) identifying issues BLM must consider; and (3) obliging BLM to consult other stakeholders. *Id.* 

In the final phase, after the sale of a lease, BLM "decides whether specific development projects will be permitted on the leased land." *Id.; see* 43 C.F.R. § 3162.3-1; 30 U.S.C. § 226. BLM must approve permits to drill after parcels of land are leased. 30 U.S.C. § 226(g).

### B. Factual background

Within its administrative boundary, BLM's Colorado River Valley Field Office ("CRVFO") has over 2.9 million acres of public and private surface land. Administrative Record ("AR") 184599. At issue here is the administration of 505,200 acres of BLM-managed surface lands and 701,200 acres of BLM-managed federal mineral estate that lie beneath other federal, state, and private surface ownership, apart from National Forest lands. AR 184647–48. These lands within the purview of the CRVFO primarily extend across Eagle, Garfield, Mesa, Pitkin, and Routt counties. AR 184600. Additionally, the Roan Plateau, which is within the purview of the CRVFO, is exempted from the RMP in question because it is under the management of a separate RMP. AR 184600–02; *see Colorado Envtl. Coal. v. Salazar*, 875 F. Supp. 2d 1233, 1238 (D. Colo. 2012) (concerning challenges to the RMP of the Roan Plateau).

In 2007, BLM formally initiated a process to revise the 1984 Glenwood Springs Resource Area RMP. AR 184604, 184644. Pursuant to the FLPMA, BLM began the revision process: (1) "in response to new issues that have arisen since the original plan was prepared in 1984 and to higher levels of controversy around existing issues"; (2) "to allow for updated BLM management direction, guidance, and policy"; and (3) because "new resource assessments and scientific information have become available to help the CRVFO revise previous decisions and address increased uses and demands on BLM lands (such as oil and gas development and recreation), as well as the protection of natural and cultural resources." AR 184646. The RMP analyzed environmental effects, thus the terms "RMP" and "EIS" are interchangeable in the context of this case. *See* AR 184644.

BLM noted a timeline of the revision process as promulgated in 43 C.F.R. Subpart 1610. AR 184650. This revision process includes: (1) identifying planning issues; (2) developing planning criteria; (3) collecting data and information analyzing the management situation; (4) formulating alternatives; (5) assessing and selecting a preferred alternative; (6) opening the RMP and EIS to public comment for review; and (7) signing the Record of Decision ("ROD"), marking the approval from BLM of the RMP. *Id*.

Of the considered alternatives, Alternative A was classified as the "no action alternative" meaning that "current management practices, based on existing RMPs and other management decision documents, would continue." AR 184606. This allowed for 672,500 acres of the Federal mineral estate to be open to fluid mineral leasing, leaving 28,700 acres closed. AR 184683.

Alternative B was the "mixed use" alternative which allocated "public land resources among competing human interests, land uses, and the conservation of natural and cultural resources." AR 184606. This allowed for 603,100 acres of the Federal mineral estate to be open to fluid mineral leasing, leaving 98,100 acres closed. AR 184683.

Alternative C was the conservation alternative, which emphasized "protecting resource values and enhancing or restoring the ecological integrity of habitats for all priority plant, wildlife, and fish species." AR 184608. This would allow for 521,500 acres of the Federal mineral estate to be open to fluid mineral leasing, leaving 179,700 acres closed. AR 184683.

Alternative D was the resource use alternative, which emphasized "allowable uses that maximize resource production in an environmentally responsible manner." AR 184608. This would allow for 648,400 acres of the Federal mineral estate to be open to fluid mineral leasing, leaving 52,800 acres closed. AR 184683.

BLM selected Alternative B as its preferred alternative. AR 184606. BLM opened the proposed RMP to public comment and found that "[n]o modifications were necessary as a result of the protests, but some clarifications were made . . . ." AR 188126. On June 12, 2015, the ROD was signed, marking the approval from BLM of the RMP and EIS. AR 188163.

#### II. ANALYSIS

Plaintiffs are non-profit organizations who focus on environmental issues. ECF No. 1 at 7–10. The parties agree that this case is currently in the first stage of the three-stage oil and gas development process under the FLPMA. Pls.' Opening Br., ECF No. 24 at 7; Defs.' Resp., ECF No. 27 at 2. Plaintiffs challenge multiple aspects of the RMP, alleging generally that BLM "failed to take a hard look at the direct, indirect, and cumulative impacts to people and environment" and "failed to consider a reasonable range of alternatives." ECF No. 24 at 10, 36.

### A. Hard look at the direct, indirect, and cumulative impacts to people and environment

In approving the RMP, Plaintiffs claim that BLM failed to take a hard look at the severity and impacts of: (1) greenhouse gas ("GHG") pollution and climate change; (2) methane emissions; and (3) oil and gas on human health.

In an EIS, BLM must consider the direct, indirect, and cumulative predicted impacts of a proposed action. *New Mexico*, 565 F.3d at 703 (citing 42 U.S.C. § 4332(2)(C); 40 C.F.R. pt. 1502 & §§ 1508.11, 1508.25(c)). "The significance of an impact is determined by the action's context and its intensity." *Hillsdale Envtl. Loss Prevention, Inc. v. U.S. Army Corps of Engineers*, 702 F.3d 1156, 1166 (10th Cir. 2012) (citing *Middle Rio Grande Conservancy Dist. v. Norton*, 294 F.3d 1220, 1224 (10th Cir. 2002)). "Applicable regulations require agencies to consider ten factors when assessing intensity, including the proposed action's effects on public health, the unique characteristics of the geographic area, the uncertainty of potential effects, and the degree of controversy surrounding the effects on the human environment." *Id.* (citing 40 C.F.R. § 1508.27(b)).

### 1. GHG pollution and climate change

Plaintiffs contend that BLM: (1) failed to analyze the foreseeable indirect GHG emissions resulting from combustion or other end uses of the oil and gas extracted from the planning area; (2) failed to consider the cumulative impacts of GHG emissions associated with oil and gas production; and (3) failed to analyze the significance and severity of the volume of emissions.

#### a. Foreseeable indirect impacts of oil and gas

Plaintiffs argue that BLM failed to include in the RMP an analysis of the reasonably foreseeable indirect impacts of oil and gas. ECF No. 24 at 13. They contend that the "reasonably foreseeable effects of allowing fossil fuel extraction on public lands include the emissions resulting from eventual combustion of that fuel," and that BLM did not include the emissions analysis resulting from combustion. *Id.* at 13–14. Plaintiffs state that BLM recognized that decisions made under the RMP may have indirect effects resulting from activities that release GHG emissions, but BLM "failed to analyze the foreseeable emissions that will result from the processing, transmission, storage, distribution, and end use of these hydrocarbons." *Id.* at 14.

BLM responds that it provided sufficient information on the indirect effects "while candidly discussing the limitations in BLM's ability to assess such impacts based on the information available at the planning stage." ECF No. 27 at 18. It adds that even though it estimated the total number of wells that would be drilled over the life of the RMP, it additionally noted the speculative nature of forecasting oil and gas production and was thus justified to provide a qualitative analysis. *Id.* at 19. Further, BLM points to reasoning in the RMP that because natural gas produces fewer GHG emissions, if it were to displace coal and oil, it could in fact reduce GHG emissions. *Id.* BLM surmises that this potential outcome means that quantifying GHG emissions would be potentially misleading and thus it was not arbitrary or capricious in leaving it out. *Id.*  Plaintiffs reply that BLM agrees that it must consider the indirect effects of burning the natural gas under the RMP and states it does so by focusing on a qualitative analysis. Pls.' Reply, ECF No. 28 at 3. Plaintiffs continue that this is flawed because it is not sufficient for BLM to claim as its qualitative analysis that an effect is unforeseeable and merely speculate without supplying what information is missing and why it could not be obtained. *Id.* at 4.

"Indirect impacts are defined as being caused by the action and are later in time or farther removed in distance but still reasonably foreseeable." *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d at 1177 (citing 40 C.F.R. § 1508.8(b)). An effect is considered reasonably foreseeable if it is "sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision." *Colorado Envtl. Coal. v. Salazar*, 875 F. Supp. 2d at 1251 (citing cases).

Courts have found that combustion emissions are an indirect effect of an agency's decision to extract those natural resources. *See San Juan Citizens All. v. U.S. Bureau of Land Mgmt.*, No. 16-CV-376-MCA-JHR, 2018 WL 2994406, at \*10 (D.N.M. June 14, 2018) (collecting cases).

While *San Juan Citizens Alliance* concerned protests to oil and gas leasing, which occurs at a later stage of the oil and gas development process than what Plaintiffs are protesting here, another court has ruled that BLM needed to consider indirect effects of combustion of fossil fuels in an RMP. *W. Org. of Res. Councils v. U.S. Bureau of Land Mgmt.*, No. CV 16-21-GF-BMM, 2018 WL 1475470, at \*13 (D. Mont. Mar. 26, 2018), *appeal docketed*, No. 18-35849 (9th Cir. Oct. 12, 2018) ("In light of the degree of foreseeability and specificity of information available to the agency while completing the EIS, NEPA requires BLM to consider in the EIS the environmental consequences of the downstream combustion of the coal, oil and gas resources potentially open to development under these RMPs.").

In *High Country Conservation Advocates v. United States Forest Service*, the defendant argued that it was too speculative to know how much coal would be mined from then-unbuilt mines and it could not provide analysis of the potential combustion. 52 F. Supp. 3d 1174, 1196 (D. Colo. 2014) ("*High Country*"). That argument failed though, as the court found that

[t]he agency cannot—in the same [final] EIS—provide detailed estimates of the amount of coal to be mined [] and simultaneously claim that it would be too speculative to estimate emissions from "coal that may or may not be produced" from "mines that may or may not be developed." The two positions are nearly impossible to reconcile.

Id. at 1196–97.

It is arbitrary and capricious for a government agency to use estimates of energy output for one portion of an EIS, but then state that it is too speculative to forecast effects based on those very outputs. *Cf. WildEarth Guardians v. U.S. Bureau of Land Mgmt.*, 870 F.3d 1222, 1234 (10th Cir. 2017) (holding that BLM erred by relying on some portions of a government report, but not acknowledging other portions).

Even though in *High Country* the challenged analysis regarding GHG emissions was of only three mines and here BLM estimates over 4,000 new wells will be drilled, the reasoning remains analogous. 52 F. Supp. 3d at 1198; AR 185778. BLM had data projecting outputs of natural gas under each alternative. AR 185947. Additionally, BLM had data comparing resultant GHG emissions from the combustion of different fossil fuels, including natural gas. AR 185232. BLM had the ability to provide more specific estimations than it did and BLM's reasoning that it was merely too speculative to provide the estimations is belied by its own analysis in the RMP. *See Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1072 (9th Cir. 2002) ("An agency may not avoid an obligation to analyze in an EIS environmental consequences that foreseeably arise from an RMP merely by saying that the consequences are unclear or will be analyzed later when an [Environmental Assessment] is prepared for a site-specific program proposed pursuant to the RMP.").

Therefore, BLM acted in an arbitrary and capricious manner and violated NEPA by not taking a hard look at the indirect effects resulting from the combustion of oil and gas in the planning area under the RMP. BLM must quantify and reanalyze the indirect effects that emissions resulting from combustion of oil and gas in the plan area may have on GHG emissions.

b. <u>Cumulative impacts of GHG and climate change</u> Plaintiffs argue that BLM failed to analyze the cumulative climate change impacts in its RMP at a regional, national, and global scale. ECF No. 24 at 14–15. Plaintiffs contend that BLM "should have included CRVFO GHG emissions increases, *added* to other past, present, and reasonably foreseeable BLM-managed fossil fuel extraction emissions on a regional and national scale." ECF No. 24 at 15 (emphasis in original). Plaintiffs continue that since BLM did not sufficiently consider the effects of GHG emissions on the CRVFO's lands, it violated NEPA, as a court cannot "defer to a void." *Id.* at 16 (quoting *High Country*, 52 F. Supp 3d at 1186).

In response, BLM argues that Plaintiffs merely disagree with BLM's methodology, and it is a court's task to simply decide whether BLM's actions had a rational basis and took into consideration the relevant factors. ECF No. 27 at 21. BLM points to parts of the RMP to show that it provided a qualitative assessment of cumulative climate change impacts and such an approach was reasonable under NEPA. *Id.* at 21–22 (citing AR 185240–42). It elaborated that this approach sufficiently provided information on all the relevant geographic scales. *Id.* at 22.

Plaintiffs reply that BLM is incorrect to characterize its analysis as qualitive because it merely provided data that climate impacts from resource use on the CRVFO's land were comparatively small compared to state, regional, and global totals. ECF No. 28 at 6–7.

The parties appear to agree that BLM contained its analysis in the RMP concerning cumulative impacts of climate change to AR 185240–42. ECF Nos. 24 at 15–16; 27 at 21–22. In the EIS, BLM wrote that

Cumulative climate change impacts are caused by CRVFO GHG emissions and increases in regional, national, and global GHG emissions. GHG emissions increase with increased population growth, industrial activity, transportation use, energy production, and fossil fuel energy use. As mentioned earlier, CRVFO emissions may or may not increase state, national, or global GHG emissions due to regulatory and market forces. AR 185240. BLM summarized potential impacts, stating that "[c]umulative GHG emissions may increase if project GHG emissions add to global GHG emissions" and that cumulative GHG emissions may not increase if oil and gas is produced in other basins or if natural gas is used. *Id*.

BLM explained that "[q]uantification of cumulative climate change impacts, such as changes in temperature, precipitation, and surface albedo, is beyond the scope of this analysis" and that potential increase in emissions and carbon sequestration could not be predicted with accuracy. *Id.* The remaining section of the cumulative climate change impact analysis read that climate change predictions for the region of western Colorado are "based on global GHG emission inventory projections and global climate change modeling." AR 185240–42.

"Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." *Id.* 

The impacts to consider include ecological, aesthetic, historic, cultural, economic, social, or health considerations. *Wyoming v. U.S. Dep't of Agric.*, 661 F.3d 1209, 1251 (10th Cir. 2011) (explaining that the scope of an EIS includes cumulative impacts, and thus the considerations of direct and indirect effects apply similarly to cumulative effects); *see* 40 C.F.R. §§ 1508.7, 1508.8, 1508.25. However, agencies must only discuss those impacts which are reasonably foreseeable. Id. (quoting

Utahns for Better Transp., 305 F.3d at 1176).

As such, "cumulative impacts that are too speculative or hypothetical to meaningfully contribute to NEPA's goals of public disclosure and informed decisionmaking need not be considered." *Wyoming v. U.S. Dep't of Agric.*, 661 F.3d at 1253.

[A] meaningful cumulative impact analysis must identify five things: (1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions—past, present, and proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate.

San Juan Citizens All. v. Stiles, 654 F.3d 1038, 1056 (10th Cir. 2011) (quoting

TOMAC, Taxpayers of Michigan Against Casinos v. Norton, 433 F.3d 852, 864 (D.C.

Cir. 2006)).

The Tenth Circuit has found a district court to err when the district court held that an agency was "woefully inadequate" in failing to discuss cumulative impacts when the agency action in the final EIS concerned an initial, "overarching framework." *Wyoming v. U.S. Dep't of Agric.*, 661 F.3d 1253. The court in *Wyoming* dealt with an initial plan regarding three government actions that would then undergo their own NEPA evaluations. *Id.* It found for the agency because those "procedural planning rules would not have any concrete, measurable *cumulative impact* until the [agency] implemented them in response to specific proposals in the future." *Id.* (alteration and emphasis added). The court found those impacts as too speculative and did not "meaningfully contribute to NEPA's goals of public disclosure and informed decisionmaking . . . ." *Id.* 

Considering that there necessarily will be more specific regulations regarding the actual leasing and drilling approvals, the cumulative impacts are undoubtedly more foreseeable at that time. *See* 43 C.F.R. Subpart 3120; *Diné Citizens Against Ruining Our Env't v. Jewell*, 839 F.3d 1276, 1289 (10th Cir. 2016) (holding that an agency did not violate NEPA when it deferred cumulative impacts analysis to an Environmental Assessment); *cf. Theodore Roosevelt Conservation P'ship v. Salazar*, 616 F.3d 497, 504 (D.C. Cir. 2010) (holding that an RMP does not "include a decision whether to undertake or approve any specific action") (citing 43 C.F.R. § 1601.0–5 (n)).

Therefore, in the RMP, BLM took an appropriately hard look at the cumulative climate change impacts. *See Hillsdale Envtl. Loss Prevention, Inc. v. U.S. Army Corps of Engineers*, 702 F.3d at 1177–78 (explaining that courts are not in a position to decide the propriety of competing methodologies and must simply determine whether the agency had a rational basis for employing the challenged method, especially when the dispute involves a technical judgment within the agency's area of expertise) (citing cases).

c. <u>Analysis of the significance and severity of the</u> <u>volume of emissions</u>

Plaintiffs claim that BLM violated NEPA by not taking a sufficiently hard look at the economic downsides regarding GHG emissions contemplated in the RMP. ECF No. 24 at 17–21. Plaintiffs argue that BLM was wrong to state in the RMP that tools did not then exist to measure incremental climate impacts of GHG emissions associated with specific activities. *Id.* at 18. Plaintiffs reason that BLM was of aware, and arbitrarily disregarded, the social cost of carbon protocol (the "Protocol"), which contextualizes the costs associated with climate change. *Id.* at 18–19. Plaintiffs continue that "BLM was particularly obligated to address the economic impact of GHG emissions by estimating their social cost because the agency did provide monetized estimates of the benefits of oil and gas production." *Id.* at 19.

Plaintiffs concede that BLM is not required to conduct a cost-benefit analysis, but looks to *High Country* to support the proposition that BLM acted in an arbitrary and capricious manner by choosing to quantify the benefits of an action, but then incorrectly claimed that it could not analyze the related costs. *Id.* (quoting 52 F.Supp.3d at 1191). Specifically, Plaintiffs argue that BLM presented benefits concerning economic, revenue, and employment data across the studied alternatives, but then did not quantify the economic costs related to those benefits. *Id.* at 20.

BLM responds that its chosen method to analyze climate change impacts is entitled to deference and sufficiently complies with NEPA. ECF No. 27 at 23. BLM confirms that it need not perform a cost-benefit analysis and that the Protocol was meant to be employed in agency rulemakings, which this RMP was not. *Id.* at 23–24. Further, BLM argues that the Protocol was issued a year after the air quality modeling and calculations in the RMP were completed and revised. *Id* at 24. Finally, BLM strongly disputes that its analysis of economic impacts constitutes a cost-benefit analysis. Thus, it argues that it does not fall within the reasoning of *High Country*, because benefits were never actually presented. *Id.* at 24–27 (citing 52 F. Supp. 3d 1174).

The Protocol is an estimate of the "monetized damages associated with an incremental increase in carbon emissions in a given year. It is intended to include (but is not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services due to climate change." AR 201225. The Protocol was "designed to quantify a project's contribution to costs associated with global climate change." *High Country*, 52 F. Supp. 3d at 1190.

As the parties agree, a cost-benefit analysis is not required in an EIS. The regulations concerning an EIS read that "the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations." 40 C.F.R. § 1502.23. However, if an agency chooses to conduct a cost-benefit analysis in an EIS, that analysis should not be misleading. *High Country*, 52 F. Supp. 3d at 1182 (citing cases).

In *High Country,* the court found the analysis misleading because the agencies "expressly relied on the anticipated economic benefits of [lease modifications] in justifying their approval," but the agencies then explained "that a similar analysis of the costs was impossible when such an analysis was in fact possible and was included in an earlier draft EIS." *Id.* at 1191.

I agree with two arguments by BLM that makes *High Country* not analogous this context: (1) the economic impact analysis was not necessarily the "benefit" side of a cost-benefit analysis; and (2) BLM did not expressly rely on anticipated economic benefits in its RMP. ECF No. 27 at 25–26.

The disputed economic projections concern average annual labor income and estimated payments to counties from mineral royalty distributions. AR 185950–51. The estimations of the proposed alternative were less than those of two other proposed alternatives. *Id.* BLM noted that "[w]hile the alternatives have the potential to affect local businesses and individuals, the relative contribution of BLM activities to the local economy... and the relative differences between the alternatives would not be large enough to have any measurable effect on economic diversity or dependency." AR 185949. BLM added that "[u]nder all the alternatives, all BLM-related contributions—jobs and labor income—would continue to support less than 1 percent of totals within the impact area economy, but could be more important for smaller communities within the planning area." *Id.* 

An important aspect of *High Country* was the fact that the agencies had attempted to quantify contributions to the costs of global climate change in drafts of

their EIS, but then removed that portion "in part it seems, in response to an email from one of the BLM's economists that pointed out that the social cost of carbon protocol is 'controversial." 52 F.Supp. 3d at 1191. Plaintiffs do not posit that a similar action occurred here.

This does not speak to the potential effectiveness of the Protocol, nor when BLM may have been aware of its existence. Simply put, under 40 C.F.R. § 1502.23, BLM was not required to perform a cost-benefit analysis. It chose not to do so, provided sufficient support in the record to show this, and thus satisfied NEPA in this respect.

#### 2. Methane emissions

Plaintiffs argue that BLM failed to take a hard look at methane emissions associated with the RMP. ECF No. 24 at 21. In particular, Plaintiffs maintain that: (1) BLM arbitrarily ignored generally accepted science regarding methane's potency; and (2) BLM relied on underestimated methane emissions data.

#### a. <u>Science concerning methane's potency</u>

Plaintiffs claim that BLM used both an improper timeframe and outdated science when it considered methane emissions. ECF No. 24 at 21–26.

As part of the RMP, BLM estimated GHG emissions in assessing climate change impacts related to the plan area across the studied alternatives. AR 184835, 184842–43. In doing so, BLM used data it collects to estimate those emissions. AR 223675, 223681. A "GHG's ability to contribute to global warming is based on its longevity in the atmosphere and its heat-trapping capacity." AR 184840. In order to aggregate GHG emissions and assess their contribution to global warming, BLM uses a method from the Environmental Protection Agency ("EPA") to assign each GHG a global warming potential unit ("GWP"), which is the emission's equivalent output of carbon dioxide. *Id.* BLM assigned methane a GWP factor of 21 and considered its effects on a 100-year timeframe. *Id.* Plaintiffs dispute both aspects of this analysis.

First, Plaintiffs argue that the GWP should be analyzed using a 20-year timeframe. Plaintiffs point to the record to posit that methane's properties make it such that its effect on the climate is much greater in the short-term and that by using the 100-year timeframe, BLM significantly understates methane's impact on the climate. ECF No. 24 at 21–22. Plaintiffs highlight the data used by the Intergovernmental Panel on Climate Change. *Id.* at 22.

In response, BLM explains that it was reasonable to use a 100-year timeframe because this is what EPA used in rules and regulations that BLM explicitly relied upon in the RMP. ECF No. 27 at 31. BLM claims it adopted a 100year timeframe to keep consistent with nationwide sectoral emissions, which allowed for a more complete look at past and future GHG emissions. *Id.* BLM acknowledges that methane has a greater GWP over a 20-year timeframe, but that it acted reasonably in using a timeframe consistent in addressing all GHG emissions. *Id.* at 32.

Concerning the second issue—whether BLM improperly assigned methane a GWP of 21—Plaintiffs argue that the source relied upon by BLM had been revised,

but BLM did not reflect this in the RMP. ECF No. 24 at 22. Plaintiffs continue that if the updated GWP was used, the assumptions BLM would use for methane emissions would substantially increase. *Id.* at 23.

BLM contends that the GWP factor it used "was accepted and supported at the time the analysis was prepared and the agency explained why it had selected that factor." ECF No. 27 at 28. BLM clarifies that it acknowledged the updated GWP factor, but reasonably explained why it kept with its original option. *Id.* at 29. It maintains that it should not be required to redo analyses each time updated information enters the scientific sphere, because it would lead to a potentially endless process of re-analyzing its data. *Id* at 28–30.

Accurate scientific analysis is essential to implementing NEPA. 40 C.F.R. § 1500.1. In an EIS, an agency must "insure the professional integrity, including scientific integrity, of the discussions and analyses . . . ." 40 C.F.R. § 1502.24. In reviewing this, as discussed *supra*, courts are not in the position to decide the propriety of competing methodologies, especially when the issue involves a technical judgment within an agency's expertise. *Hillsdale Envtl. Loss Prevention, Inc. v. U.S. Army Corps of Engineers*, 702 F.3d at 1177–78; *see Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983) (holding that when examining an agency's prediction, "within its area of special expertise, at the frontiers of science," a reviewing court must generally be at its most deferential).

Here, BLM pointed to two EPA decisions to explain its choice to use the GWP factor of 21 in a 100-year timeframe. AR 223677, 223853. In one of these decisions,

EPA used a GWP factor of 21 with a 100-year timeframe. Mandatory Reporting of Greenhouse Gases, 74 Fed. Reg. 56,260, 56,395 (Oct. 30, 2009). In a technical support document prepared for BLM, it was noted that the Intergovernmental Panel on Climate Change, "the international scientific body created by the United Nations to evaluate the risk of climate change, has published more recent GWPs in its Fourth Assessment Report." AR 223840. This report included a GWP factor for methane of 25. *Id.* However, BLM chose keeps its numbers consistent with those of EPA.

It explained that while the GWPs from the Intergovernmental Panel on Climate Change

[A]re more universal and more recent than [EPA]-published GWPs, the [EPA]-published numbers are being used by companies that must report GHG emissions to [EPA], including certain sectors of the oil and gas industry. Because many U.S. companies are using [EPA]-published GWPs, and for consistency in sectoral comparisons, BLM Colorado has chosen to use [EPA] GWPs. In the event that [EPA] revises their published GWPs, BLM Colorado will follow suit.

# Id.

BLM notes that EPA changed its methane GWP factor to 25 in 2014, while still using the 100-year timeframe. ECF No. 27 at 29, n.10 (citing 2013 Revisions to the Greenhouse Gas Reporting Rule and Final Confidentiality Determinations for New or Substantially Revised Data Elements, 78 Fed. Reg. 71,904, 71,909 (Nov. 29, 2013) ("Reporting Rule Revision")). However, BLM adds that this decision postdated the revised EIS analysis. *Id.* The pertinent analysis concerning air quality modeling and calculations was published in May 2011 and was revised in August 2012. AR 223657.

Plaintiffs take issue with BLM's commitment that if EPA revised their published GWPs, BLM would follow suit. ECF No. 28 at 12. Plaintiffs claim that EPA did not update its GWP "prior to BLM's decision" which was in 2015. *Id.*; AR 188163. However, the Reporting Rule Revision noted that "the GWPs finalized in this rulemaking are only applied prospectively, and do not affect the applicability for reporters that was determined for prior years." 78 Fed. Reg 71,904, 71,938. Therefore, BLM need not reach back and re-calculate its prior analyses based on the new GWP. BLM took a sufficient hard look at methane's potency based on the applicable regulations in force at the time of its analysis and decision.

#### b. Estimations of methane emissions data

Plaintiffs argue that BLM made improper assumptions about the magnitude of methane emissions, which thereby undermined the validity of BLM's findings in the RMP. Plaintiffs claim that three incorrect assumptions were made when BLM estimated the planning area's methane emissions. ECF No. 24 at 24. First, Plaintiffs note that the modeling data came solely from survey responses of oil gas operators without being confirmed by BLM. *Id.* Second, Plaintiffs argue that the data was not based on current or historic emissions rates, but on forecast emissions in 2028. *Id.* Third, Plaintiffs claim BLM improperly adjusted these emissions rates on a faulty assumption about the implementation of control technologies on oil and gas emission sources. *Id.*  Plaintiffs request that the court follows their calculations of an assumed leakage rate. ECF No. 24 at 24–25. However, neither in their Opening Brief nor their Reply do Plaintiffs provide support by cites to the record from where they get certain numbers for their conversions. *See* ECF Nos. 24 at 25, n.19; 28 at 14, n.8. This leaves the court with no reliable way to sufficiently judge Plaintiffs' analysis on the issue. Further, Plaintiffs reference BLM rulemakings that occurred after the ROD was signed. ECF No. 24 at 25.

Plaintiffs do not persuasively explain how using industry assumptions necessarily leads to faulty data, nor do they fully develop an argument regarding the issue concerning adjusting emissions on a faulty assumption about control technologies on oil and gas emission sources in 2028. As such, I must afford the deference due to BLM on this issue and find against Plaintiffs.

#### 3. Oil and gas effects on human health

Plaintiffs argue that BLM failed to provide a meaningful analysis of the potential health impacts related to the oil and gas development projected in the RMP. ECF No. 24 at 26. Plaintiffs allege that: (1) BLM improperly dismisses the harm to humans from oil and gas development in the planning area; (2) the RMP provides insufficient information to the public regarding potential health impacts; and (3) BLM's deference in the RMP to future adaptive management and compliance with legal requirements does not substitute for a proper analysis in the RMP itself. *Id.* at 26–36. Plaintiffs add that BLM's deferral to later stages was inappropriate because Plaintiffs are faulting it for failing to disclose general health risks, not site-specific information. ECF No. 28 at 21.

# a. <u>BLM's discussion of site-specific human health</u> <u>effects of oil and gas development in the planning</u> <u>area</u>

Plaintiffs provided a voluminous submission in the record of studies, reports, and firsthand accounts which they argue paint a significantly more severe picture of the environmental impacts of oil and gas than which BLM considered. *See generally* AR 203304–217808; ECF No. 24 at 27–34. Plaintiffs dispute BLM's assertion that "no studies have documented significant cancer-based or noncancer-based health risks from oil and gas operations using emissions rates and operational practices typical of current development in the CRVFO." ECF No. 24 at 28 (quoting AR 185943). Plaintiffs cite the United States Census to show that people live physically close to the wells. *Id.* They further point to studies showing that there were adverse health effects regarding proximity to oil and gas that was more severe than what was stated in the RMP. Id. at 28–29. They add that BLM failed to take a hard look at the firsthand reports of area residents. Id. at 29–30.

BLM states that its RMP complies with the scope of the analysis required by NEPA. As discussed *supra*, this RMP is the first of a three-stage process concerning oil and gas development on public land. BLM argues that "it appropriately deferred greater and more localized detail to the implementation stages, when substantially more will be known about the specifics of development." *Id.* at 36–37.

BLM stated in its response to comments in the RMP that "new oil and gas leases must undergo an Environmental Assessment under NEPA." AR 223553. BLM argues that it is following NEPA and related regulations by deferring more detailed analysis in a process named "tiering." ECF No. 27 at 36–37.

"Tiering refers to the coverage of general matters in broader environmental impact statements . . . with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately sitespecific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared." 40 C.F.R. 1508.28.

Tiering allows for subsequent, more narrow assessments to follow broader EISs. *San Juan Citizens All. v. Stiles*, 654 F.3d at 1054 (quoting 40 C.F.R. § 1508.28). "Tiering can 'eliminate repetitive discussions of the same issues and allows the agency to focus on the actual issues ripe for decision at each level of environmental review,] while excluding from consideration issues already decided or not yet ripe." *Id.* (quoting 40 C.F.R. §§ 1502.20, 1508.28(b)) (alterations omitted).

Site-specific impacts must be analyzed under NEPA "only when a 'critical decision' has been made to act on site development—i.e., when 'the agency proposes to make an irreversible and irretrievable commitment of the availability of resources to project at a particular site." *Friends of Yosemite Valley v. Norton*, 348 F.3d 789, 801 (9th Cir. 2003), *opinion clarified*, 366 F.3d 731 (9th Cir. 2004) (quoting *State of Cal. v. Block*, 690 F.2d 753, 761 (9th Cir. 1982)).

In the context of oil and gas leasing, the site-specific impacts occur in the later stages of leasing and development. *See Pennaco Energy, Inc. v. U.S. Dep't of Interior*, 377 F.3d at 1151–52 ("BLM is initially charged with determining whether the issuance of a particular oil and gas lease is consistent with the RMP. The lessee must obtain BLM approval of an Application for Permit to Drill (APD) before commencing any 'drilling operations' or 'surface disturbance preliminary thereto.") (quoting 43 C.F.R. § 3162.3-1(c)).

NEPA requires agencies to consider context and intensity when considering if an action significantly affects the environment. 40 C.F.R. § 1508.27. When considering site-specific action, "significance would usually depend upon the effects in the locale rather than in the world as a whole." *Id*.

Therefore, it was appropriate for BLM to defer site-specific health analysis to later assessments or reports. BLM appropriately noted that it would provide more localized details when it knew more about the specifics of development. This is not to question the veracity or importance of the firsthand accounts and reports Plaintiffs note; this is merely the improper procedural stage to raise such issues.

### b. <u>BLM's discussion of general human health effects</u> of oil and gas development in the planning area

Plaintiffs argue that BLM has not sufficiently informed the public of health impacts in the RMP. They claim that BLM only provides vague, unhelpful assessments concerning risks to health including air quality, water resources management, and chemicals associated with oil and gas production. Plaintiffs also argue that BLM's plan in the RMP to provide for adaptive management or legal compliance that would occur after the RMP was too subjective and did not assure any health outcomes. ECF No. 24 at 34–36.

The RMP contained a sufficient discussion of how it describes air quality. AR 184826–34. This section contained substantive discussion of: the regulatory structure for air quality; the current conditions, including ambient air pollution concentrations, particulate matter, ozone, hazardous air pollutants, and visibility; and characterization of air quality. *Id.* The RMP contained an additional discussion on the impacts of air quality on physical, biological, and cultural resources. AR 185201–29. In part, this section discussed the environmental consequences of the impacts on air quality based on each alternative and cumulative air quality impacts. *Id.* 

BLM provided a similar analysis concerning water quality. It discussed how the RMP would affect water resources. AR 184849–57. It discussed the impacts of fluid minerals, including oil and gas, on water resources. *See e.g.* AR 185276–78, 185280–82, 185764, 185769. It discussed the potential risks of hydraulic fracturing and included in that discussion "public concern about contamination of freshwater aquifers and water wells" and accordant studies. AR 185040–44.

Additionally, BLM instituted a Comprehensive Air Resources Protection Protocol, which "describes the process and strategies the BLM will use when authorizing activities that have the potential to adversely impact air quality within the state of Colorado." AR 188793. BLM responded to public comment to add that the RMP will incorporate additional analyses and monitoring of water quality. AR 223500. In response to comments, BLM also updated the RMP "to include more comprehensive definitions and protections to municipal watersheds and public water supplies." AR 223501.

Plaintiffs argue in their Reply that BLM omitted from its analysis certain powerful pollutants that were routinely detected in air monitors in the plan area. ECF No. 28 at 18. However, as BLM noted, it is under no obligation to respond to each study cited by Plaintiffs in their brief "or to provide an encyclopedic discussion of potential health effects." ECF No. 27 at 41.

In accordance with the discussion concerning tiering, BLM's comments to provide greater context and analysis in site-specific situations in the future, and the deference I must give in situations of technical analysis, I find that BLM took a sufficiently hard look in the RMP of human health impacts of oil and gas.

#### B. Consideration of alternatives

Plaintiffs argue that BLM's range of alternatives violates NEPA by omitting any option that would meaningfully limit oil and gas leasing and development within the planning area. ECF No. 24 at 36. Plaintiffs note that "[o]f the 701,200acre mineral estate to be managed through the RMP, no alternative closes more than 179,700 acres (or 25.7 percent) to future leasing—even though, in each alternative, a significant portion of the areas left open to development have a low potential for development." *Id.* at 38–39. BLM explained its need to revise the then-enacted RMP by listing seven major issues contributing to the revision. AR 184603. These issues included managing recreation, protection of natural and cultural resources, managing vegetation, and managing surface water and groundwater. *Id.* Also included was "[m]anaging energy development, particularly regarding the designation of lands available for fluid minerals leasing and the application of lease stipulations, to protect cultural and natural resources and to minimize user conflicts." *Id.* 

These lease stipulations included no surface occupancy ("NSO") and controlled surface use ("CSU"). The NSO stipulation prohibits surface-disturbing activities, thus "[a]ccess to fluid minerals resources would require horizontal and/or directional drilling from outside the boundaries of the area with the NSO stipulation." AR 188349. The CSU stipulation "is a category of moderate constraint stipulations that allows some use and occupancy of surface lands while protecting identified resources or values." AR 188350. A CSU stipulation allows "BLM to require special operational constraints, including special design or relocating the surface-disturbing activity . . . ." *Id.* In the RMP, the studied alternatives projected between 239,400 to 356,700 acres covered under NSO stipulations and between 423,300 to 616,800 acres covered under CSU stipulations. AR 184620.

These stipulations interplay with the way development land is categorized for its potential. BLM classified development areas as high, medium, low, and no known potential. AR 185778. Within the defined areas, BLM found 20 percent of the land rated as having high potential, 12 percent with medium potential, 46 percent with low potential, and 22 percent with no known potential. *Id.* BLM estimated that 99 percent of future wells would be drilled within high potential areas—totaling 127,300 acres—with the remaining one percent of future wells on areas with medium or low potential. AR 185190, 185778. It added that "approximately 88 percent of the federal mineral estate in the planning area with high potential for oil and gas ha[d] been leased." AR 185762.

BLM noted that it did a cursory analysis of a no leasing alternative, but it reasonably rejected calls to further explore a no leasing alternative when it explained that because most of the high potential areas are already leased, "the majority of future leasing would take place in lands adjacent to existing leases." AR 223539. It added that, "[c]urrently there is no interest in leasing in areas outside high potential areas." *Id.* BLM stated that because "FLPMA mandates the BLM to manage its lands for multiple uses and sustained yield," BLM "eliminated such alternatives as closing all BLM lands to oil and gas leasing, or managing all lands for particular natural resource value to the exclusion of other resource use considerations." AR 184701.

Because of the low projected percentage of development on anything other than high potential lands, BLM argues that a no leasing alternative was not practically different than the studied alternatives, and thus BLM was not required to consider an alternative where low and medium potential lands were closed for leasing. ECF No. 27 at 14. Plaintiffs dispute this reasoning, claiming that those areas with low and

medium potential should be closed for leasing—especially if the potential for

development is so low-because BLM could then use that land more productively in

accordance with other values. ECF No. 24 at 39.

The NEPA framework concerning alternatives in a case such as this is well

explained by the Tenth Circuit, who wrote that

The "heart" of an EIS is its exploration of possible alternatives to the action an agency wishes to pursue. 40 C.F.R. § 1502.14. Every EIS must "[r]igorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14(a). Without substantive. comparative environmental impact information regarding other possible courses of action, the ability of an EIS to inform agency deliberation and facilitate public involvement would be greatly degraded. See Baltimore Gas & Elec. Co., 462 U.S. at 97, 103 S.Ct. 2246. While NEPA "does not require agencies to analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or impractical or ineffective," it does require the development of "information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned." [Colo. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1174 (10th Cir.1999)] (quotations and alteration omitted). It follows that an agency need not consider an alternative unless it is significantly distinguishable from the alternatives already considered. Westlands Water Dist. v. U.S. Dep't of the Interior, 376 F.3d 853, 868 (9th Cir.2004).

We apply the "rule of reason" to determine whether an EIS analyzed sufficient alternatives to allow BLM to take a hard look at the available options. *Id.* The reasonableness of the alternatives considered is measured against two guideposts. First, when considering agency actions taken pursuant to a statute, an alternative is reasonable only if it falls within the agency's statutory mandate. *Westlands*, 376 F.3d at 866. Second, reasonableness is judged with reference to an agency's objectives for a particular project. 30 *See Dombeck*, 185 F.3d at 1174–75; *Simmons v. U.S. Army Corps of Eng'rs*, 120 F.3d 664, 668–69 (7th Cir.1997); *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1520 (9th Cir.1992).

*New Mexico*, 565 F.3d at 708–09.

In relevant part, the court in *New Mexico* found that the defendant should have analyzed a management alternative that closed more than 17% of a certain portion of the plan area to leasing. *Id.* at 709. The court found that the defendant's justification—that it reasonably had analyzed an alternative of no development in the plan area *as a whole*—was in fact different than analyzing an alternative of no development for the specific portion of land at issue. *Id.* ("While agencies are excused from analyzing alternatives that are not 'significantly distinguishable' from those already analyzed, [] the alternative of closing only the Mesa—which represents a small portion of the overall plan area—differs significantly from full closure.").

The court reasoned that having considered an option of no development in the planning area at whole did not relieve the defendant of the duty to consider any other alternative along the spectrum between complete closure and the studied alternative which provided for the greatest closure. *Id.* at 711, n.32. "Otherwise, an agency could exclude any alternative it wished by considering (and rejecting) an extreme." *Id.* (citing *Dombeck*, 185 F.3d at 1175 (agencies must "take responsibility for defining the objectives of an action and then provide legitimate consideration to alternatives that fall between the obvious extremes.")).

Here, the same issue is at play. BLM argues it reasonably considered a no development scenario, yet that scenario considers the plan area at whole and is succinctly discarded. AR 184701, 223539. However, Plaintiffs argue that BLM should have considered "an alternative eliminating oil and gas leasing in areas determined to have only moderate or low potential for oil and gas development." ECF No. 24 at 37. This would be an alternative within the spectrum mentioned by the court in *New Mexico*. 565 F.3d at 711, n.33.

I disagree with BLM's argument that there is no substantive difference between an alternative that opens low and medium potential areas for leasing and one that does not. The basis of BLM's argument here is that it was not required to consider the latter option because such a low percentage of the low and medium potential areas were projected to be developed. ECF No. 27 at 14–15. But if those areas were open for leasing, even if there is a minimal chance for development, it would detract from BLM designating that land for other uses.

As such, "the principle of multiple use does not require BLM to prioritize development over other uses." *New Mexico*, 565 F.3d at 710. Since a "parcel of land cannot both be preserved in its natural character and mined" it seems a reasonable alternative would be to consider what else may be done with the low and medium potential lands if they are not held open for leasing. *Id.* (quoting *Rocky Mtn. Oil & Gas Ass'n v. Watt*, 696 F.2d 734, 738 n.4 (10th Cir. 1982)).

BLM points to its field guidance, which reads that it should "close lands to mineral development only when 'other land or resource values cannot be adequately protected with even the most restrictive lease stipulations." ECF No. 27 at 13–14. However, this does not excuse the fact that BLM did not closely study an alternative that closes low and medium potential lands when it admits there is an exceedingly small chance of them being leased. This alternative would be "significantly distinguishable" because it would allow BLM to consider other uses for that land. *See New Mexico*, 565 F.3d at 708–09. Therefore, BLM's failure to consider reasonable alternatives violates NEPA.

### III. CONCLUSION

I find the following regarding Plaintiffs' Petition for Review of Agency Action: Cause of action one: BLM failed, in part, to take a hard look at the severity and impacts of GHG pollution. Namely, it failed to take a hard look at the reasonably foreseeable indirect impacts of oil and gas.

Cause of action two: BLM took a sufficiently hard look at methane emissions.

Cause of action three: BLM took a sufficiently hard look at the impacts of oil and gas on human health.

Cause of action four: BLM failed to consider reasonable alternatives to oil and gas leasing and development.

Pursuant to the Order Granting Joint Motion for Procedural Order on Parties' Merits Briefing, the parties shall address remedies accordant with the present Order in separate briefing. ECF No. 23.

It is ORDERED that counsel confer and attempt in good faith to reach agreement as to remedies. If an agreement is not reached, the parties may submit briefs. This briefing will consist of one brief from each party, not exceeding 4,000 words, including everything from the caption to the certificate of service. It shall be filed with the Court **on or before December 3, 2018**.

The Court DEFERS a final ruling on the remedies until further briefing is received.

Dated: October 17, 2018 in Denver, Colorado.

BY THE COURT:

s/Lewis T. Babcock LEWIS T. BABCOCK, JUDGE

# Addendum

Administrative Procedure Act
Bureau of Land Management
Colorado River Valley Field Office
Controlled surface use
Environmental Impact Statement
Environmental Protection Agency
Federal Land Policy and Management Act
Greenhouse gas
Global warming potential
National Environmental Protection Act
No surface occupancy
Resource Management Plan
Record of Decision