

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO**

**SAN JUAN CITIZENS ALLIANCE,
WILDEARTH GUARDIANS, AMIGOS
BRAVOS, DINE CITIZENS AGAINST
RUINING OUR ENVIRONMENT, and
SIERRA CLUB,**

Plaintiffs,

v.

No. 16-cv-376-MCA-JHR

**UNITED STATES BUREAU OF LAND
MANAGEMENT, SALLY JEWELL, in her
official capacity as United States Secretary
of the Interior, UNITED STATES FOREST
SERVICE, and TOM VILSACK, in his
Official capacity as United States Secretary
of Agriculture;**

Defendants.

MEMORANDUM OPINION AND ORDER

THIS MATTER is before the Court on Plaintiffs’ *Petition for Review of Agency Action* [Doc. 1] and *Plaintiffs’ Opening Merits Brief* [Doc. 22].

Plaintiffs are a collective of citizens groups whose members variously “use and enjoy the wildlands, wildlife habitat, rivers, streams, and healthy environment on . . . lands affected by development of the 13 leases challenged” by this action. [Doc. 1 ¶¶ 12-17] Defendants are federal agencies (or the heads of such agencies) responsible for managing the at-issue public lands and resources. [Doc. 1 ¶¶ 20-23] Plaintiffs’ *Petition* challenges the joint decision of the United States Bureau of Land Management (BLM)

and the United States Forest Service (USFS or “the Forest Service”) to lease thirteen parcels of federal mineral estate in the Santa Fe National Forest (SFNF) in New Mexico. [Doc. 22 p. 12; Doc. 26 p. 7]¹ As grounds for their challenge, Plaintiffs allege that BLM and the Forest Service (collectively “the agencies”) violated the National Environmental Policy Act (NEPA), 42 U.S.C. 4321-35.

The Court has considered the parties’ submissions, the relevant law, and the record, and is otherwise fully advised. For the reasons that follow, the Court **grants in part and denies in part** Plaintiffs’ requested relief.

I. DISCUSSION

A. Overview of the Governing Law

1. NEPA

NEPA was enacted by Congress in recognition of “the profound impact of man’s activity on the interrelations of all components of the natural environment, particularly the profound influence[] of . . . resource exploitation” and “the critical importance of restoring and maintaining environmental quality[.]” 42 U.S.C. § 4331(a). Congress declared it to be “the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures . . . to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.” *Id.*

¹ In citing the parties’ briefs, the Court uses the page numbers assigned by the Court along with the document number, rather than the parties own page numbers.

To that end, NEPA requires “all agencies of the Federal Government” to:

- (A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man’s environment;
- (B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality [CEQ] . . . which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;
- (C) 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 [environmental impact] statement [EIS] by the responsible official on--
 - (i) the environmental impact of the proposed action,
 - (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
 - (iii) alternatives to the proposed action,
 - (iv) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and
 - (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

42 U.S.C. § 4332.

NEPA is complemented by federal regulations purposed “to tell federal agencies what they must do to comply with the procedures and achieve the goals of the Act.” 40 C.F.R. § 1500.1(a). The procedures require that “high quality” environmental information based on “[a]ccurate scientific analysis, expert agency comments, and public

scrutiny” is available to public officials and citizens before decisions are made and before actions are taken. *Id.* § 1500.1(b).

NEPA’s purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. The[] regulations provide the direction to achieve this purpose.

40 C.F.R. § 1500.1(c).

To determine whether a proposed action “significantly affect[s] the quality of the human environment,” thereby prompting the EIS requirement, 42 U.S.C. § 4332(c), the federal agency may be required to prepare an environmental assessment (EA). 40 C.F.R. § 1501.4(b). “An EA is a concise public document that briefly provides sufficient evidence and analysis for determining whether to prepare an EIS or a finding of no significant impact.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (internal quotation marks, citations and brackets omitted); *accord* 40 C.F.R. § 1508.9(a)(1). Based on the environmental assessment, a federal agency must either prepare an EIS or prepare a “finding of no significant impact” (FONSI). 40 C.F.R. § 1501.4(c)-(e). “[I]nherent in NEPA and its implementing regulations is a ‘rule of reason,’ which ensures that agencies determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decisionmaking process.” *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004) (internal quotation marks and citation omitted).

In cases requiring an EIS, the agency is required to prepare “a concise public record of decision” stating, among other things: what the decision was; all alternatives that were considered in reaching the decision; the alternatives that were “environmentally preferable”; and “whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not[.]”

40 C.F.R. § 1505.2.

The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced. Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues. Verbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement.

40 C.F.R. § 1502.15.

Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.

40 C.F.R. § 1502.24.

Agencies are encouraged to tier² their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the

² “Tiering” as it is used in NEPA is “coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific 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.

actual issues ripe for decision at each level of environmental review (§ 1508.28). Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available.

40 C.F.R. § 1502.20. “A NEPA document that tiers to another broader NEPA document . . . must include a finding that the conditions and environmental effects described in the broader NEPA document are still valid or address any exceptions.” 43 C.F.R. § 46.140.

“An [EA] prepared in support of an individual proposed action can be tiered to a programmatic or other broader-scope [EIS] . . . for a proposed action with significant effects . . . if the . . . broader [EIS] . . . fully analyzed those significant effects.” 43

C.F.R. § 46.140(c). However, “[t]o the extent that any relevant analysis in the broader NEPA document is not sufficiently comprehensive or adequate to support further decisions, the tiered NEPA document must explain this and provide any necessary analysis.” 43 C.F.R. § 46.140(b).

In cases in which a federal agency prepares a FONSI, the reviewing court must “insure that the agency [took] a ‘hard look’ at environmental consequences”; however, the Court “cannot interject itself within the area of discretion of the [agency] as to the choice of the action to be taken.” *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976). In keeping with the “hard look” requirement, some courts have held that an agency that

prepares a FONSI “must supply a convincing statement of reasons to explain why a project’s impacts are insignificant.” *Blue Mountains Biodiversity Project*, 161 F.3d at 1212; *Twp. of Lower Alloways Creek v. Pub. Serv. Elec. & Gas Co.*, 687 F.2d 732, 741-42 (3rd Cir. 1982).

2. Oil and Gas Leasing on Federal Forest Land

Oil and gas leasing on forest land is under the dual management of the United States Forest Service, which regulates the surface, and BLM, which regulates the subsurface. 30 U.S.C. § 226(g)-(h). Pursuant to the Mineral Leasing Act, 30 U.S.C. § 181-287, the Secretary of the Interior [who controls BLM] has “considerable discretion to determine which lands will be leased.” *W. Energy Alliance v. Salazar*, 709 F.3d 1040, 1044 (10th Cir. 2013). “BLM state offices administer these leases through lease sales.” *Id.* at 1042. However, “[t]he Secretary of the Interior may not issue any lease on National Forest System Lands reserved from the public domain over the objection of the Secretary of Agriculture,” who controls the USFS. 30 U.S.C. § 226(h).

In general, “[o]il and gas leasing follows a three-[phase] process.” *N.M. ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 716 (10th Cir. 2009). In the first phase, BLM prepares a land use plan called a “resource management plan,” that determines which tracts or areas of public land will be open to leasing and under what conditions. *Id.*; 43 U.S.C. § 1712(a). In the second phase, BLM may grant leases for the development of specific sites within areas that are open to leasing, subject to the requirements of the resource management plan. *Richardson*, 565 F.3d at 716; 43 U.S.C. § 1712(e). In the third and final phase, a lessee may file an application for a permit to

drill, which is subject to BLM review and approval. *Richardson*, 565 F.3d at 716; 43 C.F.R. § 3162.3-1.

Because BLM may not issue any lease on national forest land over the Forest Service's objection, 30 U.S.C. § 226(h), the two agencies operate under a memorandum of understanding concerning oil and gas leasing operations (the MOU). [Doc. 26 p. 9; BLM 11808] The MOU identifies administrative procedures and lines of authority that ensure the timely processing of oil and gas lease applications, surface use plans of operation, and applications for permits to drill. [BLM 11808] Under the MOU and applicable regulations, the Forest Service identifies the specific lands that shall be offered for lease by undertaking a process that complies with NEPA and accords with the forest land and resource management plan. 36 C.F.R. § 228.102(e). [Doc. 26 p. 9; BLM 11815] Then BLM provides a "reasonably foreseeable development scenario" for oil and gas leasing on forest lands. [BLM 11815] If the Forest Service consents to leasing, it may mandate stipulations, as appropriate, to protect the surface resources. 43 C.F.R. § 3101.7-1(a); 36 C.F.R. § 228.102(c)(1)(ii). [Doc. 26 p. 9; BLM 11816] BLM may then issue competitive leases. [BLM 11817] If, after obtaining a lease, a lessee decides to pursue development, the lessee must file an application for a permit to drill as to each well including a surface-use plan of operations that identifies the location of the drillpad and road, details of pad construction, methods of containing and disposing of waste, and a surface reclamation plan. 43 C.F.R. § 3162.3-1(d), (f); *see* 30 U.S.C. § 226(g). [Doc. 26 p. 9] The surface-use plan of operations must be approved by the Forest Service

before BLM finally approves an application for a permit to drill. 30 U.S.C. § 226(g); 36 C.F.R. § 228.107(a); 43 C.F.R. § 3162.3-1(h).

B. Factual Background

The SFNF comprises 1,567,181 acres. [FS 744 p. 5] In October 2015, BLM approved an oil and gas lease sale for thirteen parcels of federal minerals covering 19,788 acres thereof. [Doc. 26 p. 11; BLM 10206, 10212] The parcels were reviewed by the USFS to ensure that leasing would be in conformance with the applicable SFNF plans and, after imposing certain stipulations, the USFS determined that it did not object to the parcels being leased. [BLM 11314-15] The thirteen parcels are located within the easternmost part of the San Juan Basin, which is one of the United States' largest natural gas fields—containing approximately 14,995 natural gas wells as of 2012. [Doc. 26 p. 11; BLM 13091, 10271, 15447]

A lengthy history involving various agencies studying, analyzing, and evaluating the impact of oil and gas leasing in the relevant portion of the SFNF precedes the agencies' decision to issue the thirteen leases that are the subject of Plaintiff's appeal. Briefly stated, with further discussion provided as necessary in the body of this Opinion, the following actions were taken beginning in 1987.

A 1987 land resource management plan (the "Forest Plan") for the SFNF that contemplated oil and gas leasing in the San Juan Basin was created. [FS 1030, 1099] Over time, the San Juan Basin became "one of the most strategic gas producing basins to the U.S. economy[.]" [BLM 13508] By 1999, oil and natural gas valued at \$2.46 billion was produced from the basin. [BLM 13508] From 1998-2012, BLM received several

expressions of interest from the oil and gas industry related to further oil and gas leasing in the SFNF; however, because the 1987 Forest Plan was outdated and was insufficient by NEPA standards, BLM could not issue new oil and gas leases. [Doc. 26 p. 11; FS 2719, 4734, 9029, 10097, 10098, 10100, 11736, 11740, 13742, 15860, 16165]

Therefore, in 2000, a “core team” of BLM, United States Bureau of Reclamation, and Forest Service staff began working to identify issues and develop project descriptions and alternatives to develop a resource management plan, examining, among other things, oil and gas leasing and development. [BLM 15447-48] In 2003, BLM issued the “Farmington Resource Management Plan with Record of Decision” (the 2003 RMP) and a “Final Environmental Impact Statement” (Final EIS) pertaining to the New Mexico portion of the San Juan Basin. [BLM 15433, 15447, 15439] Ultimately, because the 2003 RMP and the Final EIS did not satisfy Forest Service NEPA requirements, no new oil and gas leases were issued. [Doc. 26 p. 11-12; BLM 13091]

Since the 2003 RMP did not adequately address Forest Service NEPA requirements, and because the USFS had identified the need to update the 1987 Forest Plan, the Forest Service conducted a planning-level NEPA analysis in 2006. [Doc. 26 p. 12; FS 9489-90; BLM 13023] The 2006 analysis examined the potential effects of oil and gas development in the SFNF. [BLM 13091] In 2006, a draft EIS was produced, and notice of its availability was published in the Federal Register. [BLM 13023] After addressing and correcting a “significant issue” that affected the EIS, a Final EIS and Record of Decision was issued by the Forest Service in 2008. [BLM 13023-24]

WildEarth Guardians (one of the Plaintiffs in this lawsuit) appealed the 2008 Record of Decision, and “the USFS Appeal Reviewing Officer remanded the Final EIS to the USFS for additional work on air quality.” [Doc. 26 p. 12; BLM 13024] After completing a supplemental analysis of air quality, the Forest Service issued a draft supplement to the Final EIS; this document was subject to a comment period ending in November, 2010. [Doc. 26 p. 12; BLM 13024] Then, in 2012, the Forest Service prepared a “final supplement to the final environmental impact statement” (FSFEIS) which analyzed air quality data from 2006-2011, and included data from a new air quality monitoring station. [Doc. 26 p. 13; BLM 13088] These analyses were used by the Forest Service in 2012 to amend the 1987 Forest Plan to permit oil and gas leasing. [Doc. 26 p. 13; BLM 13042-44]

In 2013, the Forest Service reviewed the 2008 Final EIS and the 2012 FSFEIS and concluded that they were “adequate for offering lands for competitive leasing.” [Doc. 26 p. 13; Doc. 22 p. 23-24; FS 16204] The Forest Service notified BLM of its decision and of stipulations applicable to each enumerated parcel of land. [Doc. 26 p.13-14; FS 16204] BLM, which served as a “cooperating agency for the preparation” of the EIS, adopted the FEIS, as supplemented, concluding that it was adequate under NEPA to issue oil and gas leases. [Doc. 26 p. 14; BLM 13016]

In 2015, BLM issued a “Decision Record” and Environmental Assessment approving for lease the 13 parcels of federal minerals at issue here subject to surface use stipulations mandated by the Forest Service. [Doc. 26 p. 14; BLM 10206] In so doing, BLM reviewed three alternative proposed actions—a “No Action” alternative denying or

rejecting expressions of interest to lease during an October 2014 competitive oil and gas lease sale (Alternative A); a proposed action that would lease twenty-five parcels covering 23,325.4 acres (Alternative B); and Alternative C, the “preferred alternative,” which BLM ultimately selected. [BLM 10219-32] The proposed action encompassed within the preferred alternative was reviewed by BLM biologists and by USFS staff for its effects on:

energy minerals; soils, watershed management and water resources; air quality; vegetation; wildlife; threatened and endangered species; cultural resources; visual resources; wild and scenic river eligibility; wilderness; social and economic resources; environmental justice; social environment; economics; recreation; rangeland and livestock grazing; fire management; public health; climate; geology; lithology, and cumulative effects.

[BLM 10210] Native American tribes were notified of the proposed action, and continual tribal consultation is being conducted by the Forest Service. [BLM 10210]

The Environmental Assessment included an analysis of the effects the proposed action would have on: wildlife, special status species, and migratory birds; air quality and climate; water quality; soil resources; dark sky resources; cultural resources and landscapes; socio economics; environmental justice; and the Old Spanish Trail. [BLM 10218, 10234-64] The Environmental Assessment tiered to and incorporated the Forest Service’s 2003 RMP, the 2008 FEIS, and the 2012 FSFEIS. [BLM 10216, 10210; BLM 11317, 11325] BLM determined that preparation of an EIS was not warranted based on a FONSI concluding that “[t]he impacts of leasing the fluid mineral estate in the [relevant areas] [were] analyzed in the 2003 RMP, [in a] 2002 Biological Assessment, and the Final EIS” issued by the Forest Service in 2012. [BLM 10213; Doc. 26 p. 14] After

denying several administrative protests of its decision, BLM issued the 13 leases. [Doc. 26 p. 14; BLM 11314, 11330, 11344]

C. Plaintiffs' Claims for Relief

Plaintiffs *Petition* contains four “Claims for Relief.” First, Plaintiffs claim that BLM violated NEPA by failing to take a hard look at the environmental impacts of oil and gas development; second, they claim that BLM violated NEPA by allegedly failing to provide a convincing statement of reasons to justify its decision to forego preparing an EIS; third, Plaintiffs allege that Defendants violated NEPA by issuing leases during a pending resource management plan amendment and forest plan revision; and finally, Plaintiffs claim that the Forest Service violated NEPA by failing to take a hard look at the impacts of oil and gas development and failing to consider significant new information and circumstances.³ [Doc. 1 p. 31-38] In accordance with these claims, Plaintiffs seek: (1) a declaration that the leasing decisions violate NEPA and its implementing regulations; (2) to enjoin Defendants from authorizing further leases within the Santa Fe National Forest pending their “full compliance” with NEPA; (3) to have this Court vacate and remand the leasing decisions; (4) to have this Court retain continuing jurisdiction of this matter until Defendants fully remedy the alleged violations enumerated in the *Petition*; and (5) to recoup their costs, fees, and expenses. [Doc. 1 p. 38-39]

II. ANALYSIS

A. Standing

³ Where Plaintiffs’ arguments regarding the Forest Service mirror the issues raised regarding BLM, the arguments are addressed together.

Plaintiffs assert that they have standing [Doc. 22, pp. 16-18], and Defendants do not contest Plaintiffs' standing. "Standing under Article III of the Constitution requires that an injury be concrete, particularized, and actual or imminent; fairly traceable to the challenged action; and redressable by a favorable ruling." *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 149 (2010). Here, within the *Petition for Review of Agency Action* and five affidavits, Plaintiffs allege and establish cognizable injuries, which are fairly traceable to BLM's sale of the leases at issue, and which are redressable by injunctive relief or remand by this Court. [Doc. 1, ¶¶ 13-19, 71-75, 86; Docs. 22-1 to 22-5] Accordingly, the Court concludes that Plaintiffs have standing to pursue this case.

B. Standard of Review

NEPA does not provide a private right of action, therefore the Court reviews Defendants' leasing decision as a "final agency action" under the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 551-59. *Wyoming v. U.S. Dep't of Agric.*, 661 F.3d 1209, 1226 (10th Cir. 2011). The Court's review is treated as an appeal, *Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1580 (10th Cir. 1994), and the Court is "highly deferential" to the agency's action, which is presumed valid. *Citizens' Comm. to Save Our Canyons v. Krueger*, 513 F.3d 1169, 1176 (10th Cir. 2008).

Under the APA, a court may set aside an agency action only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

An agency's decision 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.

Richardson, 565 F.3d at 704 (internal quotation marks and citation omitted). The burden of satisfying this standard rests with the appellants who challenge the agency's action.

Kruger, 513 F.3d at 1176.

“Agencies are not required to elevate environmental concerns over other valid concerns.” *Cure Land, LLC v. United States Dep’t of Agric.*, 833 F.3d 1223, 1235 (10th Cir. 2016) (internal quotation marks and citation omitted). “If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989). Thus, provided that “the record demonstrates that the agencies in question followed the NEPA procedures, the court will not second-guess the wisdom of the ultimate decision.” *Cure Land, LLC*, 833 F.3d at 1236 (ellipses omitted).

C. Plaintiffs’ “Hard Look” Argument

“NEPA has twin aims. First, it places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action. Second, it ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process.” *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983) (internal quotation marks and citations omitted).

“The sweeping policy goals announced in . . . NEPA are . . . realized through a set of action-forcing procedures that require that agencies take a ‘hard look’ at environmental

consequences . . . and that provide for broad dissemination of relevant environmental information.” *Robertson*, 490 U.S. at 350. While NEPA’s action-forcing “procedures are almost certain to affect the agency’s substantive decision,” it is firmly established that NEPA “does not mandate particular results, but simply prescribes the necessary process.” *Id.*

Plaintiffs argue that the agencies “failed to take a hard look at direct, indirect, and cumulative impacts of oil and gas leasing before making an irretrievable commitment of resources.” [Doc. 22 p. 25, 53] “Direct effects” are “caused by the action and occur at the same time and place.” 40 C.F.R. § 1508.8. “Indirect effects,” which “may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems[,]” “are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8(b). A “[c]umulative impact” is an “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.*

Plaintiffs argue that BLM failed to consider the impacts of granting the leases in four distinct areas of concern: (1) greenhouse gas emissions and climate change; (2) air quality, (3) water resources—including the impacts to water quantity, groundwater

quality, and surface water quality; and (4) the cumulative impacts of lease development.

[Doc. 22 p. 25-45] Defendants contend that these arguments ignore the fact that the environmental assessment tiered to the Forest Service's 2008 FEIS and 2012 FSFEIS, both of which satisfied NEPA's "hard look" requirement. [Doc. 26 p. 17]

1. Greenhouse Gas Emissions and Climate Change

On the topic of greenhouse gases, or GHGs, BLM's Decision Record states:

Information about (GHGs) and their effects on national and global climate is presented in the Air Resources Technical Report [issued by BLM in 2014]. Analysis of the impacts of the proposed action on GHG emissions [are] reported below. *Only the GHG emissions associated with exploration and production of oil and gas will be evaluated here* because the environmental impacts of GHG emissions from oil and gas consumption, such as refining and emissions from consumer-vehicles, are not effects of the proposed action as defined by the Council on Environmental Quality because they do not occur at the same time and place as the action. Thus, GHG emissions from consumption of oil and gas do not constitute a direct effect that is analyzed under NEPA. *Nor is consumption an indirect effect of oil and gas production because production is not a proximate cause of GHG emissions resulting from consumption. However, emissions from consumption and other activities are accounted for in the cumulative effects analysis.*

[BLM 10269 (emphasis added)] Among other things included in BLM's ensuing analysis of greenhouse gas emissions is a table (Table 23) which sets forth the "potential greenhouse gas emissions resulting from [the] proposed lease sale." [BLM 10271-72] In that table BLM identifies the total potential of greenhouse gas emissions from oil and gas field production at full development of the leases (118 wells is estimated to produce 11,611 metric tons per year). [BLM 10271] Table 23 also states the percentage of total

United States greenhouse gas emissions from development of the 118 wells as 0.0018%.⁴

[BLM 10272]

As to the cumulative effects of the sale of the leases on climate change, the Decision Record states:

The very small increase in [greenhouse gas] emissions that could result from approval of the action alternatives would not produce climate change impacts that differ from the No Action Alternative. This is because climate change is a global process that is impacted by the sum total of [greenhouse gas] emissions in the Earth's atmosphere. The incremental contribution to global [greenhouse gases] from the proposed action cannot be translated into effects on climate change globally or in the area of this site-specific action. It is currently not feasible to predict with certainty the net impacts from the proposed action on global or regional climate.

The Air Resources Technical Report discusses the relationship of past, present and future predicted emissions to climate change and the limitations in predicting local and regional impacts related to emissions. It is currently not feasible to know with certainty the net impacts from particular emissions associated with activities on public lands.

[BLM 10282]

In addition, BLM's Decision Record incorporates the analysis of the impact of oil and gas development set forth in the Air Resources Technical Report, or ARTR. [BLM 10234-35; BLM 12587 (ARTR)] The ARTR assesses climate change and air quality impacts from oil and gas development in New Mexico and summarizes information about greenhouse gas emissions from oil and gas development. [BLM 10268; BLM 12623-25 (ARTR)] With regard to the cumulative effect of greenhouse gases on climate change, the ARTR states:

⁴ Defendants state that this number contains a typographical error, and the correct figure is actually 0.00018 percent. [Doc. 26, p. 18 n. 10]

Climate change is a global process that is impacted by the sum total of GHGs in the Earth's atmosphere. The incremental contribution to global GHGs from the proposed action cannot be translated into effects on climate change globally or in the area of any site-specific action. It is currently not feasible to predict with certainty the net impacts from a proposed action on global or regional climate. That is, while BLM actions may contribute to climate change, the specific effects of those actions on global or regional climate are not quantifiable. Therefore, the BLM does not have the ability to associate an action's contribution in a localized area to impacts on global climate change. As climate models improve in their sensitivity and predictive capacity, the BLM will incorporate those tools into NEPA analysis at that time.

[BLM 12623] The ARTR nonetheless describes various potential impacts of climate change which could occur in the southwest, including: a drier climate and soils; a change in the spatial range for cool season plant species; loss of habitat for animal species and a shift in their ranges; and less snowmelt and a potential impact on water resources and the species dependent on those resources. [BLM 12623]

Finally, the Decision Record tiered to the Forest Service's 2012 FSFEIS which also estimated greenhouse gas emissions for oil and gas activities associated with the issuance of new leases (estimating that the development of twenty wells in a single year would lead to 3,350 metric tons per year of greenhouse gases). [BLM 13114-15]

Considering the impact of such greenhouse gases on climate change, the FSFEIS states:

The assessment of greenhouse gas emissions and climate change is in its formative phase; therefore, it is not yet possible to know with confidence the net impact to climate. However, the Intergovernmental Panel on Climate Change (IPCC 2007) has concluded that—warming of the climate system is unequivocal and—most of the observed increase in globally average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic (manmade) greenhouse gas concentrations. The lack of scientific tools designed to predict climate change on regional or local scales limits the ability to quantify potential

future impacts. Potential impacts to air quality due to climate change are likely to be varied and dependent on which climate scenario plays out.

[BLM 13114-15]

Nonetheless, neither the Record Decision nor its tiered or incorporated documents estimate the potential greenhouse gas emissions from consumption of the oil and gas produced by wells developed on the leases, nor do they discuss the potential impacts of such emissions. [BLM 10269 (Record Decision); BLM 12609 (ARTR); BLM 13107-15 (FSFEIS)]

By the Court's count, Plaintiffs make fourteen arguments regarding the failures of BLM to take a hard look at the impacts of granting the leases on greenhouse emissions and climate change. The Court has assembled these arguments into four groups: the failure to quantify and adequately evaluate the impacts of the downstream greenhouse emissions; failures in considering mitigation measures; improper reliance on the ARTR; and failures in the analysis of the cumulative impacts pertaining to greenhouse emissions. [Doc. 22, pp. 28-36] The Court considers these arguments below.

a. *Downstream Greenhouse Gas Emissions*

Plaintiffs argue that BLM failed to adequately consider the downstream greenhouse gas emissions resulting from granting the leases. [Doc. 22, p. 31] By "downstream," Plaintiffs are referring to all emissions produced through and including the end-use combustion of the oil and gas produced by wells developed on the subject leases. [Doc. 22, p. 31] Plaintiffs make the following arguments regarding BLM's failure to consider the downstream GHG emissions: 1) BLM's statement that emissions

from consumption of oil and gas are not an “indirect effect of oil and gas production because production is not a proximate cause of GHG emissions resulting from consumption” is arbitrary; 2) other courts have determined that combustion emissions are foreseeable and thus an indirect impact of oil and gas development which must be analyzed; 3) combustion emissions are a reasonably foreseeable result of oil and gas leases; and 4) although BLM states that “emissions from consumption and other activities are accounted for in the cumulative effects analysis,” the cumulative effects analysis does not analyze emissions from consumption. [Doc. 22, pp. 30-31] The Court considers these arguments below.

BLM states that consumption is not “an indirect effect of oil and gas production because production is not a proximate cause of GHG emissions resulting from consumption.” [BLM 10269] The Court first observes that this statement is circular and worded as though it is a legal conclusion. However, it is contrary to the reasoning in several persuasive cases that have determined that combustion emissions are an indirect effect of an agency’s decision to extract those natural resources. *See W. Org. of Res. Councils v. U.S. Bureau of Land Mgmt.*, No. CV 16-21 GF-BMM, 2018 WL 1475470, *13 (D. Mont. March 26, 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.”); *Sierra Club v. Fed. Energy Regulatory Comm’n*, 867 F.3d 1357, 1374 (D.C. Cir. 2017) (stating that greenhouse gas emissions from the combustion of gas “are an indirect effect

of authorizing this [pipeline] project, which [the agency] could reasonably foresee” and “conclude[ing] that the EIS for the . . . Pipelines Project should have either given a quantitative estimate of the downstream greenhouse emissions that will result from burning the natural gas that the pipelines will transport or explained more specifically why it could not have done so”); *Montana Envtl. Info. Ctr. v. U.S. Office of Surface Mining*, No. CV 15-106-M-DWM, 2017 WL 5047901, *3 (D. Mont. Nov. 3, 2017) (stating that indirect effects from coal trains includes “the effects of the estimated 23.16 million metric tons of greenhouse gas emissions the Mining Plan EA concluded would result from combustion of the coal that would be extracted from the Mine”); *Diné Citizens Against Ruining Our Env’t v. U.S. Office of Surface Mine Reclamation & Enforcement*, 82 F. Supp. 3d 1201, 1213 (D. Colo. 2015) (“find[ing] that the coal combustion-related impacts of [the mine’s] proposed expansion are an ‘indirect effect’ requiring NEPA analysis”), *vacated as moot by* 643 F. App’x 799 (10th Cir. 2016); *WildEarth Guardians v. United States Office of Surface Mining, Reclamation & Enforcement*, 104 F. Supp. 3d 1208, 1229–30 (D. Colo. 2015) (rejecting the argument that “coal combustion is not an actual [indirect] ‘effect’ of the mining plan within the meaning of NEPA because a mining plan does not *cause* coal combustion”) *order vacated and appeal dismissed as moot by* 652 F. App’x 717 (10th Cir. 2016); *see also* CEQ Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, 81 Fed. Reg. 51,866 (Aug. 5, 2016) (hereafter CEQ Final Guidance) at 14 & 16 n.42 (stating that “NEPA reviews for proposed resource extraction and

development projects typically include the reasonably foreseeable effects of various phases in the process, such as clearing land for the project, building access roads, extraction, transport, refining, processing, *using the resource*, disassembly, disposal, and reclamation” (emphasis added); and stating that “where the proposed action involves fossil fuel extraction . . . [t]he indirect effects of such an action that are reasonably foreseeable at the time would vary with the circumstances of the proposed action. For actions such as a Federal lease sale of coal for energy production, the impacts associated with the end-use of the fossil fuel being extracted would be the reasonably foreseeable combustion of that coal”), withdrawn 82 Fed. Reg. 16,576 (April 5, 2017)⁵; *cf. WildEarth Guardians v. U.S. Bureau of Land Mgmt.*, 870 F.3d 1222, 1228-29, 1234-35 (10th Cir. 2017) (considering NEPA EIS analysis concerning coal leases which calculated potential GHG emissions from combustion of coal as an indirect effect; holding that it was arbitrary for agency to assume that the impact would not differ from the no action alternative because if the coal was not produced pursuant to the leases other coal would nonetheless be burned).

By regulation, indirect effects of an action are effects that “are caused by the action and are later in time or farther removed in distance, but are still *reasonably*

⁵ The Court cites to the CEQ’s Final Guidance for its persuasive value only. Although it was in effect at the time of briefing and both parties analyze it, the Guidance is not binding for several reasons. First, it was promulgated after the lease decision was made in this case. Second, the CEQ Final Guidance was guidance only and not “a rule or regulation,” not “legally binding,” and “not legally enforceable.” Final Guidance, p. 1 n.1. And finally, it was withdrawn pursuant to a directive within Executive Order 13783, 82 Fed. Reg. 16093, 16094 (March 28, 2017). Nonetheless, to the extent the reasoning is logically sound and consistent with case law, the Court finds it persuasive and worthy of citation.

foreseeable.” 40 C.F.R. § 1508.8(b). Accordingly, it is erroneous to fail to consider, at the earliest stage feasible, “the environmental consequences of the downstream combustion of the coal, oil, and gas resources potentially open to development” under the proposed agency action. *See, e.g., W. Org. of Res. Councils*, 2018 WL 1475470, at *13. As such, the Court concludes that BLM’s failure to estimate the amount of greenhouse gas emissions which will result from consumption of the oil and gas produced as a result of development of wells on the leased areas was arbitrary. This error also requires that BLM reanalyze the potential impact of such greenhouse gases on climate change in light of the recalculated amount of emissions in order to comply with NEPA.

The failure of BLM to quantify and analyze the impacts of the downstream greenhouse gas emissions requires remand of this case. However, as Plaintiffs argue that BLM acted arbitrarily in additional and discrete respects which would not necessarily be corrected based on this limited holding, the Court considers those arguments as well.

b. *Mitigation Measures*

Plaintiffs argue that BLM’s mitigation analysis is deficient in three respects: 1) BLM improperly deferred consideration of mitigation measures until the permitting stage of development [Doc. 22, pp. 31-32]; 2) BLM’s analysis is insufficient and perfunctory where it states that “preserving as much land as possible and applying appropriate mitigation measures will alleviate the cumulative impacts” [Doc. 22, p. 34 quoting BLM 10281]; and 3) BLM fails to state which lands it will preserve [Doc. 22, p. 35].

Plaintiffs first argue that BLM improperly deferred consideration of mitigation measures to a later stage of development. Plaintiffs argue that BLM’s statement that it

would work with industry at a later date to facilitate the use of the relevant best management practices “is fundamentally incongruous with NEPA’s hard look mandate, and fails to take these emissions in particular and, more broadly, the impacts of climate change, seriously.” [Doc. 22, pp. 31-32] However, based on controlling case law, the Court finds no error in BLM’s deferral of further analysis to the permitting stage of development.

Our Supreme Court discussed the requirement to consider mitigation measures in *Robertson*, 490 U.S. at 351. The Court stated that “[t]he requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of the Act and, more expressly, from CEQ’s implementing regulations.” *Id.* The Court further explained that considering mitigation measures is an important step in evaluating potential adverse effects of agency action:

[G]enerally, omission of a reasonably complete discussion of possible mitigation measures would undermine the “action-forcing” function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.

Id. at 352. However, the Court went on to state that:

There is a fundamental distinction, however, between a requirement that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated, on the one hand, and a substantive requirement that a complete mitigation plan be actually formulated and adopted, on the other. . . . [I]t would be inconsistent with NEPA’s reliance on procedural mechanisms—as opposed to substantive, result-based standards—to demand the presence of a fully developed plan that will mitigate environmental harm before an agency can act.

Id. at 352-53.

Our Tenth Circuit has held that a discussion of mitigation measures “must be reasonably complete in order to properly evaluate the severity of the adverse effects of a proposed project prior to making a final decision.” *Colorado Env'tl. Coal. v. Dombeck*, 185 F.3d 1162, 1173 (10th Cir. 1999) (internal quotation marks and citations omitted). And, even before *Robertson*, the Tenth Circuit rejected an argument that a mitigation analysis was insufficient on facts very similar to those at hand. *See Park County Res. Council, Inc. v. U.S. Dep't of Agric.*, 817 F.2d 609, 621-22 (10th Cir. 1987), *overruled on other grounds by Village of Los Ranchos de Albuquerque v. Marsh*, 956 F.2d 970, 972 (10th Cir. 1992) (en banc). In *Park County Resource Council*, our Tenth Circuit refused to find arbitrary BLM’s finding of no significant impact regarding the issuance of an oil and gas lease. Addressing potential mitigation measures of unspecified “lease stipulations,” the Court observed that, “[i]n order to work the lease, the lessee must submit site-specific proposals to the Forest Service and BLM who can then modify those plans to address any number of environmental considerations. Each action is subject to continuing NEPA review.” *Id.* at 622. The Court rejected the plaintiffs’ argument “that an EIS must be prepared at the leasing stage because of the eventual cumulative and foreseeable effects of exploratory drilling and then full field development.” *Id.* Instead, the Court reasoned:

When BLM is considering a mere leasing proposal, it has no idea whether development activities will ever occur, let alone where they might occur in the lease area. When an APD [application for permit to drill] is submitted, BLM then has a concrete, site-specific proposal before it and a more useful environmental appraisal can be undertaken. Only then can BLM determine whether a river system is implicated, where access will be needed and how it should be accomplished, and which wildlife is affected. In short, the

specificity that NEPA requires is simply not possible absent concrete proposals.

Id. at 624.

Park County Resource Council and Robertson govern the analysis in this case.

BLM deferred identifying specific mitigation measures until the APD stage of development, however, BLM stated that it would “work with industry to facilitate the use of the relevant [best management practices] for operations proposed on Federal mineral leases where such mitigation is consistent with agency policy.” [BLM 10272] Further, potential best management practices were identified in the FSFEIS and Record Decision,⁶

⁶ The FSFEIS states:

The air quality impact analysis indicated that while there are adverse impacts to air quality, it is unlikely that significant environmental effects would occur. At this time, the SFNF does not require specific mitigation measures to reduce potential impacts to air quality. . . . The actual effects of these wells to air quality would only occur once they have been analyzed and authorized through a site-specific NEPA decision at the time of application for permit to drill (APD). Based upon the analysis results, mitigation options could be considered in more detail.

The Forest Service and Bureau of Land Management (BLM) have been participants in the Four Corners Air Quality Group (formerly task force). This group has identified numerous potential mitigation strategies. . . . The “EPA Gas Star Program” . . . and the “Emission Reduction Techniques for Oil and Gas Activities” . . . have also identified other mitigation strategies to reduce air pollution from oil and gas development. These mitigation measures must be applied on a case-by-case basis and evaluated in the APD NEPA analysis rather than in this programmatic document. Cumulative impacts could be reduced with application of recommended mitigation measures, but these would be more effective if applied across the basin. The Forest Service is committed to working with the BLM to ensure reduction of emissions which contribute to ozone formation and could potentially impact air quality values in San Pedro Parks Wilderness and other nearby Class 1 areas.

which were as specific as possible without further information which would be available

[According to the] “Air Quality Modeling Study for the Four Corners Area” . . . [t]he controls considered in detail for the oil and gas sector were VOC control for pneumatic devices, flaring, and venting. The controls considered for NO_x were emission reductions on existing engines. The SFNF will consider these findings when developing air quality mitigation measures for potential future oil and gas development on the SFNF. . . .

EPA is currently under a court ordered deadline to finalize four rules to reduce air pollution from the oil and gas industry by April 3, 2012. . . . The proposed rules would rely on proven technologies and best practices that are currently in use and could reduce . . . GHG[] and criteria pollutants significantly.

. . . [T]he WRAP is in the process of conducting high resolution modeling using the Phase III emissions inventory cited in this document Both the monitoring data and the results of this assessment will be considered at the time of new applications to drill as part of a site-specific NEPA decision in the near term.

[BLM 13115-16] The Record Decision states:

The EPA’s inventory data describes “Natural Gas Systems” and “Petroleum Systems” as the two major categories of total US sources of GHG . . . emissions. . . . Within the two categories, the BLM has authority to regulate only those field production operations that are related to oil and gas measurement, and prevention of waste (via leaks, spills and unauthorized flaring and venting).

Between 2008 and 2012, methane and carbon dioxide emissions from oil production have increased nationally due to increases in domestic oil production. Between 2006 and 2012, methane emissions from natural gas production declined significantly due to improved practices and the use of green completions with hydraulic fracturing. However, during the same period, carbon monoxide emissions from natural gas production increased significantly due to increases in flaring. . . . The Field Office will work with industry to facilitate the use of the relevant BMPs for operations proposed on Federal mineral leases where such mitigation is consistent with agency policy.

[BLM 10272]

only at the permitting stage. [BLM 10272, 13115-16] Even though application of greenhouse gas mitigation measures may be less variable by site than other types of mitigation measures, applying *Park County Resource Council*, BLM acted within its discretion to defer consideration of site-specific mitigation measures until the APD stage. *Id.* at 622-24. And, because mitigation measures will be addressed more specifically at a later stage, the Court also finds no error in BLM's statement that it will preserve as much land as possible and BLM not, at this stage, stating with specificity which land would be preserved.

Nonetheless, while the Court does not find an abuse of discretion with regard to the mitigation measure analysis within the Record Decision, the Court notes that once BLM calculates the amount of greenhouse gas emissions produced from consumption and analyzes the potential environmental impacts of such emissions, BLM may find it necessary to conduct a new mitigation analysis taking into account the revised potential impacts.

c. Reliance on the ARTR

Plaintiffs argue that BLM's reliance on the ARTR was improper for three reasons: 1) the ARTR was not subject to NEPA review; 2) the ARTR's analysis is broad, and not a site-specific analysis; and 3) the ARTR fails to evaluate the cumulative impacts of GHG emissions from a multitude of sources. [Doc. 22, p. 33] The Court is not persuaded by the first argument, and the Court analyzes the second two arguments in the context of Plaintiffs' attack on BLM's cumulative impact analysis.

Regardless of whether the ARTR was subject to NEPA review, BLM did not err in considering it. BLM “incorporated” the analysis of the ARTR. [BLM 10234-35; BLM 12587 (ARTR)] CEQ regulations instruct agencies to either “tier to” a prior EIS, or, relevant here, to “incorporate material into an environmental impact statement by reference when the effect will be to cut down on bulk without impeding agency and public review of the action.” 40 C.F.R. § 1502.21. This regulation further states:

The incorporated material shall be cited in the statement and its content briefly described. No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference.

Id. Thus, on its face, this regulation allows for incorporation of material which is not subject to the requirements of NEPA, as long as the material is reasonably available for inspection and opportunity for comment is available. The draft EA gave an internet uniform resource locator (URL) at which the ARTR could be obtained, and the draft was published prior to the comment period. Accordingly, BLM’s incorporation of the ARTR by reference was allowed by 40 C.F.R. § 1502.21.

d. *Cumulative Impacts of Greenhouse Gases*

Finally, Plaintiffs argue that BLM’s analysis (within the Record Decision, the ARTR, and the tiered documents) of the cumulative impacts of GHG emissions from the leases is deficient in several respects. Plaintiffs argue that BLM acted arbitrarily by: 1) disavowing responsibility for analyzing the impacts of GHG emissions [Doc. 22, p. 29]; 2) merely describing the nature of climate change, and failing to “disclose and consider

the reasonably foreseeable effects of [the] proposed actions, including cumulative effects, using data and analysis to reveal the proportional impact of the proposed action” [Doc. 22, p. 32]; 3) using the amount and proportion of the GHG emissions as a proxy for assessing the significance of emissions [Doc. 22, p. 34]; and 4) failing to analyze “how the incremental contribution of lease emissions—combined with other sources of cumulative emissions—will impact resource values in the SFNF” [Doc. 22, p. 35].

Plaintiffs argue that BLM disavowed their responsibility for analyzing the impacts of greenhouse gas emissions. Plaintiffs state that BLM “universally refused to analyze site-specific impacts, making the fatal assumption that ‘[t]he act of leasing the parcels would, by itself, have no impact on any resources in the FFO [Farmington Field Office]. All impacts would be linked to as yet undetermined future levels of lease development. BLM010266.’” [Doc. 22, pp. 27-28] While BLM made this statement, BLM went on to conduct various estimations of expected emissions and an analysis of the effect of such emissions on climate change. Accordingly, Plaintiffs overstate the importance of this statement, which the Court concludes was not arbitrary.

Plaintiffs further argue that BLM acted arbitrarily by concluding as follows:

The very small increase in [GHG] emissions that could result from approval of the action alternatives would not produce climate change impacts that differ from the No Action Alternative. This is because climate change is a global process that is impacted by the sum total of GHGs in the Earth’s atmosphere. The incremental contribution to global GHGs from the proposed action cannot be translated into effects on climate change globally or in the area of this site-specific action. It is currently not feasible to predict with certainty the net impacts from the proposed action on global or regional climate.

[Doc. 22, p. 32; BLM 10282; *see also* BLM 12623 (ARTR)] While our Tenth Circuit has approved generally of an agency's determination that "the approved drilling activities *would not cause a significant increase* in emissions over the amount anticipated in the RMP," *Diné Citizens Against Ruining Our Environment v. Jewell*, 839 F.3d 1276, 1283 (10th Cir. 2016) (emphasis added), this is a different conclusion, scientifically, from the conclusion that an agency action "*would not produce climate change impacts* that differ from the No Action alternative." [BLM 10282 (emphasis added). *See* Reference Manual on Scientific Evidence (Fed. Judicial Ctr. & Nat'l Research Council of the Nat'l Acads. eds., 3d ed. 2001), p. 241, 251-53 (defining significance testing and discussing whether a difference is statistically significant, generally).

More importantly, BLM failed to conduct the analysis required by 40 C.F.R. § 1508.7, which sets forth BLM's duty to take a hard look at the cumulative effects of the proposed action. Section 1508.7 defines the cumulative impact as "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." Section 1508.7 further recognizes that "[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time." Accordingly, Section 1508.7 acknowledges that the impact of the action alone may be individually insignificant, but also that the impact may be significant only in combination with other actions. It is the broader, significant "cumulative impact" which must be considered by an agency, but which was not considered in this case. Without further explanation, the

facile conclusion that this particular impact is minor and therefore “would not produce climate change impacts that differ from the No Action Alternative,” is insufficient to comply with Section 1508.7. *Center for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008) (concluding that the agency “must provide the necessary contextual information about the cumulative and incremental environmental impacts of the Final Rule” in light of other actions because, even though the rule’s impact might be “individually minor,” its impact together with the impacts of other actions would be “collectively significant”).

Plaintiffs also argue that the analysis of the cumulative impacts within the ARTR is insufficient.⁷ The ARTR observes that increased greenhouse gases, “caused by the burning of fossil fuels[,] . . . are believed to be contributing to global scale impacts to climate.” [BLM 12608] The ARTR points to effects of greenhouse gases such as “a net warming of the atmosphere,” and states that in New Mexico, “the increase in mean annual temperatures ha[s] exceeded the global average increase by nearly 50% since the 1970’s” and that “[w]arming is greatest in the northwestern, central, and southwestern parts of the state.” [BLM 12609]

As stated in the ARTR:

⁷ As to Plaintiffs’ argument that the ARTR is too general and not site-specific, the Court agrees with Plaintiffs’ description of the ARTR as a broad and general analysis that does not analyze the site-specific impacts of the particular leases at issue. [Doc. 22, p. 33] However, agencies are encouraged to incorporate broader analyses into more specific analyses. *See* 40 C.F.R. § 1502.20 (stating that an agency may tier to and incorporate a “broad environmental impact statement” and then conduct an analysis of “the issues specific to the subsequent action.”) Thus, an agency acts arbitrarily only if, at a stage at which a site-specific analysis is necessary, the agency fails to conduct such analysis.

Changes in climate due to increases in GHGs have the potential to influence renewable and nonrenewable resource management. However, the degree of change and specific effects from these changes cannot be quantified at the regional or local scale at this time.

...

It is currently not feasible to know with certainty the net impacts from particular emissions associated with activities on public lands. The inconsistency in results of Global Climate Models used to predict climate change and the lack of models able to predict climate change on regional or local scales, limits the ability to quantify potential future impacts of emissions at this level. When further information on the impacts of local emissions to climate change is known, such information would be incorporated into the BLM's planning and NEPA documents as appropriate.

[BLM 12609]

BLM's reliance on the broad analysis within the ARTR is permitted by regulation, as discussed above. However, BLM must nonetheless conduct a site-specific analysis within the EA. BLM's site-specific analysis was as follows:

The incremental contribution to global GHGs from the proposed action cannot be translated into effects on climate change globally or in the area of this site-specific action. It is currently not feasible to predict with any certainty the net impacts from the proposed action on global or regional climate.

[BLM 10282] Relying on well-respected sources such as the IPCC [BLM 12609], BLM thus explained that it could not do more specific analyses based on limitations of the ability to scientifically predict the effects, especially the local effects, of climate change.

Because the cumulative impact analysis must be conducted anew given BLM's failure to consider downstream greenhouse gas emissions, the Court declines to consider whether BLM's "site-specific" within the EA is sufficient. In addition, the Court

observes (as Plaintiffs point out) that, since the date of the ARTR and the Record Decision, the IPCC has updated its reports on climate change [*See* Doc. 22, p. 29, n.5], and further, new reports have been issued by the United States Global Change Research Program (a cooperative effort of 13 agencies) as well. *See, e.g.*, USGCRP, 2017: Climate Science Special Report: Fourth National Climate Assessment, Volume I, Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock (eds.), U.S. Global Change Research Program, doi: 10.7930/J0J964J6. Accordingly, since the date of the ARTR (2013), substantial progress may have been made in assessing the potential global and regional effects of climate change. On remand, in considering the potential impacts of the full amount of greenhouse gas emissions which are indirect effects of issuing the leases in this case, BLM must not rely on outdated scientific tools and analyses.⁸ *See Custer Cty. Action Ass’n v. Garvey*, 256 F.3d 1024, 1034 (10th Cir. 2001) (stating that “agencies must take a hard look at the environmental consequences of proposed actions utilizing public comment and the best available scientific information” (internal quotation marks and citation omitted)); *City of Dallas, Tex. v. Hall*, 562 F.3d 712, 720 (5th Cir. 2009) (“Properly analyzing the risks of an action requires an agency to use updated information or data; reliance on out-of-date or incomplete information may

⁸ The Court is remanding this matter because of the failure of BLM to quantify and analyze the impacts of downstream greenhouse gas emissions on the environment – not because of the failure to use scientific analyses which postdate the EA. *See Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 73 (2004) (stating that supplementation of an environmental analysis based on new evidence or information is only necessary “if there remains major Federal action to occur” (internal quotation marks and citation omitted)). However, because BLM must revise its analysis, at this juncture it must do so utilizing the best available scientific evidence.

render the analysis of effects speculative and uncertain, warranting the preparation of an EIS.”); *see also Idaho Sporting Cong. Inc. v. Alexander*, 222 F.3d 562, 566 (9th Cir. 2000) (stating that “once an agency determines that new information is significant, it must prepare a supplemental EA or EIS”).⁹

As to Plaintiffs’ remaining arguments concerning greenhouse gas emissions, because the Court concludes that BLM must revise its analysis of the indirect and cumulative impacts of the estimated greenhouse gases the Court declines to consider them specifically. The Court remands this matter to BLM to take a hard look at the impacts of greenhouse gas emissions, including foreseeable downstream greenhouse gas emissions from the combustion of the produced oil and gas likely to be developed from the leases, consistent with the Court’s analysis, above.

2. Air Quality

Plaintiffs make a three-part argument that BLM failed to take a hard look at the impact of the leases on air quality. [Doc. 22 p. 36-38] First, Plaintiffs argue that BLM “fail[ed] to quantify the foreseeable direct emissions of criteria pollutants that will result from the proposed action.”¹⁰ [Doc. 22, pp. 36-37] Second, without pointing to a

⁹ With regard to Plaintiffs’ argument that BLM failed to analyze the cumulative effect of greenhouse gas emissions on the resource values in the Santa Fe National Forest [Doc. 22, p. 35], the Court observes that the ARTR included a discussion of the likely effects of climate change on the southwest. [BLM 12623] However, BLM must reconsider the adequacy of this analysis in considering the impacts of greenhouse gases from consumption of the oil and gas in the calculation as well as any updated scientific assessments.

¹⁰ Pursuant to the Clean Air Act, the EPA has established National Ambient Air Quality Standards (NAAQS) for particular pollutants, which are called “criteria pollutants.” *See* 42 U.S.C. § 7408 (directing the EPA establish national ambient air quality standards); 40

particular failing, Plaintiffs argue that BLM's analysis of the cumulative impacts to air quality was insufficient, because "the NAAQS are not the sole measuring standards for assessing whether lease development will significantly affect air quality." [Doc. 22, pp. 37-38] Finally, Plaintiffs argue that "BLM failed to aggregate or model the cumulative air quality effects of the lease sale with all other actions impacting air quality in the planning area." [Doc. 22, p. 38] In making these arguments, Plaintiffs do not acknowledge that BLM's decision tiered to and incorporated the Forest Service's 2012 FSFEIS. [BLM 10234] The Court concludes that the 2012 FSFEIS conducts all of the analyses which Plaintiffs assert are lacking, and thus the Court cannot conclude that BLM failed to take a hard look at the effects of the leasing decision on air quality.

The FSFEIS estimated emissions from development of new oil and gas leases in the SFNF. [BLM 13107-11] Therein, the Forest Service examined impacts to air quality that are caused in the first 1-2 months during which new wells are developed, including the pollution that results from constructing roads, pipelines, and well pads; drilling wells; and completion fracturing. [BLM 13107-08] It also looked at emissions from later, day-to-day operations that will impact air quality. [BLM 13108] It analyzed "modeling studies" to assess potential impacts and concluded that "[d]ue to the small number of wells that may be developed . . . it was impractical to directly model the emissions[.]" [BLM 13109] These analyses looked specifically at the likely emissions produced under a maximum development scenario, of 20 wells, for all six criteria pollutants. [BLM

C.F.R. § 50.1 *et seq.*, (setting national ambient air quality standards for criteria pollutants).

13110-11] The Forest Service also compared the predicted construction emissions to WRAP 2006 and 2012 estimates¹¹ for all criteria pollutants. [BLM 13111] Utilizing various modeling studies, the Forest Service concluded that constructing and operating the wells was not likely to lead to an exceedance of current national or New Mexico air quality standards, however, if the standard for ozone was reduced, the emissions could have a significant effect of contributing toward an exceedance of the standard. [BLM 13112-13] In the Record Decision, BLM concluded that “[t]he potential amounts of ozone precursor emissions of NO_x and VOCs from the proposed lease sale on not expected to impact the current design value for ozone in San Juan County under either of the action alternatives.” [BLM 10269] The Forest Service also concluded that the “impacts from 20 wells would be less than significant even at nearby San Pedro Parks Wilderness.” [BLM 13111] The Court concludes that the analysis above, inclusive of the 2012 FSFEIS, to which the Record Decision was tiered, meets the “hard look” requirements of NEPA with regard to the impact of the action on criteria pollutants.

Plaintiffs next argue that the cumulative impact analysis was insufficient with regard to air quality. [Doc. 22, pp. 37-38] They argue that “the NAAQS are not the sole measuring standards for assessing whether lease development will significantly affect air quality.” [Doc. 22, pp. 37] However, Plaintiffs point to no particular factor or impact

¹¹ WRAP stands for the Western Regional Air Partnership, which completed a “Phase III Emissions Inventory for the South San Juan Basin” in 2009, which includes emissions from smaller sources and thus, according to the Forest Service, “is much more representative of the emissions in this region from oil and gas.” [BLM 13106]

which BLM failed to consider in its cumulative air quality impact analysis, nor does this Court find any such failure. In the 2012 FSFEIS, the Forest Service stated:

Emissions from oil and gas well operation sources could disperse for long distances downwind and contribute to cumulative visibility impacts in PSD Class I areas and/or ozone impacts in areas nearing ozone nonattainment. Even though the contribution of impacts from this project is small and less than significant within the study area, the impact could become significant on a cumulative basis if it would cause or add to a new or existing problem of visibility degradation or ozone nonattainment. If the ozone NAAQs were to be lowered at any time in the next 20 years, any additional contribution of these pollutants could become a significant impact. Cumulative impacts could be reduced with application of recommended mitigation measures, but these would be far more effective if applied across the basin.

[BLM 13113] The Forest Service determined that the cumulative effects from development of 20 wells would be “adverse, but less than significant, in that their development would not result in [exceedances] of State or Federal air quality standards, nor increases in visibility degradation at nearby Class I areas.” [BLM 13113] Given this analysis, the Court cannot find that BLM arbitrarily failed to consider the impact of non-criteria air pollutants.

Plaintiffs argue that “BLM failed to aggregate or model the cumulative air quality effects of the lease sale with all other actions impacting air quality in the planning area.” [Doc. 22, p. 38] However, considering the tiered to FSFEIS and incorporated ARTR, the Court rejects this argument. The FSFEIS observed that the area is not a “high density well area” but that even if it were, modeling “indicated that (1) maximum modeled impact concentrations would be less than national or New Mexico ambient air quality standards and (2) risks from exposure to hazardous air pollutants would be less than

significant.” [BLM 13112] Between this analysis and the analysis in the EA accounting for an additional 20 wells, the Court concludes that BLM adequately considered the cumulative air quality effects of the lease sale along with all other actions impacting air quality in the planning area. The Court concludes that BLM did not fail to take a “hard look” at the air quality impacts of its decision.

3. Water Resources

Plaintiffs argue that the agencies failed to analyze the impacts of the leasing decision on water quantity, groundwater quality, and surface water quality. [Doc. 22 p. 39-42] The Court considers these arguments below.

a. *Water Quantity*

BLM identified the primary aquifers in the area and described their depth, formation, thickness, recharge areas, transmissivity, and quality. BLM also noted that ground water is “readily available” in most of the planning area but that its quality is “fair to poor.” [BLM 10251-52] With regard to potential water use by oil and gas wells, BLM stated that:

[F]racturing fluid is typically more than 99 percent water and sand, with small amounts of readily available chemical additives used to control the chemical and mechanical properties of the water and sand mixture. . . . Because the fluid is composed mostly of water, large volumes of water are usually needed to perform hydraulic fracturing. However, in some cases, water is recycled or produced water is used.

[BLM 10293] Finally, with regard to the potential impact of hydraulic fracturing on water quantity, BLM stated:

[t]he water used for hydraulic fracturing in the Farmington Field Office generally comes from permitted groundwater wells, although surface water

may occasionally be used. Because large volumes of water are needed for hydraulic fracturing, the use of groundwater for this purpose might contribute to the drawdown of groundwater aquifer levels. Groundwater use is permitted and managed by the New Mexico Office of the State Engineer, and these water rights have already been designated. In addition, the use of water for hydraulic fracturing is one of many uses of groundwater in the Farmington Field Office. Other uses include irrigation, industrial mining operations, and domestic and livestock use.

[BLM 10276] In addition, in letters denying protests, BLM explained that:

The amount of water used during well development is highly dependent on a number of factors including but not limited to: vertical or horizontal well, length of well bore, closed-loop or reserve pit drilling system, type of mud, type of stimulation used (e.g. hydraulic fracturing or acidizing), formation being fractured, and use of recycled water or inert gases. Therefore the amount of water that could actually be used is too speculative to reasonably quantify at the leasing stage. When an [application for a permit to drill] is received a quantitative analysis can be completed. . . .

In response to the high demand for and the lack of availability of water in the San Juan Basin, operators have successfully developed fracturing techniques that use considerably less water by substituting inert gases such as nitrogen and carbon dioxide as the carrier of the fluid for the frack. These can replace up to 95 percent of the water used for the frack fluids. The BLM encourages operators to utilize this new technology to lessen the impact of oil and gas development on the water availability in the area.

[BLM 11323, 11341]

Plaintiffs argue that BLM's failure to quantify how much water will be required for the development of the thirteen leases and to drill and fracture each well fell short of the "hard look" requirement imposed by NEPA. [Doc. 22 p. 39] Plaintiffs also argue that BLM's consideration of the issue of water quantity is arbitrary because "[t]here is no discussion of how the groundwater drawdown from lease development will impact the land, forests, wildlife, livestock, or human communities in the planning area, or how these impacts are further compounded in a drought-stricken southwest, which is poised to

worsen in the face of climate change.” [Doc. 22, p. 40] In their brief, Defendants do not rely on the reasoning in the EA – that ground water is managed by the State Engineer.¹²

Instead, consistent with their protest responses, Defendants argue that BLM determined that the amount of water well operators may use is too speculative to quantify at the leasing stage, but a quantitative analysis would be possible at the permitting stage.¹³

[Doc. 26, p. 26]

¹² Our Tenth Circuit recently “express[ed] some concern over the BLM’s apparent disavowal of any independent responsibility to consider whether hydraulic fracturing of horizontal wells may result in groundwater depletion in the San Juan Basin” where BLM stated: “[b]ecause the State of New Mexico has jurisdiction over water use, the State analyzes the impacts of potential groundwater depletion caused by these wells and has not determined that the current use will lead to depletion.” *Diné Citizens Against Ruining Our Env’t v. Jewell*, 839 F.3d 1276, 1283 n.2 (10th Cir. 2016) (*DCARE I*). This Court shares the concern. Where an agency action may implicate water quantity, NEPA requires the analysis of the environmental impacts of the action, regardless of whether water rights are established and controlled by a state. *See Los Padres ForestWatch v. U.S. Bureau of Land Mgmt*, No. CV-15-4378-MWF, 2016 WL 5172009 *11 (C.D. Cal. Sept. 6, 2016) (concluding that BLM failed to take a hard look at impact of hydraulic fracturing on, inter alia, water supplies, where the EIS noted that the state has primacy and permit authority over groundwater protection); *cf. Wright v. Inman*, 923 F.Supp. 1295, 1301-02 (D. Nev. 1996) (concluding that Forest Service took a hard look at water quantity issues where it used computer modeling to calculate potential surface water losses and “considered in detail the issues of potential losses in quantity, or changes in flow regimes, of surface water and groundwater”); *Ctr. for Envtl. Law & Policy v. U.S. Bureau of Reclamation*, 655 F.3d 1000, 1009 (9th Cir. 2011) (holding that the hard look requirement was met where the agency’s EA contained “detailed accounts of the cumulative effects of the drawdown with past projects on, among other things, groundwater, water rights, fish populations, aquatic plants, and prehistoric sites”); *Diné Citizens Against Ruining Our Env’t v. Jewell*, No. CIV 15-0209 JB/SCY, 2018 WL 1940992, *41 (D.N.M. April 23, 2018) (*DCARE II*) (describing the quantification of projected water consumption by BLM in a 2003 resource management plan EIS for the Mancos Shale formation in the San Juan Basin).

¹³ Plaintiffs argue that this analysis constitutes a post hoc rationalization because it was not conducted within the EA but within the denials of protests. [Doc. 29, p. 21] However, the final EA with the finding of no significant impact was signed by the BLM

“[A]ssessment of all ‘reasonably foreseeable’ impacts must occur at the earliest practicable point, and must take place before an ‘irretrievable commitment of resources’ is made.” *Richardson*, 565 F.3d at 715, 718 (citations omitted) (concluding that sufficient information was available at the leasing stage to determine how many wells would be built based on production levels of existing nearby wells and that “BLM acted arbitrarily by concluding without apparent evidentiary support that impacts on the Aquifer would be minimal”). Given several other cases in which water usage was quantified prior to the application for permit to drill stage, the Court is not persuaded by BLM’s unsupported conclusion that it did not have enough information to calculate water usage. *See, e.g., DCARE II*, 2018 WL 1940992, at *41 (describing projection and quantification of water consumption by BLM in 2003 EIS for the Mancos Shale formation in the San Juan Basin and concluding that tiering to prior EIS was appropriate); *Ctr. for Env’tl. Law & Policy*, 655 F.3d at 1009 (describing detailed analysis of impact of action on groundwater and the environmental impacts of groundwater drawdown); *see also Los Padres ForestWatch*, 2016 WL 5172009, at *12 (holding that the BLM was required to conduct an analysis of the environmental consequences of hydraulic fracturing in a resource management plan EIS). Further, in addition to having failed to estimate the quantity of water which would be used, BLM also failed to discuss and consider the effect of such water use on the environment.

in 2015, nearly two years after the protests were denied. Even though the rationale is not expressly in the EA, the Court considers the argument for the sake of thoroughness.

At the permitting stage, BLM will know the proposed technique of hydraulic fracturing and whether any water conserving measures are proposed. Thus, at that stage, BLM's estimates of the impact of the action on water quality will become even more precise. Nonetheless, the record indicates that sufficient information is available at this stage to make estimates of potential water usage for the different methods of hydraulic fracturing, and thus BLM must use that information in deciding whether the action results in a significant impact. *See Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 371 (1989) ("NEPA ensures that the agency will not act on incomplete information."). Because BLM failed to use the information it had at this stage to consider the impacts of the agency action on water quantity, BLM failed to meet its duty to take a hard look at the environmental impacts of the proposed action.

b. Water Quality

i. Groundwater

Plaintiffs argue that BLM failed to take a hard look at impacts to groundwater quality. [Doc. 22 p. 30]

BLM stated that the groundwater quality within the leased parcels is "of fair to poor quality," and no drinking water sources are located on or near the parcels. [BLM 10252-53] It also found that there have been no verified instances of hydraulic fracturing causing adverse effects to groundwater in the San Juan Basin. [BLM 10276] Additionally, in regard to the potential effects of its decision on groundwater quality, BLM's Decision Record acknowledged that groundwater contamination "*could* occur *without* adequate cementing and casing of the proposed well bore"; and that the potential

for such an impact would be “long term for the life of the wells.” [BLM 10276 (emphasis added)] BLM also described administrative and regulatory procedures that are in place to foreclose or limit the prospect of inadequate cementing and casing leading to contamination. [Id.] BLM also acknowledged the “potential for accidental spills or releases of [hazardous materials] which could impact local water quality,” a risk that would be present “long term for the life of the wells.” [BLM 10277] BLM also explained that the New Mexico Oil Conservation Division, a state agency, is responsible for monitoring underground injection wells and ensuring that abandoned wells are properly plugged. [BLM 10253] Based on these analyses, the Court concludes that BLM met the hard look requirement by examining the current state of the water, the potential risks associated with its leasing decision, mitigation measures, and the prospective monitoring of water quality.

ii. Surface Water

Plaintiffs argue that BLM failed to discuss the severity of potential impacts to surface water and failed to address mitigation measures to reduce such impacts. [Doc. 22 p. 32]

In regard to the impacts of its leasing decision on surface water quality, the 2008 FEIS recognized that the development of new oil and gas wells has the potential to affect surface water quality owing to the surface-disturbing activities inherent in well development and use. [BLM 13323] The effects include potential contribution to degradation of streams downstream from the new developments, primarily through sedimentation. [Id.] To mitigate the potentially harmful effects on surface water of new

well development and use, no surface occupancy stipulations apply “on steep, unstable soils and would minimize surface-disturbing activities that interfere with natural drainage and vegetative cover, resulting in the potential for minimal erosion and sedimentation[.]” [BLM 13322] As well, BLM stated that it would impose “[t]iming limitations on drilling operation and construction activities [which] would also reduce the risk of accidental spill or leakage into streams during winter and spring[.]” [BLM 13322] Under the lease terms, surface occupancy or use is subject to “special operating constraints”—particularly requirements that facilities be located at least 100 meters away from drainages and riparian areas that access roads and drainage crossings include site-specific mitigation to control sedimentation. [BLM 13478] Finally, BLM explained in its letters denying protests, that spills and leaks “are rare and unforeseeable events, [therefore] it would be inappropriate to quantitatively estimate the volumes of oil or brine leaks and spills, and their environmental consequences.” [BLM 11323] Based on these analyses, the Court concludes that BLM met its obligation to take a hard look at the impact of the proposed action on surface water quality.

4. Cumulative Impact

In their final “hard look” argument, Plaintiffs argue that BLM failed to take a hard look at the cumulative impact of lease development on specific resources. [Doc. 22 p. 43] Based on the Court’s holdings above, BLM will need to conduct a new cumulative impacts analysis. Accordingly, the Court does not address this argument.

D. Plaintiffs’ Additional Arguments

Plaintiffs also make the following arguments: BLM failed to provide a convincing statement of reasons to justify its decision to forego preparation of an environmental impact statement [Doc. 22, p. 45]; BLM unlawfully issued the leases causing prejudice and limiting the choice of alternatives in the pending resource management plan amendment [Doc. 22, p. 50]; and the Forest Service failed to take a hard look at oil and gas leasing and failed to consider new significant information and circumstances [Doc. 22, p. 53]. Given that this matter must be remanded for BLM to conduct a new analysis of the proposed action on various environmental impacts, the Court deems it unnecessary and unwise to address these arguments, which may become moot based on BLM's revised analysis or based on changes in circumstances after the EA and leases were issued.

E. Relief

In their *Petition*, Plaintiffs seek the following relief: that this Court declare that “Defendants’ leasing decisions violate NEPA and its implementing regulations”; that this Court vacate and remand the leasing decisions; that this Court enjoin Defendants from any further leasing authorizations pending “full compliance with NEPA and its implementing regulations”; that this Court retain jurisdiction over this matter until Defendants remedy the violations of law; and fees, costs, and expenses under the EAJA. [Doc. 1, pp. 38-39] In their *Opening Brief*, Plaintiffs request: declaratory relief and that this court “vacate and remand Federal Defendants’ leasing decisions, and suspend and enjoin Federal Defendants from any further leasing authorizations pending Federal Defendants’ full compliance with NEPA.” [Doc. 22, p. 59]

The Court reviewed the Agencies' decision pursuant to the APA, under which the Court may "set aside final agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Silverton Snowmobile Club v. U.S. Forest Serv.*, 433 F.3d 772, 779-80 (10th Cir. 2006) (internal quotation marks, citation and brackets omitted). Further, the Court recognizes that "[w]hen the agency record is inadequate, the proper course, except in rare circumstances, is to remand to the agency for additional investigation or explanation." *Sierra Club-Black Hills Grp. v. U.S. Forest Serv.*, 259 F.3d 1281, 1289 (10th Cir. 2001) (quoting *Florida Power & Light Co. v. Lorion*, 470 U.S. 729, 744 (1985)). Accordingly, in this case the Court concludes that the proper remedy is to set aside BLM's finding of no significant impact and its issuance of the leases¹⁴ and to remand to BLM for further analysis and action consistent with this opinion. At this juncture, neither the briefing nor the record demonstrate the elements for declaratory or injunctive relief.

III. CONCLUSION

For the reasons stated herein, the Court grants the following relief requested by Plaintiffs in their *Petition for Review of Agency Action* [Doc. 1]:

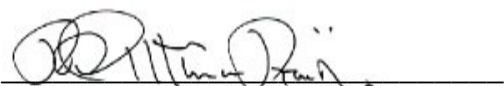
The Court **SETS ASIDE** the finding of no significant impact;

The Court **SETS ASIDE** the leases; and

¹⁴ As Defendants submit, the final agency action was the issuance of the leases. [Doc. 26, p. 14 n.8]

The Court **REMANDS** this matter to BLM for further analysis, consistent with the Court's discussion above, of the environmental impacts of the decision to grant the leases at issue.

IT IS SO ORDERED this 14th day of June, 2018, in Albuquerque, New Mexico.

A handwritten signature in black ink, appearing to read "M. Christina Armijo", is written over a horizontal line.

M. CHRISTINA ARMIJO
Senior United States District Judge