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

SAN JUAN CITIZENS ALLIANCE, *et al.*,	)	
Plaintiffs,	)	Case No. 1:16-cv-00376-MCA-WPL
v.	)	
UNITED STATES BUREAU OF LAND MANAGEMENT, *et al.*,	)	
Defendants.	)	

PLAINTIFFS' OPENING MERITS BRIEF

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES:

STATUTES:

REGULATIONS:

OTHER AUTHORITIES:

INTRODUCTION

Rising from the high deserts, the Santa Fe National Forest was established in 1915 and consists of 1.6-million acres of some of the most remarkable and treasured lands in the Southwest. Flourishing meadows, mesas, canyons and peaks give way to wild and scenic rivers and the headwaters of the Pecos, Jemez, and Gallinas Rivers. It contains four separate wilderness areas in the Pecos, San Pedro Parks, Chama, and Dome Wildernesses, and is home to prized fisheries and abundant wildlife. As the Wilderness Act describes, this is a place where "earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain" 16 U.S.C. § 1131(c).

Yet immediately to the west, New Mexico's San Juan Basin offers a stark contrast. One of the most heavily industrialized areas in the country for fossil fuel exploitation, the Basin is home to two separate mine-to-mouth coal-fired power plant complexes, a dreadful history of uranium mining, and a legacy of over 40,000 oil and gas wells which have been drilled. With public lands managed by the Bureau of Land Management ("BLM") Farmington Field Office already over 90 percent leased for oil and gas, this case represents industry's greedy push into the edges of the Basin and some of its last remaining untouched landscapes in the Santa Fe National Forest ("SFNF").

BLM's October 2014 lease sale ushered in the next wave of oil and gas speculation, brought on by advancements in drilling technology and the ability to economically tap new shale oil bearing formations for the first time. The Forest Service authorized the sale and BLM issued leases on 13 parcels covering 20,146.67 acres in the SFNF without adequately considering and taking a hard look at the impacts of leasing on

environmental values and human communities; failed to justify a finding of no significant impact and decision to forego an environmental impact statement; caused unlawful prejudice and limited the choice of alternatives in a pending resource management plan amendment; and failed to consider significant new information and circumstances, in violation of the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 *et seq.,* its implementing regulations, and agency policy and procedures. Plaintiffs in this action (collectively "Citizen Groups") therefore respectfully request that this Court declare that Federal Defendants' leasing decisions are arbitrary and capricious, set the approvals aside, and remand the matter to Federal Defendants.

STATUTORY BACKGROUND

I. MINERAL LEASING ACT

Under the Mineral Leasing Act ("MLA"), 30 U.S.C. § 181 *et seq.,* as amended, the Secretary of the Interior is responsible for managing and overseeing mineral development on public lands, not only to ensure safe and fair development of the mineral resource, but also to "safeguard[]…the public welfare." 30 U.S.C. § 187. The Secretary has discretion, though constrained by the laws at issue in this case, to determine where, when, and under what terms and conditions mineral development should occur. 43 C.F.R. § 3101.1-2; 30 US.C. § 226(a). The grant of rights in a federal mineral lease is subject to a number of reservations of authority to the federal government, including reasonable measures concerning the timing, pace, and scale of development. *Id*.

II. FEDERAL ONSHORE OIL AND GAS LEASING REFORM ACT

Pursuant to the Federal Onshore Oil and Gas Leasing Reform Act ("FOOGLRA"), Forest Service and BLM share responsibility for the issuance of leases on forest lands. *See* 30 U.S.C. § 226(h). The Forest Service is responsible for implementing those portions of the lease that require lessees to conduct operations in a manner that minimizes adverse impacts to surface resources and other land uses and users.

The Forest Service is required to comply with NEPA, NEPA's implementing regulations, and the Forest Service's own policies and procedures when analyzing oil and gas leasing decisions. 36 C.F.R. § 228.102(a). At the "leasing decision" stage, the Forest Service identifies specific parcels for leasing, performs specific environmental review on those parcels, and determines whether to authorize BLM to lease those parcels. *See* 36 C.F.R. § 228.102(e). At the "verification" stage, the Forest Service verifies that the leasing was adequately addressed in a NEPA document and is consistent with management plans. *See* 36 C.F.R. § 228.102(e)(1).

If NEPA has not been adequately addressed, or if there is significant new information or circumstances requiring further analysis, pursuant to 40 C.F.R. § 1502.9, then the agency must complete additional environmental analysis before making a leasing decision for specific lands. 36 C.F.R. § 228.102(e)(1).

III. NATIONAL ENVIRONMENTAL POLICY ACT

NEPA is our "basic national charter for the protection of the environment." 40 C.F.R. § 1500.1. It was enacted with the recognition that "each person should enjoy a healthful environment," to ensure that the federal government uses all practicable means

to "assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings," and to "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences," among other policies. 42 U.S.C. § 4331(b).

NEPA regulations explain, at 40 C.F.R. §1500.1(c), that:

> Ultimately, of course, it is not better documents but better decisions that count. 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.

"Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts." 40 C.F.R. § 1501.2. To accomplish this purpose, NEPA requires that all federal agencies prepare a "detailed statement" regarding all "major federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). This statement, known as an environmental impact statement ("EIS"), must, among other things, describe the "environmental impact of the proposed action," and evaluate alternatives to the proposal. *Id.* Alternatives, notably, are the "heart" of the NEPA process, ensuring that agencies "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14.

To determine whether a proposed action significantly affects the environment, and whether an EIS is therefore required, regulations promulgated by the Council on

Environmental Quality ("CEQ") provide for preparation of an environmental assessment ("EA"). Based on the EA, a federal agency either concludes its analysis with a finding of no significant impact ("FONSI"), or the agency goes on to prepare a full EIS. 40 C.F.R. § 1501.4. "If an agency decides not to prepare an EIS, it must supply a 'convincing statement of reasons' to explain why a project's impacts are insignificant." *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (internal citations omitted). "The statement of reasons is crucial to determining whether the agency took a 'hard look' at the potential environmental impact of a project." *Id.*; *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976).

Pending completion of an EIS, an agency, *inter alia*:

> shall not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment unless such action: (1) Is justified independently of the program; (2) Is itself accompanied by an adequate environmental impact statement; and (3) Will not prejudice the ultimate decision on the program. Interim action prejudices the ultimate decision on the program when it tends to determine subsequent development or limit alternatives.

40 C.F.R. § 1506.1(c).

NEPA allows an agency to "tier" a site-specific environmental analysis for a proposed action to a broader EIS for a program or plan under which the subsequent action is carried out, allowing the agency to effectively streamline its analysis. 40 C.F.R. §§ 1502.20, 1508.28. However, Interior's NEPA regulations specify that an EA tiering to a broader EIS "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. A site-specific EA "can be tiered to a programmatic or other broader-

scope [EIS] … for a proposed action with significant effects, whether direct, indirect, or cumulative, if … a broader [EIS] fully analyzed those significant effects." *Id.* at § 46.140(c). Moreover, if the impacts analysis in the EIS "is not sufficiently comprehensive or adequate to support further decisions," the agency EA must explain this and provide additional analysis. *Id.* at § 46.140(b).

STANDING

Citizen Groups' have standing to bring this action. Standing requires a showing of injury, traceability, and redressability. *S. Utah Wilderness All. v. Palma*, 707 F.3d 1143, 1153 (10th Cir. 2013). An organization has standing "when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit." *Friends of the Earth v. Laidlaw*, 528 U.S. 167, 181 (2000).

In a NEPA case, as here, a plaintiff satisfies the injury requirement by showing (1) that the alleged NEPA violation creates an increased risk of environmental harm, and (2) that the plaintiff has a geographical nexus to or actual use of the area of the agency action. *Comm. to Save Rio Hondo v. Lucero*, 102 F.3d 445, 449 (10th Cir. 1996).

"[E]nvironmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons 'for whom the aesthetic and recreational values of the area will be lessened' by the challenged activity." *Friends of the Earth*, 528 U.S. at 183; *S. Utah Wilderness All.*, 707 at 1156 (finding injury where a declarant has "traversed through or within view of parcels of land where oil and gas development will occur, and

plans to return"). Actual environmental harm from complained-of activity need not be shown, as "reasonable concerns" that harm will occur are enough. *Comm. to Save Rio Hondo*, 102 F.3d at 450. To establish traceability, the plaintiff "need only show its increased risk is fairly traceable to the agency's failure to comply with [NEPA]," i.e., from "the agency's uninformed decisionmaking." *Id*. at 451-52. Redressability is satisfied by showing that the plaintiff's "injury would be redressed by a favorable decision requiring the [agency] to comply with [NEPA's] procedures." *Id*. at 452.

Here, Citizen Groups meet this standard. Citizen Groups' members are directly harmed by the Federal Defendants failure to comply with NEPA in approving and issuing 13 leases in the SFNF. Citizen Groups' members routinely hike, recreate, camp, research, derive inspiration, and otherwise use areas on and near the SFNF lease parcels.[1] Citizen Groups' members' activities and enjoyment of lease areas are both personal and professional, and include: recreational uses, solitude, night sky viewing, wildlife viewing, use of waters, birding, artistic endeavors, and aesthetic enjoyment.[2] Having already witnessed the impact that oil and gas leasing and development can have on nearby landscapes, Citizen Groups' members identify harm that will be suffered from lease

[1] *See, e.g.,* Graham Dec. ¶¶ 6, 7, 8, 9 (citing specific use of all parcels); Klingel Dec. ¶¶ 3, 8, 10 (citing specific use of parcels 1, 4-6, 9-14); Turner Dec. ¶ 11 (citing specific use of parcels 1, 5, 6, 8-14); Seamster Dec. ¶¶ 6, 11 (citing general use of SFNF near parcels); Eisenfeld Dec. ¶¶ 7, 8 (citing specific use of all parcels).

[2] *See, e.g.,* Graham Dec. ¶¶ 4, 5, 6; Klingel Dec. ¶¶ 3, 4, 5; Turner Dec. ¶¶ 3, 5, 9; Seamster Dec. ¶¶ 6, 7; Eisenfeld Dec. ¶¶ 7, 8, 10.

development in the SFNF, which include not only their use and enjoyment of the areas, but also their health and safety.[3]

Citizen Groups' members' injuries can be traced to Federal Defendants' authorization and issuance of the SFNF leases that did not undergo adequate NEPA, which threatens these areas with environmental harms causing negative impacts to air, water, landscapes, and other resources from impendent oil and gas development.[4]

Citizen Groups' members' injuries would be redressed by a favorable result in this suit because Federal Defendants would be required to sufficiently analyze the environmental impacts of 13 lease parcels in the Santa Fe National Forest. Such analysis is fundamental to NEPA's role in agency decisionmaking, and could lead to a denial of the leases or additional stipulations that would lessen potential impacts to people, the environment, and nearby communities. "Under [NEPA], 'the normal standards of redressability' are relaxed; a plaintiff need not establish that the ultimate agency decision would change upon [NEPA] compliance." *Comm. to Save Rio Hondo*, 102 F.3d at 452 (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 572 n.7 (1992)).

STANDARD OF REVIEW

Courts review agency compliance with NEPA pursuant to the APA, which provides that a "reviewing court shall … hold unlawful and set aside agency action, findings, and conclusions found to be … arbitrary, capricious, an abuse of discretion, or

[3] *See, e.g.,* Graham Dec. ¶¶ 10, 11, 12, 13; Klingel Dec. ¶¶ 6, 7, 8, 9, 10; Turner Dec. ¶¶ 4, 5, 7, 11, 12; Seamster Dec. ¶¶ 7, 10, 11; Eisenfeld Dec. ¶¶ 8, 10.
[4] *See, e.g.,* Graham Dec. ¶¶ 6, 10, 13; Klingel Dec. ¶¶ 5, 6, 7, 9, 10; Turner Dec. ¶¶ 6, 7, 10, 11; Seamster Dec. ¶¶ 8, 10, 11; Eisenfeld Dec. ¶¶ 6, 8, 9, 11, 12.

otherwise not in accordance with law." 5 U.S.C. § 706(2)(A); *WildEarth Guardians v. Nat'l Park Serv.*, 703 F.3d 1178, 1182-83 (10th Cir. 2013) (NEPA compliance reviewed under "arbitrary and capricious" standard). Arbitrary and capricious review requires a court to "determine whether the agency considered all relevant factors and whether there has been a clear error of judgment." *Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1574 (10th Cir. 1994). Accordingly, agency action will be set aside if:

> the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation 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.

Motor Vehicle Mfrs. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). A reviewing court may not "supply a reasoned basis for the agency's action that the agency itself has not given." *Id.* (quoting *SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947)). Instead, "[a]n agency's action must be upheld, if at all, on the basis articulated by the agency itself." *Id.* at 50. Though this standard of review is ultimately narrow and agency action is "entitled to a presumption of regularity," review must nevertheless be "searching and careful," "thorough, probing, and in-depth." *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415, (1971).

STATEMENT OF FACTS

I. BLM'S OIL AND GAS PLANNING AND MANAGEMENT FRAMEWORK

BLM manages onshore oil and gas leasing and development through a three-phase process. Each phase serves a distinct purpose, and is subject to unique rules, policies, and procedures, though the three phases, ultimately, must ensure "orderly and efficient"

development. 43 C.F.R. § 3160.0-4. Oil and gas development is a multiple use managed in accord with the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. §§ 1701 *et seq*. FLPMA, in 43 U.S.C. § 1701(a)(8), provides that BLM must manage the public lands:

> [I]n a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition, that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.

In the first phase of oil and gas decisionmaking, BLM prepares a resource management plan ("RMP") in accordance with FLPMA and associated planning regulations, 43 C.F.R. §§ 1600 *et seq*., with additional guidance from BLM's Land Use Planning Handbook (H-1601-1). An RMP predicts present and future use of public lands and their resources by establishing management priorities, as well as guiding and constraining BLM's implementation-stage management. With respect to fluid minerals leasing decisions, the RMP determines which lands containing federal minerals will be open to leasing and under what conditions, and analyzes the landscape-level cumulative impacts from predicted implementation-stage development. BLM is further required to supplement its RMP and EIS if substantial changes in the proposed action occur that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. 40 C.F.R. §§ 1502.9(c)(1)(i), (ii). A reasonably foreseeable development scenario ("RFDS") underlies BLM's assumptions regarding the pace and scope of fluid

minerals development within the RMP planning area.

In the second phase of oil and gas decisionmaking, BLM identifies the boundaries for lands to be offered for sale and proceeds to sell and execute leases for those lands through a lease sale. Leases are sold in accordance with 43 C.F.R. §§ 3120 *et seq*., with additional agency guidance outlined in BLM Instruction Memorandum ("IM") No. 2010-117 (hereafter "Leasing Reforms"). BLM012741. Prior to a BLM lease sale, BLM has the authority to subject leases to terms and conditions, which can serve as "stipulations" to protect the environment. 43 C.F.R. § 3101.1-3. Once BLM issues leases, it may impose conditions of approval ("COAs") that are delimited by the terms and conditions of the lease. 43 C.F.R. § 3101.1-2. Oil and gas leases confer "the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold." *Id*.

The third-phase occurs once BLM issues a lease, wherein the lessee is required to submit an application for permit to drill ("APD") to BLM prior to drilling. 43 C.F.R. § 3162.3-1(c). At this stage, BLM may condition the approval of the APD on the lessees' adoption of "reasonable measures" whose scope is delimited by the lease and the lessees' surface use rights. 43 C.F.R. § 3101.1-2.

II. BLM'S PLANNING AND MANAGEMENT GOVERNING SANTA FE NATIONAL FOREST LEASES

BLM completed the current RMP for the Farmington planning area in 2003, BLM025433, with a RFDS that was finalized in 2001. BLM013503. BLM makes RMP revisions in accordance with 43 C.F.R. § 1610.5-6, including preparation of a new RMP

to amend or replace an existing one. RMP revisions are necessary if monitoring and evaluation findings, new data, new or revised policy, or changes in circumstances indicate that decisions for an entire plan or a major portion of the plan no longer serve as a useful guide for resource management. 43 U.S.C. § 1712(c).

BLM determined that the 2003 RMP is no longer capable of guiding the agency's fluid minerals leasing and development decisionmaking, and is currently engaged in preparing a RMP Amendment and EIS specific to the Mancos Shale/Gallup Formation (hereinafter "Mancos RMPA"). 79 Fed. Reg. 10,548 (Feb. 25, 2014). All 13 leases in the SFNF are within the planning area for the Mancos RMPA. *Id.* at 10,549 ("Lands and mineral estate managed by the BLM for other Federal agencies, such as the U.S. Forest Service and the Bureau of Reclamation, are included in this RMP Amendment process and the analysis area.").

Acknowledging the deficiencies of the 2003 RMP, BLM provides that "[a]s full-field development occurs, especially in the shale oil play, additional impacts may occur that previously were not anticipated in the RFD or analyzed in the current 2003 RMP/EIS which will require an EIS-level plan amendment and revision of the RFD for complete analysis of the Mancos Shale/Gallup Formation." 79 Fed. Reg. 10,548. Other parcels originally included in the October 2014 lease sale were "deferred until the FFO Mancos Shale/Gallup Formation RMPA/EIS alternatives have been developed." BLM010228. BLM recently reinitiated the scoping process for the Mancos RMPA "specific to the extension of analysis in that EIS to BIA decision-making where BIA manages mineral leasing and associated activities in the RMPA Planning Area." 81 Fed. Reg. 72,819 (Oct.

21, 2016). Accordingly, BLM has not yet developed alternatives for the RMP amendment. Not only is the SFNF in the planning area for the Mancos RMPA, but the Mancos Shale formation is the producing zone targeted for development on the challenged leases. BLM010276.

III. FOREST SERVICE APPROVAL FOR SPLIT ESTATE LANDS IN THE SANTA FE NATIONAL FOREST

The surface estate for the 13 SFNF leases included in BLM's October 2014 lease sale is administered by the Forest Service Cuba Ranger District, Santa Fe National Forest. BLM's Farmington Field Office administers the federal mineral estate, creating a federal "split estate" on the leases challenged herein. BLM010215.

Pursuant to the Energy Policy Act of 2005, BLM and the Forest Service established a memorandum of understanding ("MOU") regarding oil and gas leasing and operations on public lands under their joint jurisdiction. BLM011808. The MOU outlines coordination and responsibilities between BLM and the Forest Service regarding leasing decisions and the application of lease stipulations. *Id.* BLM issues and administers oil and gas leases on Forest Service lands only after the Forest Service authorizes leasing for specific lands. BLM011810.

On September 25, 2013, the Forest Service Acting Director for Lands and Minerals issued a "letter of concurrence" to BLM concluding that the 2008 Santa Fe National Forest Oil-Gas Leasing Forest Plan Amendment ("2008 Forest Plan Amendment"), FS013743, and the Final Supplement to the Final Environmental Impact Statement for Oil-Gas Leasing, Santa Fe National Forest, Rio Arriba and Sandoval

Counties, New Mexico ("2012 Forest Plan Supplement"), FS016003, were "adequate for offering lands for competitive leasing" and identified specific SFNF parcels as available. FS016261; BLM000214. This letter of concurrence represents the Forest Service's final agency action authorizing the sale of the 13 SFNF parcels.

IV. BLM'S COMPETITIVE OIL AND GAS LEASE SALE FOR SANTA FE NATIONAL FOREST PARCELS

On March 10, 2014, BLM released a list and map of 26 nominated parcels for inclusion in the October 2014 competitive oil and gas lease sale, BLM001622, initiating a two-week public scoping period. On March 24, 2014, Citizen Groups submitted scoping comments and associated exhibits to BLM. BLM001639.

On or about May 1, 2014, BLM released a "draft" EA and unsigned FONSI for public review and comment. BLM003313. The draft EA stated that 35 parcels had been nominated for the October 2014 oil and gas lease sale, and included a "proposed action" that would lease 25 of those parcels, covering 23,325.4 acres under standard lease terms and conditions. BLM003314-15. On May 28, 2014, Citizen Groups submitted comments to BLM regarding the agency's draft EA and unsigned FONSI. BLM003953.

On or about July 16, 2014, BLM released a "final" EA and unsigned FONSI, initiating the protest period for the October 2014 lease sale. BLM006910. The final EA included a "preferred alternative" wherein 13 parcels covering 20,146.67 acres were included in the October 2014 lease sale. BLM006924. All 13 parcels are located in the SFNF, with a surface estate administered by the Forest Service. *Id.* BLM identified these parcels in the agency's lease sale notice. BLM008105. As described in the final EA,

BLM deferred authorizing the other 12 parcels previously included in the proposed action "until the FFO Mancos Shale/Gallup Formation RMPA/EIS alternatives have been developed." BLM006924. On August 14, 2014, Citizen Groups filed an administrative protest of BLM's lease authorizations for the October 2014 sale, objecting to the sale of all 13 parcels in the SFNF. BLM007848.

On October 22, 2014, BLM held the competitive oil and gas lease sale at the agency's New Mexico State Office in Santa Fe, New Mexico. BLM posted the sale results the same day, indicating that all 13 parcels had been sold. BLM008151. On October 23, 2015, a year after all parcels were sold, BLM denied Citizen Groups' Protest of the lease authorizations. BLM011314. And on October 28, 2015, BLM issued all 13 leases to Lessees. BLM011411.

ARGUMENT

I. BLM FAILED TO TAKE A HARD LOOK AT DIRECT, INDIRECT, AND CUMULATIVE IMPACTS OF OIL AND GAS LEASING BEFORE MAKING AN IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA imposes "action forcing procedures … requir[ing] that agencies take a *hard look* at environmental consequences." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citations omitted) (emphasis added). The purpose of the "hard look" requirement is to ensure that the "agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious." *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council,* 462 U.S. 87, 97 (1983). These "environmental consequences" may be direct, indirect, or cumulative. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8. Direct effects "are caused by the action and occur at

the same time and place." *Id.* § 1508.8(a). Indirect effects "are caused by the action and are later in time or farther removed in distance, but are still foreseeable." *Id.* § 1508.8(b). "Indirect effects may include … effects on air and water and other natural systems, including ecosystems." *Id.* A 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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7; *see also* 40 C.F.R. § 1508.25 (requiring that agencies take cumulative impacts into consideration during NEPA review).

An environmental effect is "reasonably foreseeable" if it is "sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision." *Sierra Club v. Marsh,* 976 F.2d 763, 767 (1st Cir.1992). An agencies hard look examination "must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made." *Forest Guardians v. U.S. Fish & Wildlife Serv.,* 611 F.3d 692, 712 (10th Cir. 2010) (citations omitted). "Looking to the standards set out by regulation and by statute, assessment of all 'reasonably foreseeable' impacts must occur at the earliest practicable point, and must take place before an 'irretrievable commitment of resources' is made." *New Mexico ex rel. Richardson v. Bureau of Land Management,* 565 F.3d 683, 717 (10th Cir. 2009) (citations omitted); *see also* 42 U.S.C. § 4332(2)(C)(v); 40 C.F.R. §§ 1501.2, 1502.22; *Sierra Club v. Hodel*, 848 F.2d 1068, 1093 (10th Cir. 1988) (holding agencies

are to perform hard look NEPA analysis "before committing themselves irretrievably to a given course of action so that the action can be shaped to account for environmental values.").

The Tenth Circuit has concluded: "issuing an oil and gas lease without an NSO stipulation constitutes [an irretrievable] commitment of resources." *New Mexico*, 565 F.3d at 718 (citations omitted); *see also* BLM12062 (BLM Handbook H–1624–1, stating: "By law, these impacts must be analyzed before the agency makes an irreversible commitment. In the fluid minerals program, this commitment occurs at the point of lease issuance."). Oil and gas leases confer "the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold." 40 C.F.R. § 3101.1-2; BLM010219 ("Once sold, the lease purchaser has the exclusive right to use as much of the leased lands as is necessary to explore and drill oil and gas within the lease boundaries."). As here, where "BLM could not prevent the impacts resulting from surface use after a lease issued, it was required to analyze any foreseeable impacts of such use before committing the resources." *New Mexico*, 565 F.3d at 718-19. Accordingly, "NEPA require[s] an analysis of the site-specific impacts of [a lease sale] prior to its issuance, and BLM [acts] arbitrarily and capriciously by failing to conduct one." *Id.*

BLM acknowledges that oil and gas development "is reasonably foreseeable … [to] occur on leased parcels." BLM010227. Yet, despite clear authority directing the agency otherwise, the 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. All impacts would be linked to as yet undetermined future levels of lease development." BLM010266. This assumption guided the agency's subsequent consideration of direct, indirect, and cumulative effects of oil and gas leasing and development to specific resources, in violation of NEPA. *New Mexico*, 565 F.3d at 718-19.

A. BLM Failed to Take a Hard Look at Impacts from Leasing on Greenhouse Gas Emissions and Climate Change

BLM fail to take a hard look at the direct, indirect, and cumulative environmental impacts of greenhouse gas ("GHG") emissions caused by lease development. It is well settled that where an agency action causes GHG pollution, NEPA mandates that the agency analyze and disclose the impacts of that pollution. As the Ninth Circuit held:

> [T]he fact that climate change is largely a global phenomenon that includes actions that are outside of [the agency's] control ... does not release the agency from the duty of assessing the effects of its actions on global warming within the context of other actions that also affect global warming.

Center for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1217 (9th Cir. 2008) (quotations and citations omitted); *see also Border Power Plant Working Grp. v. U.S. Dep't of Energy*, 260 F. Supp. 2d 997, 1028-29 (S.D. Cal. 2003) (finding agency failure to disclose project's indirect carbon dioxide emissions violates NEPA). The need to evaluate such impacts is bolstered by the fact that "[t]he harms associated with climate change are serious and well recognized," and environmental changes caused by climate change "have already inflicted significant harms" to many resources around the globe. *Massachusetts v. EPA*, 549 U.S. 497, 521 (2007); *see also*

id. at 525 (recognizing "the enormity of the potential consequences associated with manmade climate change.").

Although BLM quantifies direct GHG emissions from the leases in its EA, BLM010271-72, the agency disavows any responsibility for analyzing the impacts of these emissions:

> Leasing the subject tracts under either action alternative would have no direct impacts to climate change as a result of GHG emissions. Any potential effects to air quality from sale of a lease parcel would occur at such time that the lease was developed. The potential full development of the proposed lease sale is estimated at 118 oil wells.

BLM010270. In other words, although GHG emissions from lease development are foreseeable and would result in 11,611 metric tons of direct CO_2e emissions[5]— which BLM attempts to diminish by comparing this numeric contribution to total U.S. GHG emissions—BLM arbitrarily concludes that such emissions are insignificant because the act of leasing is essentially paper transaction. However, courts have rejected this excuse for deferring analysis to the permitting stage. *See, e.g.*, *New Mexico*, 565 F.3d at 718-19 (holding that BLM "was required to analyze any foreseeable impacts of [leasing] before committing the resources.").

Critically, the agency also purposefully ignores downstream GHG emissions from

[5] BLM010272. Notably, BLM significantly underestimates direct emissions by using outdated data on the warming potential of methane, a significant component of natural gas. BLM010168 ("methane has a global warming potential that is 21-25 times greater than the warming potential of CO2."). While BLM failed to disclose both foreseeable emissions by source and assumptions with regard to leak rates, the IPCC's most recent and best available science states that methane's global warming potential is 87 over a 20-year timeframe. BLM007870 (citing Intergovernmental Panel on Climate Change, *Working Group I Contribution to the IPCC Fifth Assessment Report Climate Change 2013: The Physical Science Basis,* at 8-58 (Table 8.7) (Sept. 2013)).

consumption of the oil and gas produced from the challenged leases, stating there is not "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." BLM010269. This conclusion is arbitrary, not supported by the record, and contrary to NEPA, agency guidance, and case law. 40 C.F.R. § 1508.25 (c) (scope of environmental analysis must include indirect impacts).[6] NEPA broadly requires agencies to consider "any adverse environmental effects which cannot be avoided should the proposal be implemented." 42 U.S.C. § 4332(2)(C)(ii).

First, as detailed below, BLM did not take a hard look at downstream GHG emissions from the leases in its cumulative effects analysis. Thus, referring to a non-existent analysis cannot save the agency. The court cannot "defer to a void." *High Country Conserv. Advocates v. U.S. Forest Service*, 52 F. Supp. 3d 1174, 1186 (D. Colo. 2015) (quoting *Or. Natural Desert Ass'n v. BLM*, 625 F.3d 1092, 1121 (9th Cir. 2010).

Second, it is well established that foreseeable downstream emissions are precisely the type of indirect effect the agency must consider and analyze. *See WildEarth Guardians v. U.S. OSMRE*, 104 F. Supp. 3d 1208, 1229–30 (D. Colo. 2015), vacated as moot, (recognizing that "combustion is therefore an indirect effect of the approval of the

[6] *See* 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) at 16 n.42 (providing "where the proposed action involves fossil fuel extraction … the [indirect impacts] associated with the end-use of the fossil fuel being extracted would be the reasonably foreseeable combustion").

mining plan modifications"); *Diné Citizens Against Ruining Our Env't v. U.S. OSMRE*, 82 F. Supp. 3d 1201, 1213 (D. Colo. 2015), vacated as moot, (holding that "coal combustion-related impacts of … proposed expansion are an 'indirect effect' requiring NEPA analysis."); *High Country,* 52 F. Supp. 3d at 1189–90 (recognizing that the agencies "do not dispute that they are required to analyze the indirect effects of GHG emissions").

Here, BLM recognizes it is both reasonably foreseeable that oil and gas development will occur on lease parcels, BLM010227, and that such development will result in combustion emissions. BLM10294. Accordingly, BLM was required to consider the indirect impacts of downstream emissions. Refusing to do so here violates NEPA. *See Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549–50 (8th Cir. 2003) (holding that "when the *nature* of the effect is reasonably foreseeable but its *extent* is not, we think that the agency may not simply ignore the effect"); *High Country*, 52 F. Supp. 3d at 1197–98 (D. Colo. 2014) (holding that "reasonably foreseeable effect[s] must be analyzed, even if the precise extent of the effect is less certain"); *see also, e.g., WildEarth Guardians,* 104 F.Supp.3d at 1230 (accord); *City of Davis v. Coleman,* 521 F.2d 661, 676 (9th Cir.1975) (accord).

Finally, BLM considers its NEPA obligation to analyze GHG impacts satisfied based on the assurance that "[t]he 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." BLM010272. This approach is fundamentally incongruous with NEPA's hard look mandate, and fails to take these

emissions in particular and, more broadly, the impacts climate change, seriously. *Northern Plains Resource Council v. Surface Transp. Bd.,* 668 F.3d 1067, 1084-85 (9th Cir. 2011) (recognizing that "reliance on mitigation measures presupposes approval. It assumes that—regardless of what effects construction may have on resources—there are mitigation measures that might counteract the effect without first understanding the extent of the problem. This is inconsistent with what NEPA requires."). BLM's failure to even consider, let along quantify and analyze, foreseeable GHG emissions from SFNF leases violates NEPA.

Moreover, BLM has recognized that "increasing concentrations of GHGs are likely to accelerate the rate of climate change." BLM010236. Yet, BLM ignores this relationship when refusing to analyze cumulative impacts to climate change from the lease sale because "the very small increase in GHG emissions…would not produce climate change impacts." BLM010282. BLM reasoned, "climate change is a global process" and that the "incremental contribution to global GHG's from the proposed action cannot be translated into effects on climate change globally or in the area of this site-specific action." *Id.* In short, BLM is describing the nature of climate change—that incremental contributions of GHGs are causing global impacts—which does not excuse the agency's NEPA obligations. Rather, NEPA mandates that BLM disclose and consider the reasonably foreseeable effects of proposed actions, including cumulative effects, using data and analysis to reveal the proportional impact of the proposed action. *See* 40 C.F.R. § 1502.15; *id.* § 1502.2(b); *Native Vill. of Point Hope v. Jewell*, 740 F.3d 489, 504 (9th Cir. 2014) (recognizing that "[i]t is only at the lease sale stage that the agency can

adequately consider cumulative effects of the lease sale on the environment, including … the effects of the sale on climate change.").

BLM relies exclusively on the Air Resources Technical Report ("ARTR")—to which the EA tiers—to satisfy its NEPA obligations with regard to climate change. BLM010282. The ARTR "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." *Id.*; *see also* BLM12587. Although the ARTR provides a broad overview of oil and gas emissions for a four state region, the document, in isolation, does not satisfy the type of site-specific NEPA analysis required here. As the ARTR acknowledges, it is a "generic" document intended to "summarize the technical information on air quality and climate change relative to all Environmental Assessment (EAs) and Application for Permit to Drill (APD) and Lease sales." BLM12590.

BLM's reliance on the ARTR as a surrogate for a cumulative impacts analysis is arbitrary. The agency cannot tier to a non-NEPA document "that has not itself been subject to NEPA review." *Kern v. BLM,* 284 F.3d 1062, 1073 (9th Cir. 2002) *see also S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep't of Interior*, 588 F.3d 718, 726 (9th Cir. 2009) (holding that "[a] non-NEPA document … cannot satisfy a federal agency's obligations under NEPA."); *Idaho v. Interstate Commerce Comm'n*, 35 F.3d 585, 595 (D.C. Cir. 1994) (citation and alteration omitted) (recognizing that attempting "to rely entirely on the environmental judgments of other agencies [is] in fundamental conflict with the basic purpose of NEPA."). Here, not only is the ARTR not a NEPA document, it does not evaluate whether GHG emissions from a multitude of sources are

cumulatively significant.

BLM's conclusion that cumulative GHG emissions from the lease sale will be insignificant is also arbitrary because BLM simply assumed that because the lease's numeric contribution to "global" and "regional" emissions would be small, that any environmental impacts from project emissions would be correspondingly small. BLM010282; *see also* BLM012623-25 (ARTR using a similar scale of global, national and state emissions); BLM010271-72 (Table 23, showing GHG emission from the lease sale are 0.0018% of U.S. GHG emissions from all sources). However, there is no record evidence supporting BLM's approach of using the *amount* and *proportion* of GHG emissions as a proxy for assessing the *significance* of project-level GHG emissions, and courts have squarely rejected this approach as sufficient to comply with NEPA. *See*, *e.g.*, *Center for Biological Diversity*, 538 F.3d at 1216.

The San Juan Basin has over 15,000 active oil and gas wells, two massive mine-to-mouth coal-fired power plant complexes—the Navajo Mine and Four Corners Power Plant, and the San Juan Mine and San Juan Generating Station—as well as vast infrastructure and transportation systems servicing the region's fossil fuel exploitation. BLM010172; BLM010281. The impact of such development on the area's air, water, land, and human communities cannot be overstated. Yet, BLM dismissively concludes that "[p]reserving as much land as possible and applying appropriate mitigation measures will alleviate the cumulative impacts." BLM010281. Such conclusory statements—with no supporting analysis, detail, plan, or identification of actual mitigation measures—fail to satisfy NEPA. *See Natural Resources Defense Council v. Hodel*, 865 F.2d 288, 298

(D.C. Cir. 1988) ("conclusory remarks … do not equip a decisionmaker to make an informed decision."); *Northern Plains,* 668 F.3d at 1085 ("[M]itigation measures, while necessary, are not alone sufficient to meet the [Agency's] NEPA obligations to determine the projected extent of the environmental harm to enumerated resources *before* a project is approved."). Having already leased over 90 percent of BLM managed lands to oil and gas, BLM also fails to identify which lands it intends to preserve.

Critically, BLM also fails to take the essential next step required for a hard look: actually analyzing how the incremental contribution of lease emissions—combined with other sources of cumulative emissions—will impact resource values in the SFNF. 40 C.F.R. § 1508.7. In fact, nowhere in BLM's EA or the ARTR does the agency describe the type of impacts GHG emissions will have on resources. Instead, BLM dismisses needing to do any analysis of GHG impacts with the assertion that "while BLM actions may contribute to climate change, the specific effects of those actions on global or regional climate are not quantifiable." BLM012623. This is both arbitrary and contradicted by the record. As recognized by a 2007 U.S. Government Accountability Office ("GAO") report:

> [C]limate change is likely to affect federal resources in a number of ways. For example, the experts said that climate change has already caused—and will likely continue to cause—physical changes, including drought, floods, glacial melting, seal level rise, and ocean acidification. Climate change will also cause biological changes, such as increases in insect and disease infestations, shifts in species distribution and abundance, and changes in the timing of natural events, among others. The experts further said that climate change is likely to adversely affect economic and social goods and services supported by federal resources, including recreation, tourism, infrastructure, water supplies, fishing, ranching, and other resource uses.

BLM018707; *see also, e.g.,* BLM018873 (Scientific Assessment of the Effects of Global Change on the United States). "The ways global warming and its associated climate changes are likely to affect the Southwest include higher temperatures, with more heat waves; more droughts and, paradoxically, more floods; less snow cover, with more strain on water resources; and an earlier spring with more large wildfires." BLM019148 (describing in detail regional climate change impacts on resources in the Southwest). Because BLM failed to mention, let alone apply, these quantified and observable impacts of climate change on resources in the SFNF, the EA did not comply with NEPA. 40 C.F.R. § 1502.15 (discussing use of data and analysis to describe affected environment); *id.* § 1502.16 (detailing analysis of environmental consequences); *id.* § 1502.24 (requiring agencies to use high quality information and ensure professional and scientific integrity); *id*. § 1508.9 (discussing environmental assessment).

B. BLM Failed to Take a Hard Look at Impacts from Leasing on Air Quality

BLM also failed to take a hard look at the impacts of leasing in the SFNF on air quality. With particular regard to cumulative impacts to air quality, BLM concluded:

> The very small increase in emissions that could result from approval of the action alternatives would not result in any county in the FFO area exceeding the [National Ambient Air Quality Standards (NAAQS)] for any criteria pollutants…. The emissions from any wells drilled in the leased areas are not expected to impact the 8-hour average ozone concentrations, or any other criteria pollutants in the Southern San Juan Basin.

BLM010282. This conclusion is unsupported by the record. Although BLM includes monitored values for criteria pollutants in San Juan County as a whole in a separate section of the EA, BLM010234 (Table 4), the agency fails to quantify the foreseeable

direct emissions of criteria pollutants that will result *from the proposed action*. Without knowing air pollution levels and their impacts in the previously undeveloped project area, it is therefore impossible for BLM to support its conclusion that the sale would result in a "very small increase" in emissions or that this incremental increase would not cumulatively impact air quality in the project area in a significant manner—let alone provide the hard look analysis NEPA demands. 40 C.F.R. § 1508.7; *Hanly v. Kleindienst*, 471 F.2d 823, 831 (2d Cir. 1972) (stating that "[o]ne more [well] polluting air and water … may represent the straw that breaks the back of the environmental camel."). Courts have rejected this type of piecemeal analysis:

> Consideration of cumulative impacts requires 'some quantified or detailed information; … [g]eneral statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided.' The cumulative impact analysis must be more than perfunctory; it must provide a 'useful analysis of the cumulative impacts of past, present, and future projects.'

Kern, 284 F.3d at 1075 (citations omitted); *see also Grand Canyon Trust v. F.A.A.*, 290 F.3d 339, 342 (D.C. Cir. 2002) (holding that an "agency's [environmental analysis] must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum.").

Moreover, even if BLM had demonstrated that lease development in a previously undeveloped area would not result in violations of an NAAQS, BLM's NEPA obligation to take a hard look at cumulative impacts to air quality is separate and distinct from compliance with the Clean Air Act because the NAAQS are not the sole measuring standards for assessing whether lease development will significantly affect air quality.

See, e.g., Colorado Envtl. Coal. v. Salazar, 875 F. Supp. 2d 1233, 1257 (D. Colo. 2012) ("The mere fact that the area has not exceeded ozone limits in the past is of no significance when the purpose of the EIS is to attempt to predict what environmental effects are likely to occur in the future[.]"). Therefore, BLM was not excused from taking a hard look at cumulative air quality impacts in its EA.

Finally, although it had the means to do so, 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. BLM notes that "[t]he primary activities that contribute to levels of air pollutant and GHG emissions in the Four Corners area are electricity generation stations, fossil fuel industries and vehicle travel." BLM010281. BLM also cites to the ARTR which provides "a description of the varied sources of national and regional emissions." *Id.* Yet BLM did not place these emission levels in any context to be able to analyze the effect they may have on regional air quality, or the future likelihood of remaining below the NAAQS for criteria air pollutants once the leases are developed and their emissions are added to current emissions levels form other sources. This failure violates NEPA. *See Colorado Envtl. Coal.*, 875 F. Supp. 2d at 1256 (holding a BLM leasing decision arbitrary where the agency "failed to take the requisite 'hard look' at the air quality effects from its decision, when accumulated with air quality effects from anticipated oil and gas development outside the Planning Area"). By failing to perform any cumulative analysis of impacts to air quality from lease development, BLM failed to consider a relevant factor and important aspect of the problem. *Motor Vehicle Mfrs.*, 463 U.S. at 43; *Olenhouse*, 42 F.3d at 1574.

C. BLM Failed to Take a Hard Look at Impacts from Leasing on Water Resources

BLM also failed to take a hard look at the direct, indirect, and cumulative impacts on water resources in the SFNF. Water resources are particularly vulnerable given the massive quantities of water required in the drilling of oil and gas wells using hydraulic fracturing (or "fracking"), as well as the chemicals added to the fracking fluids, which threaten to contaminate groundwater and surface water. BLM010276. BLM acknowledges that it is foreseeable that fracking will occur on leased parcels, and that "[h]ydraulic fracturing is a common process in the San Juan Basin and applied to nearly all wells drilled." BLM010276.

1. Impacts to water quantity

BLM fails to quantify how much water will be required for the development of SFNF leases, or the amount of water foreseeably required to drill and fracture each well. The record shows these volumes could be massive, and that "[w]ater used in drilling and particularly in hydraulic fracturing can amount to between 2 million and 8 million gallons per well." BLM048047. By this count, lease development would foreseeably consume between 236 million and 944 million gallons of water. Yet BLM's only statement with regard to water consumption fails to address the impact of this level of water use:

> The water used for hydraulic fracturing in the Farmington Field Office generally comes from permitted groundwater wells, although surface water sources 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.

BLM010276 (emphasis added). In an arid region already suffering from prolonged drought, such a vague and shallow assessment falls far short of the agency's hard look obligation under NEPA. *Methow Valley*, 490 U.S. at 350. There 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. BLM019148

Whether or not BLM is responsible of allocation of water rights is not relevant to the question of whether the agency has satisfied its NEPA obligations. BLM is required to analyze the environmental consequences of "reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. §§ 1508.7, 1502.16; *Colorado Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1176 (10th Cir. 1999). Nearly one-billon gallons of water could be permanently removed from the hydrologic system as a result of BLM's lease issuance, and the agency has a duty to disclose and analyze what the impact of this magnitude of water removal might be. The agency has altogether failed to do so here, rendering the agency's conclusions about water quantity impacts arbitrary.

2. Impacts to groundwater quality

BLM similarly failed to take a hard look at impacts to groundwater quality. The starting point for the agency's consideration of groundwater quality is the assertion that "[t]here are no verified instances of hydraulic fracturing adversely affecting groundwater

in the San Juan Basin." BLM010276. Simply because there are "no verified instances" of contamination[7]—in a region of poor and underserved populations, and with no basis in the record to support this statement—does not obviate the agency's requirement to take a hard look.

In fact, BLM admits that "[c]ontamination of groundwater could occur without adequate cementing and casing of the proposed well bore." BLM010276. And the agency further acknowledges that "potential for impacts to groundwater from the well bores would be long term for the life of the well." BLM010276. In other words, it is both foreseeable that groundwater contamination could occur, and, if and when it does, the impacts would last a very long time. Yet, the agency dismissively concludes: "Adherence to APD COAs and other design measures would minimize potential effects to groundwater quality." BLM010276. "A 'perfunctory description,' or 'mere listing of mitigation measures, without supporting analytical data,' is insufficient to support a finding of no significant impact." *National Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 735 (9th Cir. 2001). Here, BLM does not even list the mitigation measures it is relying on to conclude that groundwater quality will not be significantly impacted. Unspecified mitigation and unsupported conclusions fail to demonstrate an "adequate buffer against the negative impacts" to groundwater quality and fail to determine "whether the mitigation measures will render such impacts so minor as to not warrant an EIS." *National Parks*, 241 F.3d at 735.

[7] *Cf.* BLM035617; BLM035633; BLM035872; BLM035930; BLM035974; BLM036951; BLM036988; BLM037021; BLM037033.

Moreover, BLM also assumes that the targeted Mancos Shale formation is "overlain by a continuous confining layer," that the "total depth of each well bore would be 6,700 feet below the ground surface," and that "[f]racturing in the Basin Mancos formation is not expected to occur above depths above 5,700 feet." BLM010276. However, as the Forest Service recognized, the Mancos Shale formation experiences uplift as it moves east, and in the SFNF "Mancos wells are usually shallow (less than 4,000 feet deep)." FS016027. Indeed, many of the assumptions BLM relies on to conclude that impacts to groundwater resources will not be significant are incorrect, or at the very least unsupported. Therefore, BLM's conclusions relating to impacts to groundwater quality are arbitrary.

3. Impacts to surface water quality

BLM also failed to take a hard look at impacts to surface water quality. The extent of BLM's consideration of surface water impacts from lease development is limited to one paragraph containing two sentences:

> There would be the potential for accidental spills or releases of these materials, which could impact local water quality. The potential for surface water quality impacts from accidental spill or releases of hazardous materials on the well pads would be long term for the life of the wells.

BLM010277. There is no discussion of the severity of these impacts, mitigation measure to reduce impacts, or any other explanation supporting BLM's determination that these impacts are insignificant. Because BLM has "offered an explanation that runs counter to the evidence before the agency," BLM's consideration of impacts to surface water quality was arbitrary. *Motor Vehicle*, 463 U.S. at 43.

D. BLM Failed to Take a Hard Look at Cumulative Impacts of Lease Development

Finally, BLM has failed to take a hard look at the cumulative impacts of lease development to specific resources. Although BLM includes a "Cumulative Impacts" section in its EA, BLM010280, BLM fails to conduct any actual cumulative analysis of impacts to resource values. Instead, BLM makes the following general statement about leasing's cumulative impacts:

> Cumulative impacts include the combined effect of past projects, specific planned projects and other reasonably foreseeable future actions such as other infield wells being located within this lease. Potential cumulative effects may occur should an oil and gas field be discovered if this parcel was drilled and other infield wells are drilled within this lease or if this lease becomes part of a new unit. *All actions, not just oil and gas development may occur in the area, including foreseeable non-federal actions*.

BLM010266 (emphasis added). However, a general acknowledgement that cumulative environmental impacts may occur from development of the leases does not satisfy BLM's obligation under NEPA to identify these impacts and assess their significance. *See Natural Resources Defense Council*, 865 F.2d at 298 (providing that section headings without the "requisite analysis" are insufficient for NEPA compliance); *see also* 40 C.F.R. § 1508.27(b)(7) (requiring that BLM consider whether the proposed action is related to other actions that together may have cumulatively significant impacts. "Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts."). An "agency's [environmental analysis] must give a realistic evaluation of the total impacts and cannot isolate a proposed project,

viewing it in a vacuum." *Grand Canyon Trust*, 290 F.3d at 342. Here, BLM improperly avoided analyzing the cumulative impacts of its leasing decision by deferring analysis until the permitting stage when lease development is a foregone conclusion.

BLM's cumulative impacts section discusses just two resources: air quality and climate change. Yet, for both, BLM dismissively concludes that development of the 13 leases will not cumulatively impact these resources, as detailed above. *See* BLM010282. BLM altogether fails to discuss potential cumulative impacts to any other resource. This omission is arbitrary because BLM admits in the EA that specific impacts to other resource values are foreseeable. *See, e.g.,* BLM010269 (describing impacts to air resources); BLM010273 (describing impacts to cultural resources); BLM010276 (describing impacts to groundwater); BLM010175 (describing impacts to surface water); BLM010277 (describing impacts to soil); BLM010279 (describing impacts to wildlife). BLM also admits that foreseeable lease development includes:

> constructing a well pad and access road, drilling a well using a conventional pit system or closed-loop system, hydraulically fracturing the well, installing pipelines and/or hauling produced fluids, regularly monitoring the well, and completing work-over tasks throughout the life of the well. In Farmington, typically, all of these actions are undertaken during development of an oil or gas well; it is reasonably foreseeable that they may occur on leased parcels.

BLM010227. Yet BLM failed to assess whether any of these actions would result in cumulatively significant impacts. "An EA's analysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment." *Te-Moak Tribe of W. Shoshone of Nevada v. U.S. Dep't*

of Interior, 608 F.3d 592, 603 (9th Cir. 2010) (internal quotation and citation omitted)); *see also New Mexico*, 565 F.3d at 713 n.36 (recognizing that 40 C.F.R. § 1508.25(a)(2) requires "effects must be considered cumulatively, and impacts that are insignificant standing alone continue to require analysis if they are significant when combined with other impacts."); *Dombeck*, 185 F.3d at 1176; 40 C.F.R.§ 1508.8 (including "ecological, aesthetic, historical, cultural, economic, social and health impacts").

"In order for Plaintiffs to demonstrate that the BLM failed to conduct a sufficient cumulative impact analysis, they need not show what cumulative impacts would occur… only the potential for cumulative impact." *Te-Moak Tribe*, 608 F.3d at 605. The court reasoned that, "[t]o hold otherwise would require the public, rather than the agency, to ascertain the cumulative effects of a proposed action." *Id.* Here, BLM has made an initial determination that "the potential for cumulative impacts" to other resources from lease development exists, but has not identified or analyzed whether these impacts will be significant. Because BLM failed to consider a relevant factor and important aspect of the problem, its leasing decision was arbitrary. *Motor Vehicle Mfrs.*, 463 U.S. at 43.

II. BLM FAILED TO PROVIDE A CONVINCING STATEMENT OF REASONS TO JUSTIFY ITS DECISION TO FOREGO PREPARATION OF AN ENVIRONMENTAL IMPACT STATEMENT

For "major federal actions significantly affecting the quality of the human environment," federal agencies must prepare an EIS. 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.4. A federal action "affects" the environment when it "will or *may* have an effect" on the environment. 40 C.F.R. § 1508.3 (emphasis added); *see also Airport Neighbors Alliance v. U.S.,* 90 F.3d 426, 429 (10th Cir. 1996) (stating that an EIS is

required if a "proposed action may 'significantly affect' the environment"); *Sierra Club v. Peterson,* 717 F.2d 1409, 1415 (D.C. Cir. 1983) (accord). Similarly, according to the Ninth Circuit:

> an EIS *must* be prepared if 'substantial questions are raised as to whether a project ... *may* cause significant degradation to some human environmental factor.' To trigger this requirement a 'plaintiff need not show that significant effects *will in fact occur*,' [but instead] raising 'substantial questions whether a project may have a significant effect' is sufficient.

Idaho Sporting Cong. v. Thomas, 137 F.3d 1146, 1149-50 (9th Cir. 1998) (citations omitted) (emphasis original). In the Tenth Circuit, review of the decision not to prepare an EIS requires the court to determine "whether the agency acted arbitrarily and capriciously in concluding that the proposed action will not have a significant effect on the human environment." *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1274 (10th Cir. 2004) (quoting *Davis v. Mineta,* 302 F.3d 1104, 1112 (10th Cir.2002)).

Federal agencies determine whether direct, indirect, or cumulative impacts are significant by accounting for both the "context" and "intensity" of those impacts. 40 C.F.R. § 1508.27. Context "means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality" and "varies with the setting of the proposed action." 40 C.F.R. § 1508.27(a). Intensity "refers to the severity of the impact" and is evaluated according to several additional elements, including, for example: unique characteristics of the geographic area such as ecologically critical areas; the degree to which the effects are likely to be highly controversial; the degree to which the possible

effects are highly uncertain or involve unique or unknown risks; and whether the action has cumulatively significant impacts. *Id.* § 1508.27(b). Courts have found that "[t]he presence of one or more of [the CEQ significance] factors should result in an agency decision to prepare an EIS." *Fund for Animals v. Norton,* 281 F.Supp.2d 209, 218 (D.D.C. 2003) (quoting *Pub. Citizen v. Dep't of Transp.,* 316 F.3d 1002, 1023 (9th Cir. 2003)).

"Judicial review of an agency's finding of 'no significant impact' is not, however, merely perfunctory as the court must insure that the agency took a 'hard look' at the environmental consequences of its decision." *Peterson,* 717 F.2d at 1413 (citing *Kleppe,* 427 U.S. at 410 n. 21). As detailed above, BLM failed to take a hard look at the direct, indirect, and cumulative impacts of its leasing decision. The agency's discussion of resource values also failed to account for the context and intensity of potential impacts, including effects the region's air, water, and landscapes, as well as factors of intensity such as the unique geology and ecology of the area, uncertainty as a result of climate change and the threats posed by fracking, controversy around these effects, and the cumulative toll that this and other development has inflicted on the region. 40 C.F.R. § 1508.27. The record contains no evidence that BLM considered the context and intensity of impacts in reaching its decision.

BLM also failed to "put forth a 'convincing statement of reasons' that explains why the project will impact the environment no more than insignificantly." *Ocean Advoc. v. U.S. Army Corps of Engrs*., 402 F.3d 846, 864 (9th Cir. 2005). Such a

statement "proves crucial to evaluating whether the [agency] took the requisite 'hard look.' " *Id.* BLM does not provide a statement in either its EA or FONSI explaining the basis for its determination that development of the challenged leases will not have significant environmental impacts. Instead, BLM offers unsupported assumptions, framed as conclusions, that "[t]he act of leasing the parcels would, by itself, have no impact on any resources in the FFO," BLM010266, and that "[p]reserving as much land as possible and applying appropriate mitigation measures will alleviate the cumulative impacts." BLM010281. Yet BLM makes these assertions at the same time it suggests that substantive analysis of site-specific impacts can be deferred until the APD stage—which, as described above, is inconsistent with the Tenth Circuit's mandate that BLM analyze the impacts of leasing before making an irretrievable commitment of resources. *New Mexico*, 565 F.3d at 718-19.

Here, BLM's FONSI consists of one paragraph, providing:

> The impacts of leasing the fluid mineral estate in the areas described with this EA have been previously analyzed in the 2003 Farmington RMP, the 2002 Biological Assessment, and the Final Environmental Impact Statement (FEIS) for Oil and Gas Leasing and Roads Management, Santa Fe National Forest; and the lease stipulations that accompany the tracts proposed for leasing would mitigate the impacts of future development on these tracts. Therefore, preparation of an Environmental Impact Statement is not warranted.

BLM010213. This vague statement tiering to inoperable planning documents, generic stipulations, and unspecified mitigation fails to satisfy the agency's NEPA mandate. *Cf.* 40 C.F.R. § 1508.27. It also fails to provide a convincing statement explaining the agency's decision to forego an EIS.

Furthermore, even if BLM concluded that an EIS was not necessary for its leasing decision because the impacts of this decision were already addressed in the 2003 RMP and EIS, the agency was still required to support that decision. NEPA regulations specify that an EA tiering to a broader EIS "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. If the impacts analysis in the programmatic EIS "is not sufficiently comprehensive or adequate to support further decisions," the agency's EA must explain this and provide additional analysis. *Id.* at § 46.140(b). BLM includes no such statement or explanation in its EA. Moreover, a site-specific EA "can be tiered to a programmatic or other broader-scope [EIS] … for a proposed action with significant effects, whether direct, indirect, or cumulative, if … a broader [EIS] fully analyzed those significant effects." *Id.* at § 46.140(c). As BLM has itself recognized in its Notice of Intent to prepare a RMP Amendment and EIS to the current 2003 Farmington RMP:

> Subsequent improvements and innovations in horizontal drilling technology and multi-stage hydraulic fracturing have enhanced the economics of developing [the Mancos Shale] horizon … As full-field development occurs, especially in the shale oil play, additional impacts may occur that previously were not anticipated in the [2001] RFD or analyzed in the current 2003 RMP/EIS, which will require an EIS-level plan amendment.[8]

79 Fed. Reg. 10,548. Because the Mancos Shale is the producing zone targeted for development of the leases, BLM010276, and additional impacts are anticipated that have not been analyzed and which require an EIS, BLM's FONSI stating that "impacts of leasing the fluid mineral estate in the areas described with this EA have been previously

[8] *See also* Scoping Report (Nov. 2014) (describing different impacts and areas being developed). JA 00742; JA 00072.

analyzed in the 2003 Farmington RMP" is both unsupported and directly contrary to its own admissions. Accordingly, BLM cannot tier to the 2003 Farmington RMP to fill any void that exists in the EA's analysis.

BLM fails to take the hard look at the impacts of lease development on the parcels included in the EA, which in turn cannot support its FONSI. BLM's leasing decision is therefore arbitrary and must be reversed. *Greater Yellowstone*, 359 F.3d at 1274.

III. BLM UNLAWFULLY ISSUED LEASES CAUSING PREJUDICE AND LIMITING THE CHOICE OF ALTERNATIVES IN THE PENDING RESOURCE MANAGEMENT PLAN AMENDMENT

NEPA establishes a duty "to stop actions that adversely impact the environment, that limit the choice of alternatives for the EIS, or that constitute an 'irreversible and irretrievable commitment of resources.'" *Conner v. Burford,* 848 F.2d 1441, 1446 (9th Cir. 1988). This duty is codified in 40 C.F.R. § 1506.1(c), recognizing that agencies *shall not* undertake action—such as issuing leases—when that action will cause prejudice or limit the choice of alternatives in the required EIS.[9] BLM's issuance of the challenged leases during the RMP amendment process—which is analyzing the impacts of decisions such as this one—violates this duty. *See Arlington Coalition on Transportation v. Volpe,* 458 F.2d 1323, 1330 (4th Cir.1972) (holding that an injunction was required until the agency completed final action on the EIS).

BLM's Farmington Field Office is in the midst of a RMP Amendment and accompanying EIS to consider, for the first time, the landscape level impacts from

[9] Defining "prejudice" as interim action that "tends to determine subsequent development." *Id.* at § 1506.1(c)(3).

reasonably foreseeable development of the Mancos Shale formation using fracking. 79 Fed. Reg. 10,548; 81 Fed. Reg. 72,819. Mancos Shale is the producing zone targeted for development of the challenged leases. BLM010276. Proceeding with the issuance of these leases before completing the Mancos RMPA limits BLM's choice of alternatives in the EIS for the RMPA, including an alternative that decides not to lease these parcels.

A robust analysis of alternatives to the proposed action is a foundational requirement of any NEPA analysis. *Colorado Envtl. Coal.*, 185 F.3d at 1174 (recognizing "the heart" of an environmental analysis under NEPA is the analysis of alternatives to the proposed project"); 40 C.F.R. § 1502.14. Consideration of reasonable alternatives is necessary to ensure that the agency has before it and takes into account all possible approaches to, and potential environmental impacts of, a particular project. NEPA's alternatives requirement, therefore, ensures that the "most intelligent, optimally beneficial decision will ultimately be made." *Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n,* 449 F.2d 1109, 1114 (D.C. Cir. 1971).

Over 90 percent of the Farmington planning area is leased for oil and gas. Thus, not only is BLM's consideration of a 'no further leasing' alternative reasonable, but arguably consideration of such an alternative is required pursuant to BLM's multiple use mandate under FLPMA.[10] "Multiple use requires management of the public lands and

[10] BLM is duty bound to develop and revise land use plans according to its congressional mandate at 43 U.S.C. § 1701(a)(8), so as to "observe the principles of multiple use." 43 U.S.C. § 1712(c)(1). "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,

their numerous natural resources so that they can be used for economic, recreational, and scientific purposes without the infliction of permanent damage." *Pub. Lands Council v. Babbitt*, 167 F.3d 1287, 1290 (10th Cir. 1999) (citing 43 U.S.C. § 1702 (c)). As the Tenth Circuit recognized, "[i]f all the competing demands reflected in FLPMA were focused on one particular piece of public land, in many instances only one set of demands could be satisfied. A parcel of land cannot both be preserved in its natural character and mined." *Rocky Mtn. Oil & Gas Ass'n v. Watt,* 696 F.2d 734, 738 n. 4 (10th Cir.1982) (quoting *Utah v. Andrus,* 486 F.Supp. 995, 1003 (D.Utah 1979)); *see also* 43 U.S.C. § 1701(a)(8) (stating, as a goal of FLPMA, the necessity to "preserve and protect certain public lands in their natural condition"); *Pub. Lands Council,* 167 F.3d at 1299 (citing § 1701(a)(8)). As further provided by the Tenth Circuit:

> BLM's obligation to manage for multiple use does not mean that development *must* be allowed on [a particular piece of public lands]. Development is a *possible* use, which BLM must weigh against other possible uses—including conservation to protect environmental values, which are best assessed through the NEPA process. Thus, an alternative that closes [public lands] to development does not necessarily violate the principle of multiple use, and the multiple use provision of FLPMA is not a sufficient reason to exclude more protective alternatives from consideration.

New Mexico, 565 F.3d at 710. Accordingly, BLM must consider closing lands to future leasing to protect other uses, which is BLM's legal obligation under FLPMA.

Notably, in deferring the 12 non-Forest Service parcels, BLM recognized the importance of completing the Mancos RMPA planning process to avoid prejudice and to

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timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values." 43 U.S.C. § 1702(c).

prevent limiting its choice of alternatives. BLM010228 (deferring parcels "until after the [Mancos RMPA] alternatives have been developed."). Yet, in defiance of this same logic, BLM chose to issue the challenged leases, unlawfully limiting its choice of alternatives and allowing development in a previously undeveloped area, in violation of NEPA. 40 C.F.R. § 1506.1.

IV. THE FOREST SERVICE FAILED TO TAKE A HARD LOOK AT OIL AND GAS LEASING AND FAILED TO CONSIDER SIGNIFICANT NEW INFORMATION AND CIRCUMSTANCES

The Forest Service failed to take a hard look at the impacts of oil and gas leasing in a previously undeveloped area of the SFNF, and failed to consider significant new information and circumstances, in violation of NEPA and Forest Service policies and procedures. 36 C.F.R. §§ 228.102(a), 228.102(e)(1); *Sierra Club*, 848 F.2d at 1093 (10th Cir. 1988) (recognizing an agency must perform hard look NEPA analysis "before committing themselves irretrievably to a given course of action so that the action can be shaped to account for environmental values."). The Forest Service and BLM share responsibility for the issuance of leases on forest lands.[11] 30 U.S.C. § 226(h). The first three stages of review, of particular relevance here, are: leasing analysis, leasing decision, and verification.

First, the Forest Service conducts NEPA analysis to identify the lands that will be made administratively available for leasing by the BLM. 36 C.F.R. § 228.102(a)-(d).

[11] The BLM-Forest Service leasing process consists of eight steps: (1) leasing analysis; (2) leasing decision; (3) verification; (4) BLM assessment; (5) sale by the BLM; (6) issuance of lease; (7) application for permit to drill; and (8) application for permit to drill to develop a field. 30 U.S.C. § 226(h). Coordination and responsibilities between the agencies is memorialized in an MOU. BLM011808.

Here, the Forest Service relied on a combination of the 2008 Forest Plan Amendment and 2012 Forest Plan Supplement[12] (together "Forest Plan documents") to identify lands available for leasing, which included the northwest portion of the SFNF.[13] FS013743; FS016003.

Second, the Forest Service identifies specific parcels for leasing, performs specific environmental review on those parcels, and determines whether to authorize the BLM to lease that those parcels. 36 C.F.R. § 228.102(e). Here, the Forest Service, in a letter of concurrence to BLM, identified specific parcels for leasing and determined that specific environmental review of those parcels was conducted in the Forest Plan documents. FS016261.

Third, the Forest Service verifies that the leasing was adequately addressed in a NEPA document and is consistent with management plans. 36 C.F.R. § 228.102(e)(1). If the proposed action has not been adequately addressed, *or* if there is significant new information or circumstances requiring further environmental analysis,[14] such analysis shall be done *before* a leasing decision for specific lands will be made." *Id.* (emphasis added). Here, the Forest Service determined that the Forest Plan documents were

[12] Notably, the 2012 Supplement was intended to add additional information and analysis to address deficiencies in the 2008 Amendment, specifically dealing with air quality, threatened, endangered and sensitive species, and the Mexican Spotted Owl. FS016009.
[13] *Cf.* BLM001615 (map of plan area). The Forest Service determined that the 1987 Santa Fe National Forest Plan, FS001030, provided no site-specific direction regarding management of oil and gas. FS016009.
[14] NEPA regulations provide that every agency "shall" prepare supplements to environmental documents if there are "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii).

"adequate for offering lands for competitive leasing." FS016261.

The Forest Service recognized the need for site-specific evaluation of oil and gas leasing availability, and explicitly concluded that both the 1987 Forest Plan and BLM's 2003 RMP failed to provide the level of analysis necessary to guide the Forest Service's decisionmaking. FS016113; FS016009 (stating BLM's 2003 RMP "was not adequate to meet Forest Service [NEPA] requirements". . . [and the 1987] "Forest Plan and its analysis final EIS did not address the potential environmental effects of future oil-gas leasing and development on the Forest sufficiently enough to make new lease issuance decisions.").[15] Accordingly, the Forest Service drafted the 2008 Forest Plan Amendment (which was supplemented in 2012) to address these fundamental NEPA deficiencies. The 2012 Oil-Gas ROD amended the Forest Plan to incorporate specific stipulations, including no surface occupancy ("NSO"), controlled surface use ("CSU"), and timing limitations ("TL"), which were added to specific lands and resources within the study area. FS016115. All SFNF lands included in the study area remain open to development but are now subject to the terms of the stipulations, where applied. FS016116; FS016127.

As detailed below, the Forest Service letter of concurrence to BLM erroneously relied on the Forest Plan documents when authorizing the leasing of specific SFNF parcels. In particular, these documents failed to take a hard look at the site-specific impacts of oil and gas leasing. *New Mexico*, 565 F.3d at 718-19 (holding that "NEPA require[s] an analysis of the site-specific impacts of [a lease sale] prior to its issuance,").

[15] The 1987 Forest Plan included broad direction regarding leasing categories of standard and limited surface use, but included no direction regarding the location or purpose of stipulations. FS016009.

Moreover, the Forest Service also failed to consider significant new information and circumstances before the leasing decision was made and the SFNF parcels were issued. 36 C.F.R. § 228.102(e)(1).

Although the Forest Service failed to take a hard look at site-specific impacts across resources, two categories—climate change and water resources—exemplify the agency's deficiencies. The 2008 Forest Plan Amendment fails to discuss GHG emissions and their impacts altogether. *See* FS013743. In the 2012 Forest Plan Supplement, the agency's discussion is limited to general statements that climate change exists, but no analysis of how it might impact the forest's natural resources. FS016033 ("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."). The Forest Service admits that "[o]il and gas development activities on the SFNF are predicted to produce greenhouse gas emissions," and even estimates annual emissions of 3,350 $MTCO_2e$ based on 20 total wells,[16] but does not go beyond comparing these emissions to those of Rio Arriba County and concluding that emissions are "very likely an overestimate." FS016034. Critically, nowhere does the Forest Service ever describe the types of direct, indirect, and cumulative impacts possible from these GHG emissions, or anticipated impacts to the forest due to climate change. Courts have rejected NEPA documents that do not include these analyses. *See, e.g.*, *Center for Biological Diversity,* 538 F.3d at 1217 (stating "the fact that climate change is largely a global phenomenon

[16] The Forest Service assumption of 20 total wells in the SFNF is far below the 118 wells predicted by BLM that will be developed from the leases. BLM010270.

that includes actions that are outside of [the agency's] control ... does not release the agency from the duty of assessing the effects of its actions on global warming within the context of other actions that also affect global warming.").

Neither do the 2008 Forest Plan Amendment or the 2012 Forest Plan Supplement mention hydraulic fracturing and the relationship of this drilling technology to water resource impacts, as detailed above. For example, there is no discussion of the vast quantities of water used in the drilling and fracturing of oil and gas wells, or the impacts that such water use would have on a draught-stricken forest. Indeed, the only mention of water use suggests the Forest Service is basing its decision on flawed assumptions; i.e., "[d]rilling operations consume most of the water used during well development." FS013798. As detailed above, the record contradicts this assumption. Hydraulically fractured wells—which BLM anticipates will be the type of wells developed here, BLM010276, require "large volumes of water" which far exceed water used for drilling. BLM010293. The Forest Service's incorrect assumptions, and a total absence of quantified information and data for drilling techniques and the massive quantities of water they consume, fail to provide the site-specific hard look at impacts to the forest required by NEPA and Forest Service regulations. 36 C.F.R. § 228.102(e).

Moreover, many of the assumptions the Forest Service relied upon for the Forest Plan documents are wrongfully premised upon BLM's 2003 RMP and the 2001 RFDS.[17]

[17] The Forest Service references its own 2004 RFDS throughout the Forest Plan documents, which focuses specifically on development of SFNF. The Forest Service states that projected development in the national forest was so "marginal to the basin" that it wasn't included in BLM's RFDS. Nevertheless, the Forest Service "uses the same

Based on these assumptions and its own analysis in a supplemental 2004 RFDS, FS009796, the Forest Service did "not project any [oil and gas] development" in the SFNF. FS013790. In other words, the conditions that formed the basis for the Forest Service's NEPA analysis are out of date, and fail to account for new information and circumstances—factors that are intended to be determinative in the agency's adequacy decision, but, here, were not even considered. 36 C.F.R. § 228.102(e)(1).

This failure is acutely problematic given enhanced drilling technology and shifting patterns of development in the San Juan Basin—particularly in the targeted Mancos Shale formation. BLM010276. As stated by the Forest Service:

> Based on the most recent and site-specific projections of new wells, few new wells would be developed over the next 20 years. Historically, most leases are never drilled on the Santa Fe National Forest… Although there are currently seven expressions of interest to lease new oil or gas parcels, the [RFD] does not project any development in these areas because the RFDS is based on proven geology and known production, regardless of lease status. The RFDS assumes that industry expenditures are more likely to be spent in areas that are known to be productive.

FS013790; *see also* FS016044 ("All reasonably foreseeable development is projected to occur on existing leases under standard terms and conditions."). As detailed above, BLM is currently preparing the Mancos RMPA precisely because earlier assumptions about the timing, pace, location, and methods of development in the San Juan Basin are no longer accurate, and fail to sufficiently guide agency decisionmaking. 79 Fed. Reg. 10,548. This is precisely the type of new information the Forest Service is required to consider, but failed to do so here. 36 C.F.R. § 228.102(e)(1).

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assumptions and basis as the [2001 BLM] RFDS" to form its own conclusions about foreseeable development in the SFNF. FS009796.

CONCLUSION

For the foregoing reasons, Citizen Groups respectfully request that this Court declare that Federal Defendants' leasing decisions violate NEPA and its implementing regulations, 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.

Respectfully submitted this 18th day of November 2016,

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CERTIFICATE OF COMPLIANCE WITH RULE 32(a)

This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because this brief contains 13,631 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

Dated this, 18th day of November, 2016.

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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO
CERTIFICATE OF SERVICE (CM/ECF)

I hereby certify that on November 18, 2016, I electronically filed the foregoing PLAINTIFFS' OPENING MERITS BRIEF with the Clerk of the Court via the CM/ECF system, which will send notification of such filing to other participants in this case.

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